Australian Government

Department of
Health and Ageing

National Health and
Medical Research Council

A MODELLING SYSTEM TO INFORM THE REVISION OF THE AUSTRALIAN GUIDE TO HEALTHY EATING

By Dietitians Association of Australia Project Manager Annette Byron

With consultants Professor Katrine Baghurst, Professor Lynne Cobiac,
Associate Professor Peter Baghurst, Dr Anthea Magarey

© Commonwealth of Australia 2011

Electronic document

This work is copyright. You may download, display, print and reproduce the whole or part of this work in unaltered form for your own personal use or, if you are part of an organisation, for internal use within your organisation, but only if you or your organisation do not use the reproduction for any commercial purpose and retain this copyright notice and all disclaimer notices as part of that reproduction. Apart from rights to use as permitted by the *Copyright Act 1968* or allowed by this copyright notice, all other rights are reserved and you are not allowed to reproduce the whole or any part of this work in any way (electronic or otherwise) without first being given the specific written permission from the Commonwealth to do so. Requests and enquiries concerning reproduction and rights are to be sent to Strategic Communications, National Health and Medical Research Council, GPO Box 1421, Canberra ACT 2600 or via email to nhmrc.publications@nhmrc.gov.au.

ISBN Online: 1864965398

Published: December 2011

Copies of this guideline can be downloaded from www.nhmrc.gov.au

Contact:

National Health and Medical Research Council
Level 1
16 Marcus Clarke Street
Canberra ACT 2601
GPO Box 1421
Canberra ACT 2601

Ph: 61 2 6217 9000
Fax: 61 2 6217 9100
Email: nhmrc@nhmrc.gov.au

NHMRC Reference code: N55c

Foreword

Australians have never been healthier nor lived longer. At the time of Federation in 1901 the infant mortality was 110 per thousand live births and this has now been reduced to five. Life expectancy has increased on average by 25 years and has now reached 79 years for men and 84 years for women. Healthy life expectancy for Australia is now the second longest in the world behind Japan. These are remarkable achievements for our public health and health care systems. Improved nutrition and food supply has been a major factor in this improvement.

The Australian Government and the National Health and Medical Research Council (NHMRC) have been providing nutrition guidance to the public for more than 75 years. Over the past four decades Dietary Guidelines and Nutrient Reference Values (NRVs) have provided the best available scientific nutrition advice, which have been communicated through food guides and consumer information. Science is continually improving, our nutrition and health priorities are changing, and all nutrition documents must be revised regularly.

Currently the NHMRC is updating the Dietary Guidelines series, including the *Dietary Guidelines for Older Australians (1999), Dietary Guidelines for Children and Adolescents in Australia (2003), The Infant Feeding Guidelines for Health Workers (2003), Dietary Guidelines for Australian Adults (2003)*, developing new Dietary Guidelines for Pregnant and Breastfeeding Women, and also reviewing the *Australian Guide to Healthy Eating (1998)*. The Dietary Guidelines series recommends culturally-relevant dietary patterns that promote health and wellbeing and reduce the risk of nutrition deficiencies and chronic disease.

A Modelling System to inform the Revision of the Australian Guide to Healthy Eating (Modelling System) is a technical document which translates the NRVs into dietary models. It describes the amounts of various foods needed to meet the estimated nutrient requirements of groups of Australian individuals of different ages, genders, lifestyle, body size and activity using the best available scientific evidence. In developing these models, issues regarding prevention of diet-related chronic disease, promotion of health and wellbeing, our social and food cultures and availability within the Australian food system have been taken into consideration.

Nutrition is an important determinant of health and wellbeing of the Australian population. Optimum nutrition is essential for normal growth, including the physical and cognitive development of infants and children. Good nutrition contributes significantly to maintaining healthy weight, quality of life, good physical and mental health throughout life, resistance to infection, and to protection against chronic disease and premature death. Diet-related chronic diseases, such as heart disease, stroke, Type 2 diabetes and some forms of cancer, are currently the major causes of premature death and disability among adults in Australia. It has been estimated that poor diet is responsible for around 16% of the total burden of disease, contributes to more than 56% of all deaths, and, even when based on the most recently available figures from 1990, costs Australia in excess of $5 billion nationally per year, including direct health care costs of approximately $3 billion.

Much of the excess burden due to poor diet in Australia is associated with obesity related to excessive intake of energy-dense, relatively nutrient-poor foods high in saturated fat, refined sugars or salt. However inadequate intake of nutrient-dense foods including vegetables, fruits and wholegrain cereals is also common in Australia and deficiency of some nutrients including iron, calcium, iodine, folate and vitamin D amongst some groups is also of concern.

To reduce the burden and premature loss of life from diet-related disease in Australia it will be necessary to improve current food and nutrient intakes. Fortunately small changes in dietary behaviours at a population level can produce significant health improvements at the national level.

The guiding principles for the revision were that the recommendations should:

1. address total diet and overall health
2. be evolutionary (incremental changes), flexible and practical
3. be based on current scientific evidence.

The goal of the Modelling System is to translate the NRVs (2006) into food consumption patterns that concurrently:

1. deliver the nutrient requirements for people of varying age/gender, activity levels and life-stages
2. are culturally acceptable and reflect the diets of different socio-economic groups
3. take into account the current Australian food supply and food consumption patterns
4. provide some flexibility in food choice
5. promote health and wellbeing.

The Modelling System will be used to revise the *Australian Guide to Healthy Eating,* where the information will be presented in ways that can be more easily understood by the public.

The development of the models was overseen by the Dietary Guidelines Working Committee (the Committee) appointed under Section 39 of the *NHMRC Act 1992* to provide expert advice to the NHMRC. It includes expertise drawn from the clinical and public health nutrition research sector, the food industry, the dietetics profession, the food legislative sector, consumer groups and Australian governments. The modelling was undertaken for the NHMRC by expert consultants under the auspices of the Dietitians Association of Australia. The work was informed by *A Review of the Evidence to Address Targeted Questions to inform the Revision of the Australian Dietary Guidelines* which investigated systematically the recent evidence in the literature regarding the complex inter-relationships between food, diet and health and food and nutrition, social diversity and the food supply.

While health and wellbeing were the primary drivers of the dietary models, it was important that models were realistic, ie that the models were achievable and that the foods comprising the models were accessible, culturally acceptable, affordable and available to all Australians. This was achieved by setting the minimum and maximum values of food group parameters in the initial stage of the modelling process, at levels consistent with the quantitative data derived from the literature review mentioned above. These levels were also consistent with available food consumption, food supply, food security and social-economic data for Australia.

Modelling was conducted using an iterative process to ensure optimum combinations of foods to meet all requirements. The aspirational component of the models was achieved through the selection of nutrient-dense lower energy choices within each composite group in proportions reflecting the most recent consumption data for the Australian population, hence also optimising their practicality.

The Committee used the best available nutrition science to produce the final document and closely followed the NHMRC evidence processes.

The resultant dietary models comprising *Foundation* and *Total Diets* demonstrate that while nutritional needs are met through the whole diet and not by single foods, the combination of foods is critical. Flexibility encompasses a range of cuisines including plant-based (such as lacto-ovo vegetarian), rice-based, pasta-based and omnivorous dietary patterns. The models are realistic according to the criteria outlined previously. They can meet all NRVs within energy requirements for all groups, including acceptable macronutrient distribution ranges and suggested dietary targets for all nutrients, with the exception of meeting the high iron requirements for pregnant girls and women and meeting Vitamin D requirements, which is a special case as Vitamin D is also produced in the body by the action of sunlight on the skin.

Improved knowledge of nutrition science and the availability of improved computer programs mean that the new modelling document is a considerable advance on the previous *Core Food Groups* (1994). The new models cover ages from six months to over 70 years; provide greater flexibility; draw from an improved evidence-base for composition of food groups including sub-groups and serve sizes; provide for better articulation of eating patterns for children and adults (supporting family-focused dietary patterns); and provide total diet models that include options of no 'discretionary choices' for all age/gender groups.

It is important to note that these models are for healthy people and are not designed to meet the specific nutritional requirements of individuals with various diseases or conditions, pre-term infants, or people with specific genetic or disease profiles.

The dietary models described in this document will be used to inform the revised *Australian Guide to Healthy Eating* and the revised *Dietary Guidelines* series.

Regardless of food choice patterns, total energy requirement remains a challenging issue in managing the total diet, particularly in view of the rising prevalence of obesity. If healthy weight is to be achieved and maintained, it should be noted that in the smallest least active groups, the models suggest that there is no opportunity for additional energy intake beyond *Foundation Diets* unless increased physical activity is used to increase energy expenditure (and thus the energy requirements). There is wide variation in individual energy needs and to ensure the maintenance of a healthy body weight some individuals may need to consume different amounts of foods to those suggested in this report. If the number of serves is adjusted, then each serve should be made smaller rather than eliminating one category of food.

This new document translates the best available nutrition science into dietary models that will be useful for all those involved in promoting nutrition in Australia.

Amanda Lee and Colin Binns on behalf of the Dietary Guidelines Working Committee

Contents

Executive Summary 7

1 Introduction 19

2 Background 21

3 Methodology 23

3.1 Framework 23

3.2 Establishing food groups for diet models 25

3.3 Establishing composite food groups for modelling Foundation Diets 27

3.4 Fortified and processed foods 27

3.5 Estimation of the relative contribution by weight of individual foods to the food group 28

3.6 Developing the nutrient composition and serve sizes of the composite groups 28

3.7 Combining proportional contributions, individual and group serve sizes and nutrient composition 29

3.8 Food group parameters 32

3.9 Modelling 34

3.10 Nutrient database and nutrients that were modelled 34

3.11 Use of the RDIs and EARs as the target reference values 36

3.12 Age, gender and life stage groups assessed 36

3.13 Cross-checking the Foundation Diets: 100 7-day simulations 37

3.14 From Foundation Diet Models to Total Diet Models 37

3.15 Limitations of the approach 39

4 Results 41

4.1 General issues and overview 41

4.2 Foundation Diets 42

4.2.1 Infants 6-12 months 42

4.2.2 Toddlers 13 to 23 months 44

4.2.3 Children 2-18 years 44

4.2.4 Men 46

4.2.5 Women 48

4.2.6 Pregnancy and lactation 49

4.3 Total Diets 50

4.4 Comparison with other Nutrient Reference Values 52

4.4.1 Upper levels 52

4.4.2 Suggested Dietary Targets 52

4.4.3 Acceptable Macronutrient Distribution Range 52

4.5 Comparison of Omnivore Foundation and sample Omnivore Total Diet intake patterns with existing recommendations, current dietary intake and food availability 52

4.5.1 Comparison of Omnivore Foundation and sample Omnivore Total Diets to recommendations from the AGTHE98 and overseas guides for equivalent groups 53

4.5.2 Comparison of Omnivore Foundation Diets with current intakes 60

4.5.3 Comparison of Foundation Diets to the Australian food supply 66

5 Discussion 69

6 References 72

7 Process Report 75

7.1 Introduction 75

7.2 Terms of reference 75

7.3 Members Dietary Guidelines Working Committee 75

7.4 Contractors and Expert Consultants 76

7.5 Acknowledgements 76

7.6 Project process 76

7.7 Evidence base 77

7.8 The Early Consultation Process 77

7.9 Brochure of the methodology for modelling the revised CFG94 79

7.10 Public consultation process 81

7.10.1 Organisations and individuals who submitted to the public consultation 81

7.10.2 Clarification of issues raised at public consultation 82

7.11 Dissemination and implementation 85

7.12 Evaluation plan to assess the effectiveness of the analysis for the revision of the Core Foods Groups and the development of the Foundation Diets 85

7.13 References 86

8 Abbreviations and acronyms 88

9 Glossary 90

10 Appendices 92

Appendix 1: The Core Food Groups (1994) 93

Appendix 2: Modelling of the Australian Guide to Healthy Eating 1998 95

A2.1 Food group considerations 95

A2.2 Age (and energy ranges) modelled for AGTHE98 95

A2.3 Sample serve sizes developed for the AGTHE98 95

A2.4 Eating patterns 96

Appendix 3: Reanalysis of the Core Food Groups 1994 and the Australian Guide to Healthy Eating 1998 98

A3.1 Core Food Groups 1994 98

A3.2 Australian Guide to Healthy Eating 1998 98

Appendix 4: Overseas food guides; modelling approaches and recommendations 106
A4.1 US approach to modelling their national food guide1 (My Pyramid) 106
A4.2 The Canadian approach to modelling the Rainbow Food Guide[2] 107
A4.3 New Zealand[5] 110
A4.4 United Kingdom[6] 110
A4.5 References 112

Appendix 5: Linear programming as a tool to derive diets which provide nutrient requirements within minimal dietary energy 113

Appendix 6: Proportions of foods constituting food groups for composite food group modelling 115

Appendix 7: Food groups and equivalents within groups 130
A7.1 Key or 'distinguishing' nutrients for food groups 130
A7.2 Equivalents across foods within food groups based on nutrient and energy composition 132

Appendix 8: Details of foods used to develop weight estimates and nutrient composition for the composite food groups 142

Appendix 9: List of foods used for modelling 7 day diets and data used for selenium, vitamin B6 and vitamin B12 content 219

Appendix 10: Rice-based, pasta-style and plant-based (lacto-ovo vegetarian) diets 228
A10.1 Rice-based and pasta-style diets 228
A10.2 Plant-based (Lacto-ovo vegetarian) diets 235

Appendix 11: Foundation Diets from composite food group analysis 239

Appendix 12: 7 day simulated Foundation Diets for men, women, boys and girls omnivore, lacto-ovo vegetarian, 'rice-based' and 'pasta-based' diets based on composite food group analysis patterns 258

Appendix 13: Food group sources of nutrients for mean of 100 7- day Foundation diets 259

Appendix 14: Samples of serve patterns for Total Diets 290

Appendix 15: Samples of 7-day Total Diets 313
A15.1 Sample 7-day Total Diet for Men 19-30 years mid energy level 314
A15.2 Sample 7-day Total Diets for Men 19-30 years higher energy level 321
A15.3 Sample 7-day Total Diets for Men 31-50 years mid energy level 328
A15.4 Sample 7-day Total Diets for Men 31-50 years higher energy level 335
A15.5 Sample 7-day Total Diets for Men 51-70 years mid energy level 342
A15.6 Sample 7-day Total Diets for Men 51-70 years higher energy level 349
A15.7 Sample 7-day Total Diets for Men 70+ years mid energy level 356
A15.8 Sample 7-day Total Diets for Men 70+ years higher energy level 363
A15.9 Sample 7-day Total Diets Women 19-30 years mid energy level 370
A15.10 Sample 7-day Total Diets Women 19-30 years higher energy level 377
A15.11 Sample 7-day Total Diets Women 31-50 years mid energy level 384
A15.12 Sample 7-day Total Diets Women 31-50 years higher energy level 391
A15.13 Sample 7-day Total Diets Women 51-70 years mid energy level 398
A15.14 Sample 7-day Total Diets Women 51-70 years higher energy level 405
A15.15 Sample 7-day Total Diets Women 70+ years mid energy level 412
A15.16 Sample 7-day Total Diets Women 70+ years higher energy level 419
A15.17 Sample 7-day Total Diets Pregnancy Women 19-50 years mid energy level 426
A15.18 Sample 7-day Total Diets Pregnancy Women 19-50 years higher energy level 433
A15.19 Sample 7-day Total Diets Lactation Women 19-50 years mid energy level 440
A15.20 Sample 7-day Total diets Lactation Women 19-50 years higher energy level 447

A15.21	Sample 7-day Total Diets Boys 2-3 years mid energy level	454
A15.22	Sample 7-day Total Diets Boys 2-3 years higher energy level	461
A15.23	Summary 7-day Total Diets Boys 4-8 years mid energy level	468
A15.24	Summary 7-day Total Diets Boys 4-8 years higher energy level	475
A15.25	Summary 7-day Total Diets Boys 9-11 years mid energy level	482
A15.26	Summary 7-day Total Diets Boys 9-11 years higher energy level	489
A15.27	Summary 7-day Total Diets Boys 12-13 years mid energy level	496
A15.28	Summary 7-day Total Diets Boys 12-13 years higher energy level	503
A15.29	Summary 7-day Total Diets Boys 14-18 years mid energy level	510
A15.30	Summary 7-day Total Diets Boys 14-18 years higher energy level	517
A15.31	Sample 7-day Total Diets for Girls 2-3 years mid energy level	524
A15.32	Sample 7-day Total Diets for Girls 2-3 years higher energy level	531
A15.33	Sample 7-day Total Diets for Girls 4-8 years mid energy level	538
A15.34	Sample 7-day Total Diets for Girls 4-8 years higher energy level	545
A15.35	Sample 7-day Total Diets for Girls 9-11 years mid energy level	552
A15.36	Sample 7-day Total Diets for Girls 9-11 years higher energy level	559
A15.37	Sample 7-day Total Diets for Girls 12-13 years mid energy level	566
A15.38	Sample 7-day Total Diets for Girls 12-13 years higher energy level	573
A15.39	Sample 7-day Total Diets for Girls 14-18 years mid energy level	580
A15.40	Sample 7-day Total Diets for Girls 14-18 years higher energy level	587
A15. 41	Pregnant Girls 14-18 years mid energy level	594
A15.42	Pregnant Girls 14-18 years higher energy level	601
A15.43	Lactation Girls 14-18 years mid energy level	608
A15.44	Lactation Girls total diets higher energy level	615

Executive Summary

The goal of this update is to translate the NHMRC *Nutrient Reference Values for Australia and New Zealand Including Recommended Dietary Intakes*[3] (NRVs) into food consumption patterns that:

- deliver the nutrient requirements for people of varying age/gender, activity levels and life-stages
- are culturally acceptable and reflect the diets of different socio-economic groups
- reflect the current Australian food supply and food consumption patterns
- provide some flexibility in food choice and
- promote health and wellbeing.

It should be noted that the NRVs are set for healthy people and, as such, dietary models based on the NRVs such as those described here, are not designed to meet the needs of those with specific medical conditions.

The guiding principles for the revision were that the models should:

- address total diet and overall health
- be evolutionary (incremental changes), flexible and practical
- be based on current scientific evidence.

The report outlines the amounts of various food groups needed to meet the estimated requirements of individuals of different ages, genders and lifestyle, body size and activity. These models were informed by a systematic review[3] of the scientific literature on food, diet and health relationships that was undertaken for the Dietary Guidelines revision. This was achieved by setting the minimum and maximum values of food group parameters in the initial stage of the modelling process, at levels consistent with the quantitative data derived from the literature review. To ensure that the final models were realistic and practical (by considering issues such as social diversity, the food supply and food culture), the parameter range was assessed to ensure that it was consistent with available food consumption, relevant food supply, food security and social-economic data for Australia.

The intent of this modelling exercise was to provide a technical document that could be used to inform the revisions to the *Australian Guide to Healthy Eating* (AGTHE98) and be referred to in the revision of the *Australian Dietary Guidelines*. The specific food groups and serve sizes used in the modelling exercise will not necessarily be those used in future food guides but will be used to inform final groupings and practical serve sizes. This report focuses on foods not beverages; it was not necessary to specifically address consideration of fluids in the modelling exercise as requirements can be addressed directly in subsequent food guides and dietary guidelines.

The analyses were based on the NHMRC NRVs (2006)[4], the most recent National Food Database[4] (AUSNUT07) developed by Food Standards Australia New Zealand (FSANZ) and the most recently available national food intake data, the 2007 Australian National Children's Nutrition and Physical Activity Survey[6] (NCNPAS07) for children aged 2–16 years and the National Nutrition Survey 1995[7](NNS95) for those over 16 years of age.

The dietary patterns were developed in consideration of the inter-relationships between nutrients, foods, food groups and whole diets, with the aim of producing sets of food groups that combined to produce the *Foundation Diets* and *Total Diets*.

The revision took into account usual patterns of intake in the community in terms of choices *within* food groups for example, it addressed how often were apples eaten compared to bananas or strawberries; milk compared to cheese or yoghurt; beef compared to pork or kangaroo. This was done using the most recent national dietary survey data available. These within group proportions were used to develop nutrient profiles for each food group which were, in turn, used to develop initial models for further testing. However, the number of serves of food groups emerging from the model were not determined by historical consumption levels but were an output of the modelling process.

The *Total Diets* were developed in three stages.

Stage 1- development of *Foundation Diet* models comprised of composite food groups

The first stage used composite food groups (Appendix 8) to design culturally relevant Foundation Diets for each age/gender group that attained nutrient requirements for most people (i.e. met the Recommended Dietary Intakes, RDI. These Foundation Diets are the dietary patterns that meet the nutrient and energy requirements for the smallest and youngest, least active individuals in each age and gender group, and accounted for chronic disease, food supply, social and cultural constraints. As noted in the NRV(2006)[4] document, for some nutrients, the evidence for requirements is less certain than that required to establish Estimated Average Requirements (EARs) or RDIs. In this instance, an Adequate

Intake (AI) is set which, for many nutrients, is simply based on current population intakes or, in other instances, on very limited experimental or physiological data. The AIs were not used to inform the modelling process as the NHMRC notes that the AIs may well overestimate needs and thus should be interpreted with caution[4]. The rationale for using RDIs and not EARs for this initial composite food group analysis is because these models aspire to meet the nutrient requirements of most individuals within each age/gender group and it is recommended that the RDI not EAR be used in planning diets for individuals (NHMRC, 2006).

The nature of the composite food groups (which foods comprised each group and the serve sizes for each of the individual foods) was determined after preliminary modelling of a wide range of potential food groups. The grouping of foods took into consideration botanical, culinary and nutrient composition of the individual foods with serve size for individual foods within a group determined on the basis of energy density and the nutrient density of key nutrients for that food group. The profiles of the composite food groups was based on the types and proportions of foods consumed by different age/gender subgroups according to most recently available national dietary survey data. Because availability, accessibility, and affordability were implied by consideration of actual food consumption patterns, this dealt with issues of access for diverse groups in the construction of the models. Within each group, nutrient compositions for modelling purposes were calculated using 'healthier' nutrient dense options i.e. lower fat and lower sodium options were selected for the modelling. Items from the main food groups that were relatively high in energy density and high in fat, salt or added sugar or specially formulated foods, were not included to develop nutrient compositions.

The final composite food groups used for modelling were fruit, green and brassica vegetables, orange vegetables, legumes, starchy vegetables, other vegetables, nuts and seeds, wholegrain cereals, refined cereals, poultry/fish/seafood/ eggs/legumes, red meats, and dairy foods (modelled as lower, medium and higher fat options). The wholegrain cereal category included both wholegrain or higher fibre options within each type of cereal food and the refined category included refined and lower fibre options from within the various types of cereal food. For simplicity these food groups are referred to as 'wholegrain' or 'refined' cereals groups in computer printouts (for details of foods constituting the groups, see Appendix 8).

To ensure models were realistic and practical, a small allowance of unsaturated oils and spreads was included in the modelling to reflect current culinary behaviour and to ensure that the energy these foods provided was within total energy constraints. However, unlike other foods, the inclusion of unsaturated oils and spreads in the models was not weighted for levels of consumption of each age/gender group as relevant data are not available. In the modelling process poly-unsaturated margarine was included as a proxy for unsaturated oils and spreads. In energy-constrained diets such as the *Foundation Diets*, it can be beneficial to include concentrated sources of essential fatty acids (as for all nutrients). At higher energy levels other foods such as unsaturated oils or spreads, nuts, seeds and legumes could be modelled instead of poly-unsaturated margarine.

An iterative approach to modelling was adopted and draft models were refined after comparison with RDIs.

As the energy provided by several *Foundation Diet* models for the smallest and least active individuals within each age/gender group was close to these individual's total energy requirements, during the iterative modelling process the interim results of draft model *Foundation Diets* were also considered against other NRVs, including relevant AIs and Acceptable Macronutrient Distribution Ranges (AMDR) to ensure that these were acceptable.

Stage 2. - development of *Foundation Diet* models comprised of individual foods

The second stage was to cross-check the patterns obtained against outputs from 100 simulated *7-day* diets for each age/gender group using individual foods to ensure that the dietary models for each group met the key nutrient requirements. For example, instead of using a composite 'fruit' group in the model, individual fruits e.g. apples, bananas, oranges, were used in the model. Patterns were generally deemed acceptable if all 100 diets met the EARs for the nutrients included in the model. EARs were used in cross-checking the diets as EARs are the recommended standard to assess the adequacy of the planned diets for population groups (NHMRC, 2006).

Stage 3 - development of *Total Diet* models

The third stage involved the development of a range of flexible options to add to these *Foundation Diets* to meet the higher energy requirements of people of varying body size and higher levels of physical activity. These latter diets were called *7-day Total Diets*. As well as the final food groups an allowance for unsaturated oils and spreads was used in the development of the *Foundation Diets* 'Discretionary choices' (i.e. foods and beverages with higher fat/sugar/alcohol and lower overall nutrient density) were also considered in modelling *Total Diets*. 'Discretionary choices' include foods and drinks such as cakes, biscuits, confectionary, sugary soft drinks, burgers and pizzas, other foods high in fats, particularly saturated fatty acids such as cream and some spreads, cordials and (for adults) alcoholic drinks (Appendix 7).

The resultant *Total Diet* dietary plans are more flexible in terms of food group choice than current models. They were constructed using individual foods commonly eaten in Australia chosen in proportion to the food group patterns derived during composite food group modelling. Within group selection of foods was made randomly by the analytical program in proportion to their current consumption using proportionality modelling.

Flexible dietary patterns

The dietary modelling addressed four different cuisines including plant-based (lacto-ovo-vegetarian) diets, cuisines that use more pasta or rice, vegetables and legumes as staple items and omnivore diets. The pasta and rice based diets aimed to more closely resemble diets consumed in some Asian or Southern European countries from which many Australians have migrated; the dietary culture of these areas has also been incorporated to varying extents into the diets of many other Australians. Some additional food groups were included for these analyses including an egg/legume/nut group for the plant-based (lacto-ovo) diets and a rice only or pasta only group for other options. As the background database for these diets was limited, the results are discussed in a special appendix (Appendix 10).

An attempt was also made to consider Aboriginal and Torres Strait Islander dietary patterns, but modelling could not be progressed due to the paucity of quantitative dietary data for these groups and the diversity of dietary patterns described for different areas and settings.

Nutrients included in the modelling

Apart from energy, the NHMRC recommended that ten nutrients with EARs and RDIs were to be included as drivers or inputs into the modelling but that others were to be included as outputs only. The nutrients included in the models were protein, thiamin, vitamin A (as retinol equivalents), vitamin C, folate, calcium, iodine, iron, magnesium and zinc. All these nutrients have EARs and RDIs and were available on the AUSNUT07 database.

Riboflavin, niacin and phosphorus were not included for modelling purposes as these nutrients are abundant in the Australian diet. They were, however, included as outputs.

As the NRVs (2006)[4] state that AIs were set for nutrients for which there was not sufficient or consistent evidence to establish an EAR and RDI, the NHMRC advised that the AI values should be interpreted with some caution, and those nutrients with AI values should not be a driver for the *Foundation Diet* modelling. Some, as yet unpublished, but incomplete Australian data were available in NUTTAB09 for vitamin B6, vitamin B12 and selenium (nutrients not on AUSNUT07) so these were included for output only and relevant results should be interpreted with care.

The *Total Diet* patterns were compared with the NHMRC AMDRs[4] for % total energy from fat, protein and carbohydrate and Suggested Dietary Targets (SDT)[4] for chronic disease prevention (for those aged over 14 years) as well as the Upper Level (UL)[4] as outputs only to ensure that excessive quantities of nutrients were unlikely to be consumed. They were also assessed in relation to the latest available national food intake data, to current dietary recommendations in Australia and comparable overseas countries, and to current food availability.

Foundation Diet models

The resulting *Foundation Diet* patterns are summarised below showing serves per week for the various age/gender groups. Serves per week were chosen rather than per day to convey the message that it is not necessary to consume the same pattern of food intake everyday but that average weekly intake should be consistent with the patterns shown below in Tables ES1 to ES4.

Table ES1: Omnivore *Foundation Diets* for boys designed to attain RDI for the relevant age group within the energy needs of the youngest and very sedentary (PAL 1.4) in the group

Omnivore *Foundation Diets* Boys (modelled serves per week)						
Composite food group	Serve size	2–3 yrs	4–8 yrs	9–11 yrs	12–13 yrs	14–18 yrs
Starchy vegetables	75g	2.5	3.5	5	7	7
Green & brassica vegetables	75g	3.5	7	7	7	7
Orange vegetables	75g	3.5	7	7	7	7
Legumes	75g	2	2	2	2	2
Nuts/seeds*	30g	0	0	2	2	4
Other vegetables	75g	7	10.5	14	14	14
Fruit	150g	7	10.5	14	14	14
Wholegrain or higher fibre cereals/grains	Equiv 40g bread	19	19	23	28	32
Refined or lower fibre cereals/grains**	Equiv 40g bread	9	9	12	14	17
Meat and alts minus red	Equiv 65g red meats	3.5	5.5	7	7	7
Red meats (beef, lamb, veal, pork)	65g	3.5	5	7	7	7
Dairy foods (milks, yoghurts, cheeses)***	Equiv 250g milk	10.5	14	17	25	25
Additional modelled allowance of unsaturated oils and spreads						
Polyunsaturated margarine****	10g	3.5	5	7	10.5	14

**Nuts and seeds were excluded for the 2–3yr olds because of the potential for choking; at 4–8yrs they can be added to the Total diets but the energy available was not sufficient to include them in Foundation Diets*

***Refined or lower fibre cereals were included as a group for cultural reasons; wholegrain or higher fibre can replace these if preferred.*

****Should be mostly low fat*

*****As proxy for unsaturated oils and spreads. Could be replaced with unsaturated oil (7g/serve) or seeds or nuts (only after 3 years) (10g/serve) . (See Appendix 7.2.7)*

Table ES2: Omnivore *Foundation Diets* for girls designed to attain RDI for the relevant age group within the energy needs of the youngest and very sedentary (PAL 1.4) in the group

Omnivore *Foundation Diets* Girls (modelled serves per week)								
							Pregnancy	Lactation
Composite food group	Serve size	2–3 yrs	4–8 yrs	9–11 yrs	12–13 yrs	14–18 yrs	14–18 yrs	14–18 yrs
Starchy vegetables	75g	2.5	3.5	5	5	5	5	7
Green & brassica vegetables	75g	3.5	7	7	7	7	7	7
Orange vegetables	75g	3.5	7	7	7	7	7	7
Legumes	75g	2	2	2	2	2	2	3
Nuts/seeds*	30g	0	0	2	2	2	2	4
Other vegetables	75g	7	10.5	14	14	14	14	14
Fruit	150g	7	10.5	14	14	14	14	14
Wholegrain or higher fibre cereals/grains	Equiv 40g bread	19	19	19	24	35	41	42
Refined or lower fibre cereals/grains**	Equiv 40g bread	9	9	9	11	14	19	21
Meat and alts minus red	Equiv 65g red meats	3.5	5.5	7	7	7	12	7
Red meats (beef, lamb, veal, pork)	65g	3.5	5	7	7	7	12	7
Dairy foods***	Equiv 250g milk	10.5	11.5	21	24.5	24.5	24.5	28.5
Additional modelled allowance of unsaturated oils and spreads								
Polyunsaturated margarine****	10g	3.5	5	7	7	14	14	14

**Nuts and seeds were excluded for the 2–3yr olds because of the potential for choking; at 4–8yrs they can be added to the Total diets but the energy available was not sufficient to include them in Foundation Diets*

***Refined or lower fibre cereals were included as a group for cultural reasons; wholegrain or higher fibre can replace these if preferred.*

****Should be mostly low fat*

*****As proxy for unsaturated oils and spreads. Could be replaced with unsaturated oil (7g/serve) or seeds or nuts (only after 3 years) (10g/serve) (See Appendix 7.2.7)*

Table ES3: Omnivore *Foundation Diets* for men designed to attain RDI for the age group within energy needs of the smallest (160cm) and very sedentary (PAL 1.4) in the group

Omnivore *Foundation Diets* Men (modelled serves per week)					
Composite food group	Serve size	19–30 yrs	31–50 yrs	51–70 yrs	70+ yrs
Starchy vegetables	75g	7	7	7	5
Green & brassica vegetables	75g	7	7	7	7
Orange vegetables	75g	7	7	7	7
Legumes	75g	7	7	2	2
Nuts/seeds	30g	7	7	4	4
Other vegetables	75g	14	14	14	14
Fruit	150g	14	14	14	14
Wholegrain or higher fibre cereals/grains	Equiv 40g bread	28	28	28	21
Refined or lower fibre cereals/grains*	Equiv 40g bread	14	14	14	10
Meat and alts minus red	Equiv 65g red meats	7	7	7	7
Red meats (beef, lamb, veal, pork)	65g	7	7	7	7
Dairy foods**	Equiv 250g milk	17	17	17	24
Additional modelled allowance of unsaturated oils and spreads:					
Poly-unsaturated margarine***	10g	28	28	28	14

**Refined or low fibre cereals were included as a group for cultural reasons; wholegrain or higher fibre cereals can replace these if preferred.*
***Should be mostly low fat*
****As proxy for unsaturated oils and spreads. Could be replaced with oil (7g/serve) or seeds or nuts(10g/serve) (See Appendix 7.2.7)*

Table ES4: Omnivore *Foundation Diets* for women designed to attain RDI for the age group within energy needs of the smallest (150cm) and very sedentary (PAL 1.4) in the group;

Omnivore *Foundation Diets* Women (modelled serves per week)									
Composite food group	Serve size					Preg.	Pr	Lact.	Lact.
		19–30 yrs	31–50 yrs	51–70 yrs	70+ yrs	19–30 yrs	31–50 yrs	19–30 yrs	31–50 yrs
Starchy vegetables	75g	5	5	5	3	5	5	7	7
Green & brassica vegetables	75g	7	7	7	7	7	7	7	7
Orange vegetables	75g	7	7	7	7	7	7	7	7
Legumes	75g	2	2	3	3	2	2	3	3
Nuts/seeds	30g	2	2	3	3	2	2	4	4
Other vegetables	75g	14	14	14	14	14	14	14	14
Fruit	150g	14	14	14	14	14	14	14	14
Wholegrain or higher fibre cereals/grains	Equiv 40g bread	28	28	20	15	41	41	42	42
Refined or lower fibre cereals/grains*	Equiv 40g bread	14	14	8	6	19	19	21	21
Meat and alts minus red	Equiv 65g red meats	7	7	7	7	12	12	7	7
Red meats (beef, lamb, veal, pork)	65g	7	7	3	3	12	12	7	7
Dairy foods**	Equiv 250g milk	17	17	28	28	17	17	17	17
Additional modelled allowance of unsaturated oils and spreads:									
Poly-unsaturated margarine***	10g	14	14	14	14	14	14	14	14

**Refined or low fibre cereals were included as a group for cultural reasons; wholegrain or higher fibre cereals can replace these if preferred.*
***Should be predominantly low fat*
****As proxy for unsaturated oils and spreads and could be replaced with oil (7g/serve) or seeds or nuts (10g/serve). (See Appendix 7.2.7)*

The food group parameters set by the NHMRC to address issues of chronic disease, health and wellbeing theoretically challenged the ability of the modelling program to attain some RDIs within the energy constraints of the *Foundation Diets*. However for the composite food modelling, RDIs for the 10 nutrients modelled were attained within the kilojoule and food group limits for most nutrients for most age/genders. It was also possible in most instances to attain the majority of the RDIs for the output-only nutrients and, with the exception of vitamin D, to attain intakes close to AI.

The exceptions for modelled nutrients where the RDI could not be attained for all individuals within all groups were for iodine in lactation, magnesium and zinc in men aged 50 years and above, and iron in women 19-50 years, pregnant women and children aged 2-8 years. Nevertheless iron requirements in younger women and young children are highly skewed and it was generally possible to attain the level that would cover the needs of 90% of these groups (RDI covers 97.5%). However, it is important to note that when cross-checking the resulting patterns with outputs from *7-day Foundation Diets* modelled with individual foods, only intakes for iron in pregnant women and magnesium in older men did not reach the EAR for all 100 *7-day Foundation Diets*. In the former case, none of the diets reached the EAR which reflects the very high iron requirements for pregnant women (iron supplements may be required for this group and are commonly prescribed during pregnancy). In the latter case, only 3% of the modelled diets did not meet the EAR for magnesium in older men which is acceptable at a population level.

When the dietary reference value targets were not met for composite food group *Foundation Diets* modelling or the EAR for *7-day Foundation Diets* modelling with individual foods, the results were discussed with the NHMRC and alternatives patterns were considered and remodelled but in a very few instances it was not possible to achieve either the RDI or EAR within energy constraints. RDIs are set for the needs of 97.5% of an age/gender group and EARs for the median needs of the group. The *Foundation Diets* were set at an energy level for the smallest (and least active) members of an age-gender group so it is possible that many of their actual nutrient needs would be at the lower end of the range for the age/gender group (i.e. below EAR). Hence, the models were deemed acceptable.

Overall the analyses indicate that people with low energy needs should increase their physical activity, not only for general health reasons but also to allow greater flexibility in their food choices. If increased activity is not possible, they should choose the most nutrient dense options within a food group.

The *Foundation Diets* were modelled with the ratio of 2:1 for wholegrain: refined cereals. Some higher fat dairy food options (e.g. cheese) were also considered for inclusion in the modelling to reflect current food preferences. However the models show that sedentary individuals of small body size (about 5th percentile for height or below) may need to choose all wholegrain cereals and all low fat options if they are to achieve the recommended daily nutrient intakes within energy needs. However, as noted above, the individual nutrient needs of smaller members of the age/gender group may, in some instances, actually be lower than that for the group as a whole.

From *Foundation* to *Total Diets*

In progressing from *Foundation Diets* to *Total Diets* which account for total energy needs, some general principles were set to ensure that modelled diets remained within acceptable limits for percentage of energy from fat and the various fat components, protein and carbohydrate (AMDRs), and the Upper Levels (ULs). The principles include modelling the addition of vegetables, including legumes/beans, fruits, nuts and seed, and cereal foods and encouraging a variety of choice of additional foods, whilst defining limitations of Discretionary Choices. 'Discretionary Choices' were also included in defined amounts in the *Total Diet* modelling in proportion to energy requirements. However it is important to note that it is not necessary that 'Discretionary choices' be included in total diets so some *Total Diets* containing no 'Discretionary choices' were also modelled for all age and gender groups.

Meat categories were selected during modelling the *Foundation Diets* because they are major contributors to iron and zinc. However they can also contribute substantially to the saturated fat content of the diets. Limitations were set for *Foundation Diet* models based on the evidence-based reviews relevant to chronic disease. Additional serves of meat (mainly lean varieties), could be included in the *Total Diet* models instead of Discretionary Choices if desired.

Dairy foods (milk, yoghurt, cheese) were selected during modelling the *Foundation Diets* because they are major contributors to calcium and some other key nutrients. However they can also contribute substantially to the saturated fat content of the diets. Limitations were set for *Foundation Diet* models based on the evidence-based reviews relevant to chronic disease. Additional serves of milk, yoghurt and cheese, mainly reduced fat varieties, could be included in the *Total Diet* models instead of Discretionary Choices if desired.

Allowances for additional unsaturated oils and spreads and for 'Discretionary Choices' were modelled in relation to energy intake, with increasing amounts added as energy needs increased.

Examples of some of the possible *Omnivore Total Diets* for men aged 31–50 years, of average height and undertaking light to medium activity are given in Table ES5. These diets provide about 11700kJ which was also the mean intake of men of this age in the NNS95. There are many other possible combinations of food groups that would provide the nutrient and energy requirements for this group so those shown in the table are illustrative only. However, as energy needs within a given group are limited, increases in one food group will affect the possibility of increasing others. The diets are based on the *Foundation Diets* patterns for this age/gender group with additional serves from various food groups to attain their particular energy requirements. Examples of *Omnivore Total Diets* for all other age/gender groups, and their nutrient composition, are given in Appendices 14 and 15.

Although not modelled specifically for nutrients with an AI, outputs of the modelling indicated that the estimated means of long chain (LC) n-3 fatty acids and vitamin D provided in the model were less than the AI. As there are many methodological issues with estimating these intakes and requirements, this finding should be treated with caution. Vitamin D can, of course, be supplied by sunlight; the AI was set on the assumption of minimal exposure to sunlight.

Any *Foundation Diet* can be built upon to derive *Total Diets* for increasing energy needs (see Table ES6). The increased serves and inclusion of additional 'Discretionary choices' at each step are shown in bold type. In this particular example, each diet builds on the previous diet with the addition of approximately 500kJ/day building blocks, although it is not necessary, of course, to use this stepwise approach to design *Total Diets*.

***Table ES5:* Sample Omnivore *Total Diets* for men aged 31–50yrs of average height (175cm) with light to medium activity (PAL 1.7; about 11700kJ), expressed as modelled serves per week**

Composite food groups	Example 1	Example 2	Example 3	Example 4	Example 5	Example 6
Starchy vegetables	14	7	7	14	7	14
Green and brassica vegetables	7	14	7	14	7	7
Orange vegetables	7	14	7	7	7	14
Legumes	7	7	14	7	7	7
Nuts and seeds	7	14	14	7	7	7
Other vegetables	21	14	14	14	14	21
Total fruit	14	14	21	21	14	28
Wholegrain or higher fibre cereals/grains	42	28	35	35	28	42
Refined or lower fibre cereals/grains*	14	21	14	18	21	14
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red meats (beef, lamb, pork etc)	7	7	7	7	7	7
Dairy foods**	17	24	17	17	24	17
Additional categories:						
Unsaturated oils and spreads***	28	28	28	28	28	28
Discretionary Choices (600kJ equivalents)	17.5	7	10.5	14	14	7

**Can be wholegrain or higher fibre if preferred*

***Should be mostly low fat*

****Polyunsaturated margarine was used in modelling as a proxy for unsaturated oils and spreads and could be replaced withunsaturated oil (7g/serve) or seeds or nuts (10g/serve) (See Appendix 7.2.7)*

Table ES6: An example of how an *Omnivore Foundation Diet* could be built upon to derive *Total Diets* for varying daily energy needs

Food groups	*Omnivore Foundation Diet* 7500kJ	Sample *Total Diets* – approximate energy content/day								
	Serves per week									
	7500 kJ	8000 kJ	8500 kJ	9000 kJ	9500 kJ	10000 kJ	10500 kJ	11000 kJ	11500 kJ	12000 kJ
Starchy vegetables	5	5	5	5	12	12	12	12	12	12
Green and brassica	7	7	7	7	7	7	7	7	7	10
Orange vegetables	7	7	7	7	7	7	7	7	7	14
Legumes	2	2	2	2	2	2	12	12	12	12
Nuts/seeds	2	7	7	7	7	7	7	7	7	7
Other vegetables	14	14	14	14	14	14	14	14	14	18
Fruit	14	14	14	14	14	14	14	24	24	24
Wholegrain or higher fibre cereals/grains	28	28	28	32	32	32	32	32	32	32
Refined or lower fibre cereals/grains*	14	14	14	17	17	17	17	17	17	17
Poultry/fish/seafood/ eggs/Legumes	7	7	7	7	7	7	7	7	7	7
Red meats	7	7	7	7	7	7	7	7	7	7
Dairy foods**	17	17	17	17	17	17	17	17	17	17
Additional categories:										
Unsaturated oils and spreads***	14	14	14	14	21	21	21	21	21	28
Discretionary Choices	0	0	6	6	6	12	12	12	18	18

**Can be wholegrain or higher fibre if preferred*

***Should be mostly low fat*

****Polyunsaturated margarine was used in modelling as a proxy for unsaturated oils and spreads and could be replaced with unsaturated oil (7g/serve) or seeds or nuts (10g/serve) (See Appendix 7.2.7)*

It is anticipated that these models will inform the development of updated national food guides, the AGTHE, and be referred to in the revisions of the *Dietary Guidelines for Children and Adolescents in Australia*[8], the *Dietary Guidelines for Australian Adults*[9] and the *Dietary Guidelines for Older Australians*[10], as well as in the development of proposed dietary guidelines for pregnant and breastfeeding women.

As children generally eat food as part of a family unit, attempt was made to align the children's models with those of the younger adults. In modelling the diets, the same serve sizes were used for children and adults but it is envisaged that in any future food guide, children's serve sizes may be reduced and the number of serves/frequency of consumption proportionally increased to help encourage variety.

It should also be stressed at this point that the food groupings and serve sizes that were used in this modelling exercise will not necessarily be those used in subsequent food guides. Some food groupings may be combined with qualitative advice about appropriate choices within the food group. Similarly serve sizes on any given eating occasion may differ from those shown for practical reasons. For example, the red meat category has been given a serve size of 65g for modelling purposes; for age/gender groups where the modelling includes 7 serves per week, the red meat could be eaten as 65g each day, 130g every second day or 195g every third day, if preferred. Similarly, nuts and seeds were given a serve size of 30g for modelling purposes; for those people for whom modelling suggests for example, 3 serves a week, nuts and seeds could also be consumed as 15g six times a week or 45g twice a week or any other combination.

Variations from the previous Core Food Group approach

The previous *Core Food Groups* (1994) (CFG94)[1] analysis aimed to identify amounts of the various food groups that would provide at least 70% RDI within 50% of the energy needs for adults as a whole and for children of various ages. In practice, for many of the nutrients, the RDI was exceeded. The CFG94 recommendations then had to be expanded when the AGTHE98[2] was developed to account for 100% energy needs for the various age/genders. It is unclear what reference value was used to establish the food groups recommended in the AGTHE98 as it is stated there was no attempt to achieve the RDI for iron and that the amounts of food suggested for pregnancy and lactation were based on RDIs. Although the targets to be achieved varied, in a general sense, the CFG94 models align with the *Foundation Diets* and the AGTHE98 correspond with the *Total Diets* described here. Changes in the NRVs including increases in some RDIs such as those for folate, iron in women and zinc in men, and calcium and magnesium for some groups (NHMRC, 2006), required a reanalysis of food patterns.

This revision expanded the food groups used for modelling to assist refinement of the models (Table 1 and Appendix 7). The additional groupings included:

- a subdivision of vegetables into starchy, green and brassica, orange, and 'others' as well as legumes
- division of the 'milks/yoghurt/cheese' group into higher, medium and lower fat subgroups for modelling purposes (subsequently combined)
- division of the 'meats and alternatives' group into red meats (beef, veal, lamb, pork, venison and kangaroo), other meats and alternatives (poultry, fish, seafood, eggs, legumes), and nuts and seeds were separated.

Some of these subgroups may be combined in a future food guide.

For the plant-based (lacto-ovo) vegetarian diets, a 5:1:1 'legume:egg:nuts/seeds' mixed food group was also included for modelling based on an USDA recommendation[11] for a fixed proportion of these foods that would provide an adequate amino acid balance.

In contrast to the method in this revision which was based on usual patterns of intake in the community determined from national dietary surveys, the original CFG94 derivation of food groups was more restrained as it used national Apparent Consumption Data[12] as broad reference data on which to base composite food groups. Furthermore in the original CFG94 the dairy food group nutrient composition was based on milk only, the 'meat' food group was limited to meats, poultry, fish and eggs (no legumes or seafood), the fruit group included just 8 individual fruits and there were only nine individual vegetables of which over 50% by weight was potato. This meant the composition of food groups used in developing the CFG94 did not reflect true consumption patterns.

In developing the *Foundation* and *Total Diets*, issues such as chronic disease, food accessibility and availability within the Australian food system were addressed from the start by setting some food group parameters on the models (Table 4). Modelling progressed iteratively to include higher amounts of some food groups or sub-groups (such as wholegrain cereals) for some age/gender groups so as to attain acceptable nutrient composition within energy needs; this was done consistent with the findings of the evidence-based literature reviews[3] conducted to inform the revision of the Australian Dietary Guidelines series, in consultation with the NHMRC. This overall approach was a new development compared to the CFG94 analysis, where issues such as chronic disease were not addressed other than assessment of some models with lower fat, higher fibre options in line with the Dietary Guidelines at that time.

Comparison to past recommendations, current intake and food supply

The resulting food patterns of the *Foundation Diets* were compared with those of the equivalent low energy recommendations in the AGTHE98 and the US [11, 13–16] and Canadian [17, 18] Guides. The patterns were generally similar across the guides although different serve sizes and descriptors had been used, complicating direct comparison.

There were some differences between the quantities in the modelling and estimated current intakes. In adults, the modelled quantities were higher than the mean consumption estimated from the NNS95 for vegetables, fruit, wholegrain cereals, the poultry/fish/seafood/eggs group, (and fish and seafood specifically), and low fat dairy foods. They were lower for starchy vegetables, refined cereals, higher and medium fat dairy foods and red meats; the latter for men only. In children, the pattern of difference between the modelled quantities and current consumption estimated from the NCNPAS07[6] was similar to that of adults. For both children and adults, decreased consumption of high saturated fat, sugar, alcohol foods and drinks that comprise the 'Discretionary choices' would be needed to achieve the dietary patterns in the models, alongside a change from higher fat to lower fat dairy foods and from refined cereals to wholegrain cereals.

When compared to the current food supply (FAOSTAT[19]) the categories for which current 'availability' may appear inadequate were legumes, vegetables other than starchy vegetables and fruit. However, it should be remembered that more of these foods are produced in Australia than appear in the 'available' data as much is exported. The data also do not include any home grown produce as no recent data for this are available.

Summary and conclusion

This proposed new food modelling system for Australia has developed:

1. *Foundation Diets* informed by current scientific evidence derived from the literature, the most current national intake data and the NHMRC NRVs (2006)[4]. The diets were modelled to provide as close to 100% of the RDIs of 10 key nutrients as was feasible and to provide the estimated energy requirements of the smallest and very sedentary category for each age and gender group. Food groups and sub-groups used in the modelling consisted of the following: starchy, green and brassica, orange and other vegetables; legumes; nuts and seeds; fruit; wholegrain and refined cereals/grains; red meat; poultry/fish/seafood/eggs/legumes; and dairy foods. A small allowance of unsaturated oils and spreads was also included in the modelling to reflect current culinary behaviour and ensure that the energy this provided was within total energy constraints. These groupings were established on the basis of nutrients provided, and potential health benefits/risks. These ***Foundation Diets***, based on low energy requirements, were then tested using 100 *7-day* simulations with the aim that all of the simulations would meet the EARs of the 10 key nutrients. Key issues were:

    a. the most limiting nutrient of these low energy *Foundation Diets* was iron as the dietary models developed were unable to provide sufficient iron to fulfil the estimated requirements of pregnant females as a group. If pregnant females were to follow the *Foundation Diets*, additional sources of iron would be essential to meet their requirements

    b. magnesium for older men was also potentially limiting

    c. those groups or individuals with low energy requirements, should be encouraged to choose foods with high nutrient density and to increase energy expenditure if possible. The latter behavioural change will facilitate the introduction of a little more flexibility into the diet.

2. A flexible system of ***Total Diets*** to cover increasing energy requirements for larger and more active people within each age and gender group. This was created by adding further serves of the foods used in the *Foundation Diets* and by providing an option to include 'Discretionary choices' higher in energy and generally with lower nutrient density.

It is envisaged that these dietary models will replace the now-rescinded CFG94[1] and in doing so, will provide sufficient amounts of 10 key nutrients within a flexible system for all but pregnant females who have very high iron requirements.

This modelling exercise will inform the development of future food guides and the *Australian Dietary Guidelines*, but the food groups and serve sizes used will not necessarily be retained in their current form. It is envisaged that such future dietary guidance will be culturally acceptable as it will be based on the most recent consumption data, and scientifically relevant as it will be fully informed by a thorough review of the scientific literature, and thus will facilitate health and well-being once disseminated and adopted.

The details of the development and consultation phases of the project are provided in the process report under Chapter 7 Process Report.

I INTRODUCTION

Introduction

Food and nutrition play an important role in promoting health for both children and adults. Different aspects of dietary intake have been shown to play a role in the prevention, incidence and/or prevalence of a range of chronic conditions including coronary heart disease, stroke, hypertension, some forms of cancer, obesity and non-insulin-dependent diabetes mellitus, osteoporosis, dental caries, gall bladder disease, diverticular disease, constipation and haemorrhoids. In many cases, these conditions are associated with excessive intake of energy-dense foods high in saturated fat, refined sugars or salt, and/or inadequate intake of foods such as vegetables, legumes, fruits, nuts and seeds and wholegrain cereals which provide protective phytonutrients, as well as dietary fibre, and a range of vitamins and minerals[8–10].

In Australia, many of these adverse dietary practices are common but at the same time, the country is experiencing a re-emergence of concern about deficiency conditions related to inadequate intakes of nutrients such as iodine and folate. Vitamin D deficiency also appears to be increasing[20] although the role of inadequate dietary intake versus lack of exposure to sunlight is not clear. Iron deficiency remains an area of concern, particularly in younger women and adolescent girls.

The overall purpose of this document is to provide the scientific basis to update this advice following publication of 2006 NHMRC *Nutrient Reference Values for Australia and New Zealand Including Recommended Dietary Intakes*[4] (NRVs).

The NRVs (2006) identify a number of reference values that address nutrient needs for various age/gender groups (see Chapter 9 for specific definitions). These nutrient recommendations must be translated into amounts and types of foods which contribute to a healthy diet that both prevents nutrient deficiency and reduces risk of chronic disease, and at the same time is realistic and practical, that is, culturally acceptable, socially equitable and environmentally sustainable.

The goal of this document is therefore to translate the NRVs (2006) into food consumption patterns that:

1. deliver the nutrient requirements for people of varying age/gender, activity levels and life-stages
2. are culturally acceptable, socially equitable and environmentally sustainable
3. reflect the current Australian food supply and food consumption patterns
4. provide some flexibility in food choice and
5. promote health and wellbeing.

It should be noted that the NRVs are set for healthy people and, as such, dietary models based on the NRVs such as those described here, are not designed to meet the needs of those with specific medical conditions.

The guiding principles for the revision were that the models should:

1. address total diet and overall health
2. be evolutionary (incremental changes), flexible and practical
3. be based on current scientific evidence.

It is anticipated that these models for food intake will replace those developed in the now rescinded *Core Food Groups*[1] which were translated to produce the *Australian Guide to Healthy Eating*[2].

The NHMRC *Dietary Guidelines Working Committee (DGWC)* guided this work which was undertaken for the NHMRC under the auspices of the Dietitians Association of Australia by expert consultants (see Chapter 7 Process Report for Terms of Reference, personnel and process).

2 BACKGROUND

Background

In 1994, the NHMRC developed the Core Food Groups (1994) (CFG94)[1] as an educational tool for those wishing to develop dietary guidance for individual or group use. The CFG94 reflected the 1991 Recommended Dietary Intakes (RDIs)[21], the 1992 *Dietary Guidelines for Australians*[22], 1990 food composition data[23], and the 1989–90 Apparent Consumption data.[12]

The CFG94 aimed to identify amounts of 'core' foods (g or ml/day of cereals, fruits, vegetables, dairy foods (milk) and meat /meat alternatives) that would supply 70% RDI for selected nutrients within 50% of energy requirements for selected age, gender and life stage groups. The CFG94 formed the basis of the current national food selection guide (AGTHE98) but this guide extended the CFG94 concept to a 'whole of diet' approach. The CFG94 was rescinded in 1999.

Since 1994, new NRVs have been published[4], there are new intake data[6,7] and more food composition data are available[5] all pointing to the need to update the food modelling system.

The NRVs (2006) cover a wider range of micronutrients than the 1991 recommendations, take into account evidence about nutrient requirements published since the last revision, incorporate different age groups and include different definitions of adequacy. As well as identifying amounts of nutrients required to prevent deficiency states (Estimated Average Requirements (EAR), and RDIs or Adequate Intakes (AI)), the NRVs (2006) also provide advice for reduction of chronic disease risk in the form of Suggested Dietary Targets (SDTs) for dietary fibre, selected micronutrients and fatty acids, and Acceptable Macronutrient Distribution Ranges (AMDRs) for % energy from protein, fats and carbohydrates. Previous public health recommendations for macronutrients such as fat, sugars or carbohydrates set a single point estimate of need in relation to % energy contributed (e.g. 30% fat or less; 45% carbohydrate or more). In assessing the evidence base for the NRVs (2006) the point estimate was replaced by a set of recommended ranges (e.g. 20–35% energy from fat) that are consistent with good health but give greater flexibility in dietary advice.

In addition to the availability of updated nutrient intake recommendations, more up-to-date food composition data for Australian foods have been published by Food Standards Australia New Zealand[5].

The most recent food intake data available for the Australian population in general were collected in 1995[7] for the National Nutrition Survey. For children aged 2–16 years, intake data from the 2007 Australian National Children's Nutrition and Physical Activity Survey[5] of over 4,400 children across Australia were released in 2008 by the Department of Health and Ageing. The last Australian Bureau of Statistics' Apparent Consumption data published for Australia were for the year 1998–9[23] although there are some very limited published data for 2001–3 in the FAO Foodstat database[19].

Details of the development of the CFG94 and AGTHE98 are given in Appendices 1 and 2. To maintain the principle of evolution and provide insights into later modelling, the CFG94 and AGTHE98 were assessed against the updated NRVs (2006) using EARs as the standard for CFG94 (these aimed at attaining 70% RDI) and RDIs for AGTHE98. A comparison with recommendations from recent reviews of food guides from overseas countries with similar food intake profiles and nutrient intake recommendations was also made (Appendix 3 and 4).

The data showed that, for some nutrients, the CFG94 and AGTHE98 recommendations were still valid but for others they were not. However, in keeping with the evolutionary principle, many of the definitions used in the original CFG94 and AGTHE98 were retained for this current modelling process including certain, but not all, aspects of food grouping, within group equivalents and serve sizes.

3 METHODOLOGY

Methodology

3.1 Framework

One of the principles underlying this revision was maximising flexibility in food choices. Linear programming was used for the modelling of *Foundation Diets*, designed to increase flexibility of choice and allow for greater personal preference.

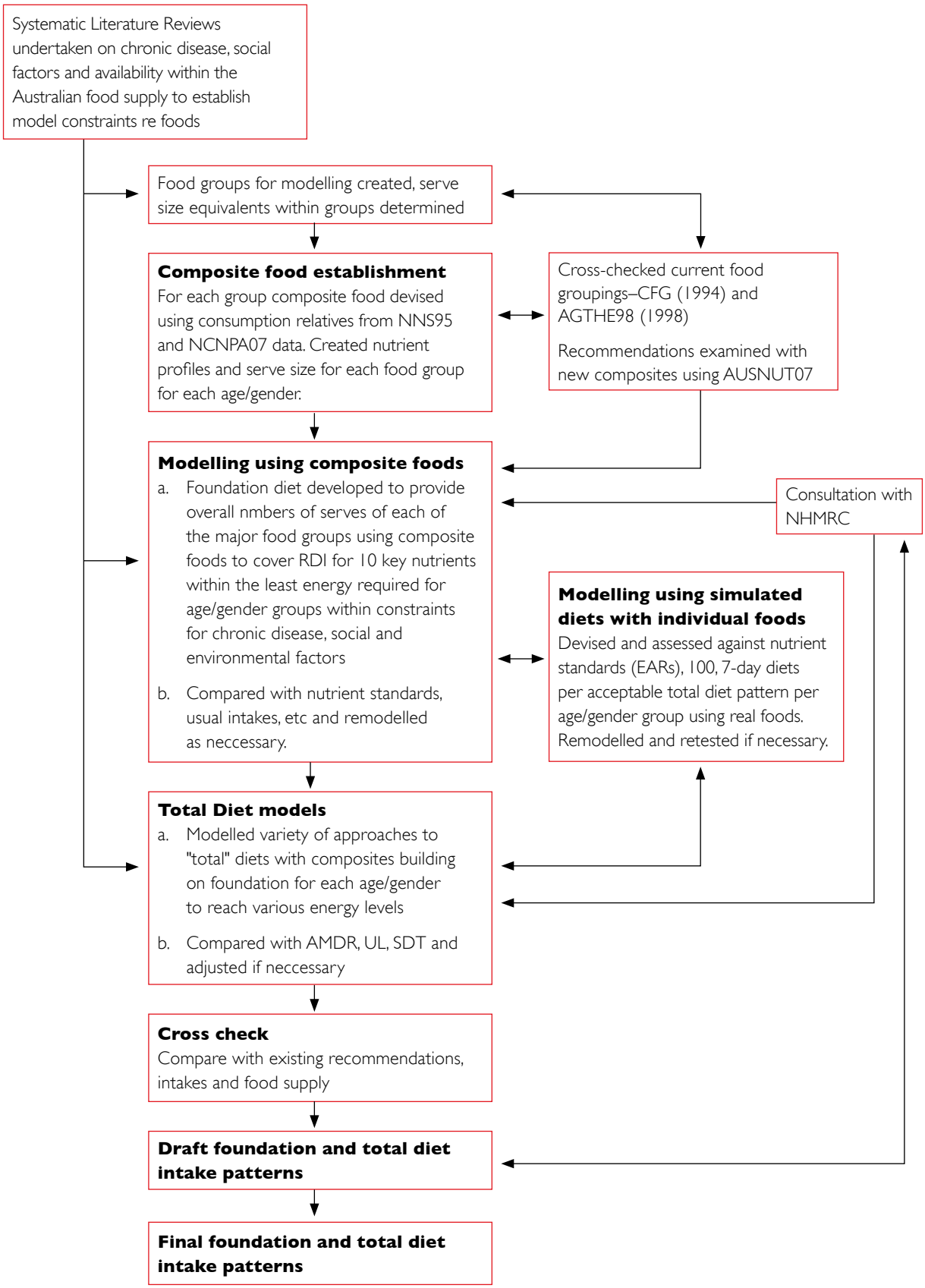
Figure 1 shows an outline of the process. The various steps will be described in more detail in later sections.

As dietary patterns and preferences in the Australian community vary widely, even from day-to-day within individuals, four different patterns were modelled: omnivore, 'rice-based', 'pasta-based' and lacto-ovo-vegetarian cuisines.

Many people in Australia originate from the Asian or Mediterranean regions and their dietary culture has also been incorporated to varying extents into the diets of many other Australians. While there is no one Asian or Mediterranean diet, an attempt was made to model dietary patterns based on these cuisines. However, there was not enough information in the FAOSTAT03 tables for Apparent Food Consumption for Asian and Mediterranean countries[19] or the 1995 National Nutrition Survey (NNS95) for migrants from East Asia[7] to vary the nutrient profile to reflect different preferences within groups such as vegetables or to include relevant proportions of important items such as olive oil. Consequently, all Mediterranean and Asian dietary patterns were modelled as 'pasta-based' and 'rice-based' cuisines respectively, using the same composition data for the composite food groups.

For ease of reading, only the modelling of the omnivore dietary pattern has been presented in the main body of this report. However, the other three dietary patterns are of equal status to the omnivore pattern. The *Foundation Diet* results for each of these other three dietary patterns are presented for each age/gender group in Appendix 10.

Figure 1: Outline of the methodology used to develop food intake patterns for the *Foundation* and *Total Diet* models using linear programming



3.2 Establishing food groups for diet models

For consistency similar groupings to those previously used in the Australian Guide To Healthy Eating (1998) (AGTHE98), with some modifications, were used. Thus 'foundation' food groups of 'breads, cereals, rice, pasta, noodles', 'fruit', 'vegetables and legumes', 'milk, yoghurt and cheese' and 'meat, fish, poultry, eggs, nuts, seeds, legumes' were modelled and an allowance was applied for unsaturated oils and spreads (for which polyunsaturated margarine was used as a proxy) in amounts related to numbers of grain-based foods (i.e. cereal) serves. Other groupings were also explored to see if they could refine the models.

Some initial modelling was undertaken using a wide range of potential food group subcategories identified by the developers of the US MyPyramid guide[13], to see if there was any value in expanding the categories, at least at the initial stages either for potential inclusion as a separate food group or to guide qualitative messages.

As a result of this preliminary assessment and considering cultural factors, chronic disease and the food supply, some of the major groups used in the AGTHE98 were divided into food sub-groups based on contributions of specific nutrients to assist refinement of the modelling process (Table 1 and Appendix 7). The final food groups and sub-groups used for modelling included fruit, green and brassica vegetables, orange vegetables, legumes, starchy vegetables, other vegetables, nuts and seeds, wholegrain cereals, refined cereals, poultry/fish/seafood/eggs/legumes, red meats (beef, lamb, veal, pork, venison, kangaroo), and dairy foods (modelled as lower, medium and higher fat options).

To ensure models were realistic and practical, an allowance of unsaturated spreads and oils was included in the modelling (with amount varied for age and gender) to reflect current culinary behaviour, and to ensure that the energy these common foods provided was considered within the energy constraints of the *Foundation Diets*.

For the lacto-ovo vegetarian diets, a 5:1:1, 'legume:egg:nuts/seeds' mixed food group was also included for modelling based on a USDA recommendation[11] for a fixed proportion of these foods that would provide an adequate amino acid balance. In addition a separate rice 'group' and pasta 'group' were also included to help model 'rice-based' and 'pasta-style' diets.

The food groups and sub-groups used for modelling and for which composite foods were created are detailed in Table 1A. It should be noted that the food subgroups used in this modelling process may not necessarily constitute separate food groups in a final national food selection guide. The food sub-groups were included in the modelling to help refine future messages about healthier food choices (within food groups) that have a higher nutrient density. Such nutrient dense foods may need to be given greater emphasis in a final food selection guide for specific age and gender groups such as those with lower energy needs who would be advised to choose healthier foods with higher nutrient density in order to meet their recommended nutrient reference values within a low estimated energy requirement (EER).

Using the same set of food groups, age/gender specific composite food groups were established using the within food group profiles of intake for each age/gender group from the NNS95 or 2007 Australian National Children's Nutrition and Physical Activity Survey (NCNPAS07) and the corresponding nutrient composition determined. For example, if within the wholegrain cereals food group young women consumed relatively more wholegrain bread than wholegrain breakfast cereals compared to older women, this would be reflected in the nutrient composition of the wholegrain cereals group for those two groups.

Further details of the proportions of foods in each food group for the various age/gender bands are given in Appendix 6; nutritional value and nutritional equivalents of foods within the various food groups in Appendix 7, and details as to which foods in the AUSNUT07 database were assigned to each group are given in Appendix 8.

Table 1B describes additional foods included in the diet modelling where energy levels allowed. Only 'Discretionary Choices' were weighted for current levels of consumption of each age/gender group according to current consumption categories in the NNS95 and NCNPAS07 with the exception of alcohol for children.

Unsaturated oils and spreads were included rather than saturated fats based on the evidence of their health benefits outlined in the evidence-based reviews[3]. Polyunsaturated options were included due to their concentration of essential fatty acids, and in the modelling process polyunsaturated margarine was included as a proxy for these. However monounsaturated or polyunsaturated oils or seeds or nuts could also have been used in the modelling. Substitution with other sources of unsaturated fatty acids will be considered during the development of a food guide. However it must be noted that, as the Nutrient Reference Values (NRVs) (2006)[4] state that Adequate Intakes (AIs) were set for nutrients for which there was not sufficient or consistent evidence to establish an Estimated Average Requirement (EAR) and Recommended Daily Intake (RDI), nutrients such as fatty acids with only AIs were not used to drive the model. To reflect these considerations outlined above, the term "unsaturated oils and spreads" was used to describe this category of additional foods. More detail issues related to oils and spreads appears in Appendix 7.2.7.

An additional 'Discretionary Choices' category comprised those foods not included in any of the food groups described above. The foods in this category are generally higher in energy density, fat (particularly saturated fat), and/or added sugars or alcohol with limited additional nutrient value. This category includes foods and drinks such as cakes, biscuits,

confectionery, sugary soft drinks, burgers and pizzas, cream and high saturated fat spreads, cordials and (for adults) alcoholic drinks. Alcoholic drinks were included in this category for modelling purposes for adults as they provide energy, but no other key nutrients, in the diet.

This category termed 'Discretionary Choices' is similar to the 'extras' category of the AGTHE98.

Table 1A: Food groups for which composites were derived for diet modelling and where components were subsequently weighted for levels of consumption of each age/gender group

Composite food groups that were modelled	Comments
Wholegrain or higher fibre cereals/grains	Included all wholegrain or higher fibre breads, cereals, rice, pasta, crumpets, English muffins, crispbreads. Relevant fortified cereals were included as they are the dominant form in the food supply. Mandatory folic acid and iodine levels were added to the nutrient database for the appropriate foods.
Refined or lower fibre cereals/grains	Included all refined or lower fibre breads, cereals, rice, pasta, crumpets, English muffins, crispbreads. For breakfast cereal volume estimates only for NNS95 adult data, this group included corn flakes, puffed rice and corn and rice&oat flakes only; all others modelled in wholegrain or higher fibre group. Relevant fortified cereals were included as they are the dominant form in the food supply. Mandatory folic acid and iodine levels were added to the nutrient database for the appropriate foods.
Fruits	Consideration at a preliminary stage was given to a citrus subgroup (i.e. high in vitamin C) but as vitamin C was more than adequate in all diets this did not proceed. Fruit juices and dried fruit were not included in the modelling of the fruit group but their nutrient equivalent was assessed for subsequent food guide purposes (see Appendix 7).
Green and brassica vegetables	As the energy and nutrient content per serve is highly variable across the 'vegetable/legumes' category, for modelling purposes, the 'vegetables and legumes'' group was subdivided into 5 categories. The green and brassica group is a valuable low kilojoule source of a wide range of nutrients notably folic acid.
Orange vegetables	The distinguishing nutrient for this group is pre-vitamin A (note: some vegetables such as sweet potato can be counted as either 'orange' or 'starchy').
Starchy vegetables	These vegetables are higher in kilojoules per unit weight and lower in nutrient density than the other groups but are a valuable source of complex carbohydrate. They are a major staple of the Australian diet.
Other vegetables	This category includes many of the salad vegetables – tomatoes are the most commonly consumed component of this nutrient dense, low energy subgroup.
Legumes	Legumes are a valuable, cost efficient, source of protein and iron but are currently eaten in relatively small amounts in Australia.
Nuts and seeds	Nuts and seeds were previously positioned in the 'meats' groups as an alternative source of protein. These foods have a different protein to energy ratio compared with other components of the meats groups, so for modelling purposes they were made into a separate group. The variety of commonly available nuts and seeds supply some protein, and are a valuable source of essential fatty acids, vitamin E, magnesium and a range of minerals. Nuts and seeds were not added to the diets of children 2–3 years or younger because of concerns with potential choking but the role of nut pastes will be addressed in subsequent food guides.
Red meats (beef, veal, lamb, pork, kangaroo)	For modelling purposes, the 'meats and alternatives' category was subdivided into 'red meat' and other components. The red meats category is a valuable source of protein, bioavailable iron and zinc and vitamin B12 as well as n-3 fatty acids. Although, in Australia, the term 'red meat' often excludes pork, the epidemiological literature generally includes pork with beef, veal and lamb as 'red meat'. Kangaroo and venison also fall in this category.
Other meats and alternatives (poultry, fish, shellfish, eggs, legumes)	For modelling purposes, the second part of the meats group included poultry, fish, seafood, eggs and legumes. They are valuable sources of protein, iron and zinc. Some fish and seafood, are good sources of LCn3 fatty acids. As noted above, nuts and seeds were removed from this group for modelling on a nutrient density basis.
Higher fat dairy foods	The milks, yoghurt, cheese category was subdivided for modelling on a fat/serve basis to explore messages related to choices within the group. The higher fat group was mostly cheese (including soy-based, calcium fortified) and was defined as being above 10g fat per 100g.
Medium fat dairy foods	The medium fat category was predominantly regular milks and regular fat yoghurts (including soy-based, calcium fortified) with fat per serve ranging from 4–10g. Some reduced fat cheeses were included here. Evaporated and condensed milks and custards were placed in the high, medium or low fat group depending on their fat composition.
Lower fat dairy foods	The lower fat subgroup was mostly reduced fat or skim milks (including soy, calcium fortified) and yoghurts with less than 4g fat per 100g.

Table 1B: Additional foods included in the diet modelling but components were not weighted for current levels of consumption of each age/gender group

Additional categories	Comments
Unsaturated oils and spreads	Includes spreads, oils, seeds and nuts high in poly-unsaturated and mono-unsaturated fatty acids
Discretionary Choices	A 'Discretionary Choices' composite was made up of foods and drinks of generally lower nutrient density but high in fats and/or refined sugars or alcohol in proportion to current usage patterns. This category included saturated fats such as butter and cream but not unsaturated fats and oils which were modelled separately. As this food group is diverse in its nutrient composition the equivalents were based on energy (600kJ). This group was included only in the *Total Diet* modelling.

3.3 Establishing composite food groups for modelling *Foundation Diets*

For efficiency, initial modelling to attain *Foundation Diets* was undertaken using composite foods representing the various food groups. This method was used in developing the CFG94s and is used in countries such as the United States and Canada in developing their food guidance models (see Appendix 4).

To derive the composite food groups for modelling *Foundation Diets*, three steps were undertaken:

1. estimation of the relative contribution by weight of individual foods to the food group for each age and gender group
2. determination of the nutrient composition per 100g for the composite food group taking into account % contribution by weight and standard serve size and
3. determination of a composite food group serve size.

The relative contributions of individual foods to the composite were determined using data from the NNS95[7] dataset for persons over 16 years and for those aged 2–16 years from the NCNPAS07[6]. For children from 13–23 months, the food patterns of 2–3 year olds were used as there were no national data for this age group, but cross-checked against a recent publication reporting intakes in Australian children of this age[31]. As a result of this method, the nutrient profiles of the composite food groups varied for each age and gender group.

As food guides generally recommend healthier food choices be made within groups, for modelling purposes, nutrient compositions were derived from nutrient-dense ('healthier') types of foods. Thus items in the food database which were prepared in a high fat, high salt or high sugar fashion were included for their relative contribution in terms of weights consumed but excluded when determining the nutrient composition. The foods available for nutrient profiling were those on the AUSNUT07 food database. Appendix 8 gives further details about inclusion of specific food items for weight and/or nutrient profiling.

Modelling with composite food groups for *Foundation Diets* did not include the 'Discretionary Choices' category.

3.4 Fortified and processed foods

A limited number of fortified foods were included in the nutrient compositions developed for use in the composite food groups. This was done to reflect the nutrient composition of foods in the current marketplace. However both mandatory and voluntary fortification practices can change over time and this may affect the relevance of the modelling results in the future.

For some foods, fortification is mandatory (i.e. mandated by law) for selected nutrients, for others manufacturers are permitted to add prescribed amounts of specified nutrients, but fortification is voluntary. For some foods, voluntary fortification is wide spread and therefore these foods were included in determining the nutrient composition.

Fortified products included in the modelling were:

1. breads, and where relevant, products made from bread flour for thiamin, folic acid and iodine (mandatory)
2. soy products: calcium and vitamin B12 (voluntary)
3. unsaturated margarines; vitamin D (mandatory)
4. breakfast cereals: range of vitamins and minerals and fibre (voluntary). These were included as fortified breakfast cereals comprise over 90% of those consumed.

Due to recent mandating of fortification of wheat flour for breadmaking with folic acid and of bread with iodine, estimates of folic acid levels in affected foods needed to be calculated. More specifically, based on information from Food Sandards Australia New Zealand (FSANZ), 200µg folic acid was added to the value for a 100g serve on AUSNUT07 in the 'to be supplemented' group, i.e. all plain, fancy, sweet breads and rolls (not organic brands) bagels, focaccia, English muffins, and flat breads (with yeast). No additional folic acid was added for foods in the 'may be supplemented' group, i.e. crumpets, scones, pancakes, pikelets, crepes, yeast doughnuts, pizza base or crumbed products.

For iodine, a value of 45µg iodine per 100g bread was used. Sweet breads, e.g. fruit breads and buns have less salt, and so no additional adjustment was made for these.

A number of processed foods were also included in the composite foods groups if they were not high in saturated fats, added sugars and salt compared with the rest of the relevant food group as detailed in Appendix 8.

3.5 Estimation of the relative contribution by weight of individual foods to the food group

The weights of foods used to develop the composite food groups (fruit, green and brassica vegetables, orange vegetables, legumes, starchy vegetables, other vegetables, nuts and seeds, wholegrain cereals, refined cereals, poultry/fish/seafood/eggs/legumes, red meats, and lower, medium and higher fat dairy foods options) were derived from the NCNPAS07 for children 2–16 years and from the NNS95 for people over 16 years. Parity between food descriptors in the NNS95 and NCNPAS07 was ensured by using the 'AUSNUT07– AUSNUT99 matching file' developed by FSANZ. This file matches the food descriptors from the AUSNUT99 food and nutrient files (used for the NNS95) to the more recently developed AUSNUT07, used in the NCNPAS07. Those food descriptors that could not be matched using this file were manually matched, using the AUSNUT07 food descriptor (and where appropriate, the nutrient compositions).

For some mixed items it was necessary to adjust the weight on the database before estimating total weight/weight for that food. For mixed dishes, the weight of the predominant food item in a mixed dish (e.g. noodles in Pad Thai) was determined to be 70%. This was done after consideration of recipes from the AUSNUT07 recipe file. Weights of other processed foods derived from a primary food product were matched by either key nutrients to determine the weight equivalent conversion factor (i.e. toast and bread were matched by starch content) or using the AUSNUT07 recipe file to work out the weight equivalent conversion factor (i.e. the amount of milk in a milkshake by weight). Details of the adjustments made are shown in Appendix 8 for the individual foods.

To keep the database manageable, there was some consolidation of items at this stage (e.g. all varieties of apples, fresh, canned or stewed were combined as 'apples', to determine total weight). All relevant foods, including less healthy versions higher in saturated fat, salt or added sugars, were included for weight estimates. The percentage contribution of each food to its food group is shown in Appendix 6.

3.6 Developing the nutrient composition and serve sizes of the composite groups

As with the weight estimates some initial combining of nutritionally similar items was undertaken using relative consumption of the component parts. A composite nutrient composition per 100g for the food group, to be included in the modelling for the *Foundation Diets* for each age/gender group, was derived by combining the nutrient composition of the individual foods in relation to their relative percentage contribution by weight to their food group for that age/gender group.

For groups such as fruits, the vegetable groups, nuts and seeds and red meats, where the various components of the food group had similar energy and nutrient compositions, a single serve size was used for each food and this then became the composite serve size for that group.

For food groups containing foods with highly variable energy and nutrient density such as the two cereal groups, the 'poultry/fish/seafood/eggs/legumes' group and the dairy food groups, an equivalent serve size for each component was first determined and then a composite serve size for the group as a whole.

For the within group serve equivalents, a sentinel food and its serve size was identified (e.g. a bread serve of 40g or a reduced fat milk serve of 250g) and the other food serve sizes (e.g. for breakfast cereals, rice, pasta or for cheese and yoghurt) were determined based on equivalence for key nutrients. With increasing concern about obesity and the need to consider the concept of nutrient density, variations in energy per serve within food categories were also taken into consideration. After the serve size equivalents were determined within the group, the composite food serve size was determined based on the relative consumption of the various foods in the group and their individual serve sizes.

As the ratios of foods within groups can vary across age-gender groups (e.g. ratio of bread to rice eaten in the cereal groups), for those food groups where individual food serve sizes vary across foods in the group (e.g. cereal groups, poultry/fish/seafood/eggs/legumes, dairy food groups), the composite food serve size will also vary across age/genders.

Further details about within food group equivalents, the basis on which they were derived and the processes involved are given in Appendix 7.

3.7 Combining proportional contributions, individual and group serve sizes and nutrient composition

Once the proportional contributions (e.g. % contribution of walnut to the nuts and seeds group based on consumption data) and individual food serve sizes were determined for a particular food group these were combined with the nutrient compositions for the individual foods to derive a food group nutrient composition specific for each age/gender group. Table 2 below shows an example of the spreadsheet used to calculate the composite nutrient composition for nuts and seeds in adults. The overall nutrient composition of the group was then calculated using the % contribution and nutrient/100g to give the figures for women or men of various ages (as shown below the food lists in Table 2). For example the energy/100g of the composite nuts and seeds group for women 19–30yrs was 2468kJ /100g; the protein was 21.1g/100g and the fat 50.8g/100g.

This process was repeated for both genders and for all age groups for all food groups and subgroups until the composite foods for all groups and subgroups were compiled. These were then used in combination with the calculated overall food group serve size to model the *Foundation Diets*. The same process was used for children for all the food groups using the estimated intakes from the NACNPAS07 to derive the % contributions to the total weight that individual food types made to the overall food group.

Table 2: Example showing estimation of the contribution of various nuts and seeds to the composite nutrient composition*

	Percentage contribution from NNS95				Serve Size	Nutrient composition per 100g		
Nuts and seeds	19–30y	31–50y	51–70y	70+y	(g)	Energy (kJ)	Protein (g)	Fat (g)
Females								
Pumpkin seed	0.0	0.9	1.5	0.3	30	2381	24.5	45
Sunflower seed	3.9	1.7	4.0	1.5	30	2395	22.7	51
Sesame seed	1.4	1.7	1.2	1.1	30	2530	22.2	55.6
Mixed seeds	0.0	0.6	0.2	0.5	30	2342	20.8	48.9
Peanut	46.2	42.1	35.9	53.3	30	2397	24.7	47.1
Almond	7.4	15.3	14.4	4.8	30	2519	20	55.1
Brazil	0.0	0.2	0.7	0.0	30	2886	14.4	68.5
Cashew	22.6	8.2	18.7	1.5	30	2437	17	49.2
Hazelnut	0.2	0.4	0.0	0.0	30	2689	14.8	61.4
Chestnut	0.0	0.0	5.5	0.0	30	724	3.4	0.6
Macadamia	4.6	1.0	0.5	3.8	30	3068	7.6	76.2
Mixed nuts	8.3	19.3	14.3	20.0	30	2481	21.5	51
Pecan	0.2	1.2	0.2	1.0	30	2973	9.8	71.9
Pine	0.4	0.8	0.9	0.0	30	2925	13	70
Pistachio	2.9	3.5	0.3	0.0	30	2389	19.7	50.6
Walnut	1.8	3.2	1.7	12.3	30	2904	14.4	69.2
Total	**100.0**	**100.0**	**100.0**	**100.0**				
Composite Nuts & seeds females 19–30y						2467	21.01	50.78
Composite Nuts & seeds females 31–50y						2473	21.61	51.17
Composite Nuts & seeds females 51–70y						2364	20.35	47.81
Composite Nuts & seeds females 70+y						2514	21.58	52.52

continues…

continued…

	Percentage contribution from NNS95				Serve Size	Nutrient composition per 100g		
Nuts and seeds	19–30y	31–50y	51–70y	70+y	(g)	Energy (kJ)	Protein (g)	Fat (g)
Males								
Pumpkin seed	0.0	0.8	2.5	3.7	30	2381	24.5	45.9
Sunflower seed	0.0	0.7	0.0	1.3	30	2395	22.7	51
Sesame seed	0.8	1.8	0.7	0.6	30	2530	22.2	55.6
Mixed seed	0.0	0.1	1.0	0.0	30	2342	20.8	48.9
Peanut	47.2	61.7	53.4	54.4	30	2397	24.7	47.1
Almond	9.9	7.2	7.0	7.0	30	2519	20	55.1
Brazil nut	0.6	1.7	0.0	0.0	30	2886	14.4	68.5
Cashew	14.7	10.0	12.9	4.0	30	2437	17	49.2
Hazelnut	0.0	0.7	0.6	0.0	30	2689	14.8	61.4
Chestnut	3.0	0.0	2.8	0.0	30	724	3.4	0.6
Macadamia	1.7	0.1	0.3	2.8	30	3068	7.6	76.2
Mixed nuts	10.9	10.4	14.6	22.7	30	2481	21.5	51
Pecan	0.8	0.5	0.7	0.7	30	2973	9.8	71.9
Pine nuts	0.0	1.0	0.0	1.2	30	2925	13	70
Pistachio	10.4	2.2	2.4	0.2	30	2389	19.7	50.6
Walnut	0.0	1.1	1.2	1.3	30	2904	14.4	69.2
Total	**100.0**	**100.0**	**100.0**	**100.0**				
Composite Nuts & seeds males 19–30y						2392	21.09	48.46
Composite Nuts & seeds males 31–50y						2445	22.51	49.63
Composite Nuts & seeds males 51–70y						2388	21.80	47.90
Composite Nuts & seeds males 70+y						2462	22.41	50.24

**only data for selected nutrients presented*

Table 3: Example showing the *Omnivore Foundation Diets* composite foods for women 19–30yrs highlighting the values for nuts and seeds for energy, protein and fat derived as in Table 2.

Composite Food Group	Serves per wk	Serve size	Energy (kJ/100g)	Protein (g/100g)	Fat (g/100g)
Starchy vegetables	5	75	352.25	2.93	0.31
Green & brassica vegetables	7	75	136.46	3.07	0.27
Orange vegetables	7	75	172.56	1.37	0.24
Legumes	2	75	453.77	8.68	2.65
Nuts/seeds	2	30	2467.74	21.01	50.78
Other vegetables	14	75	139.15	1.62	1.03
Fruit	14	150	233.10	0.76	0.15
Wholegrain or higher fibre cereals/grains	28	55	794.96	7.46	2.99
Refined or lower fibre cereals/grains	14	68	736.94	5.66	1.28
Poultry, fish, seafood, eggs, legumes	7	97	610.46	21.67	5.52
Red meats (beef, lamb, veal, pork)	7	65	864.93	30.90	9.13
Eggs, legumes, nuts/seeds (lacto-ovo)	0	210	775.13	11.33	10.98
Higher fat dairy foods	3	41	1473.35	22.47	28.76
Medium fat dairy foods	0	241	291.82	3.50	3.37
Low fat dairy foods	14	244	214.33	3.82	1.19
Pasta (for pasta-style diets)	0	120	593.00	5.00	0.45
Rice (for rice-based diets)	0	120	487.00	1.90	0.20
Additional modelled allowance of unsaturated oils and spreads					
Polyunsaturated margarine*	7	10	2682.00	0.60	72.10

**As proxy for unsaturated oils and spreads, and could be replaced with oil (7g/serve) or seeds or nuts (10g/serve). (See Appendix 7.2.7)*

3.8 Food group parameters

The NHMRC set food group parameters to inform the modelling of the *Foundation Diets* (Table 4). The rationale for setting minimum and/or maximum parameters for modelling daily serves of specific foods was based on evidence of health effects identified in the evidence-based literature reviews conducted to inform the revision of the *Australian Dietary Guidelines* series. Further qualitative filtering of food groups was also included to produce realistic and practical models which considered variety, cultural acceptability, accessibility and availability within the Australian food supply. These parameters are outlined in Table 4.

For example, an upper range was set for green vegetables. The consumption of green leafy and brassica vegetables is associated with positive health outcomes and this sub-group of vegetables is an excellent source of nutrients. Without any limit being set for green vegetables, the computer modelling program would select 11–15 serves a day as they are so nutrient dense. Hence an upper limit was set at a *maximum* of 2 serves of green vegetables a day for modelling consistent with the quantitative data from the literature regarding health benefits of green vegetables, but also having regard to cultural acceptability and to ensure variety. As another example, there is good evidence for the health benefits of consuming fish. Based on this primary benefit, a *minimum* of at least one serve of fish per week was specified consistent with the quantitative data from the literature regarding health benefits of fish in order to ensure that fish was included in all omnivore dietary patterns. However, for practical reasons, a *maximum* was also set having regard to the availability of fish in the food supply. For practical reasons small amounts of higher fat dairy options were also included as well as reduced-fat options in the modelling.

The food group parameters outlines in Table 4 were used for all adults and for children from nine years of age but the levels were reduced by half for children 4–8 years and by two thirds for children 2–3 years to reflect the lower relative energy intakes of these younger children compared to adults.

Table 4: Food group parameters used to inform the range of serves for the initial composite food group modelling for adult *Foundation Diets*

Food group	Minimum average daily serves	Maximum average daily serves	Comments
Cereals overall	4	6	Model all wholegrain(wg) ; all white and 50-50 wg-white (subsequently 2/3 wg to 1/3 refined ratio agreed as a result of modelling)
White rice	unlimited	unlimited	120g cooked rice = 1 serve Cultural acceptability particularly for Asian cuisines
Wholegrain or brown rice	unlimited	unlimited	See cereals overall
Refined pasta	unlimited	unlimited	120g cooked pasta = 1 serve Cultural acceptability particularly for some Mediterranean cuisines
Wholegrain pasta	unlimited	unlimited	See cereals overall
Wholegrain or higher fibre bread	unlimited	unlimited	40g bread equivalent = 1 serve
Refined or lower fibre bread	unlimited	unlimited	40g bread = 1 serve
Oats	unlimited	2	Serve =25g dry
Refined or lower fibre breakfast cereals	unlimited	2 serves	Suggest sliding scale based on energy content (serve 30g)
Legumes	unlimited	unlimited	Includes beans including baked beans, soybean, chickpeas, lentils, tofu
Green, brassica vegetables	1	2	Upper level was modelled on basis of cultural acceptability and variety as a large number of serves (e.g. 11–15/day) are chosen in an unrestrained model because of high nutrient density of this food category Serve =75g
Orange vegetables	1	2	As above
Starchy vegetables	1	4	Not to dominate vegetable group
Other vegetables	1	2	Includes tomatoes
Nuts and seeds	unlimited	2	High in energy density. Serve =30g

continues…

continued…

Table 4: Food group parameters used to inform the number of serves for the initial composite food group modelling for adult *Foundation Diets*

Food group	Minimum average daily serves	Maximum average daily serves	Comments
Meats, fish, seafood, poultry overall	unlimited	150g	Note global contraction and convergence framework – suggests contraction over decades among high consuming populations to mean of 90g meat/person/day for all people - allows room for low consuming populations to increase intake - based on principles of reducing poor health from both over and under-consumption and availability within the Australian food supply. Maximum level in modelling is consistent with evidence in literature review re health and chronic disease.
Lean red meats	unlimited	65g	See above. Good source of limiting nutrients Includes beef, lamb, veal, pork, venison, kangaroo. Pork included as epidemiological evidence usually includes pork as red meat. Current red meat consumption is high in Australian men but low in some groups such as young women. Maximum level in modelling is consistent with evidence in literature review re health and chronic disease; lean varieties are preferable.
Lean white meats	unlimited	65g	Includes chicken, turkey, duck, quail, crocodile
Fish and seafood	20g	40g	Combine all categories for modelling purposes. Minimum set due to evidence of health benefits of consumption. At a 100g serve the daily range of 20-40g targeted for modelling of *Foundation Diets* would equate to 1.4 to 2.8 serves a week. (Note: as shown in Table 26, the resulting *Foundation Diets* for adults included at least 40% more fish and seafood than reported for NNS95; additional amounts can also be consumed instead of Discretionary choices in *Total Diets* if required). There is evidence that supply of some species is more sustainable than others.
Eggs	Unlimited	1 egg	
Fruit	2	4	Serve = 150g (edible portion) Exclude juice for modelling.
Total dairy foods	Unlimited	4	Serve =250g milk equiv Good source of limiting nutrients Some non-lower fat dairy foods to be included for cultural acceptability After initial modelling, dairy foods were modelled on a mix of higher fat and lower fat options for *Foundation diets*. Serve quantitiess were combined but with the proviso that most choices be lower fat.
Higher fat dairy foods	0.5	0.5	Predominantly cheese. Good source of calcium and vitamin A and variety but limit re saturated fat content. Serve= 40g
Medium fat dairy foods	1	unlimited	Includes full fat milks, yoghurts, some reduced fat cheese. Dairy food consumption declining in children Serve= 250g milk equiv
Lower fat dairy foods	unlimited	unlimited	Dairy food consumption declining in children Serve= 250g milk equiv
Unsaturated spreads and oils	unlimited	0 or unlimited depending on modelling	High energy density. Consider current culinary practices. Available dietary data are inadequate to support weighting (see methods)- include as an allowance as per previous CFG modelling.

3.9 Modelling

The *Solver Platform for Excel*, a constrained optimisation program, was used to assist in the development of the *Foundation Diet* patterns. In this application, the use of a constrained optimisation program allows the identification of least energy diets which still satisfy all nutrient and food group parameters (the 'constraints') set by the operator. The program used in the development of these *Foundation Diets* was the same as that designed for use within the Solver software to identify least energy diets that conformed to specified nutrient standards when assessing the draft NHMRC NRVs before their public consultation phase[25]. Further details about the linear programming approach can be found in Appendix 5.

The *Solver* program can be adjusted to determine the number of times a particular food or food group is chosen in order to make the diets realistic and to promote variety. Several serve sizes can also be tested and readjusted.

The linear programming approach can identify a number of different dietary patterns that will theoretically provide all nutrient requirements for the various age, gender, and life stage groups, for the least amount of energy (kilojoules, kJ). As it is a theoretical approach, the dietary patterns may not always be achievable in practice and there may be other parameters (as outlined above) that need to be imposed on the amounts of foods derived from a purely theoretical approach. For example, if the model has no parameters set with respect to maximum quantities of green vegetables, the *Solver* program will select large quantities of this nutrient-rich group at levels which are not culturally acceptable.

The models were designed on a weekly basis rather than daily to facilitate testing of quantities for foods that may be consumed on a weekly rather than daily basis e.g. cheese no more than three times per week.

To ensure consistency throughout the modelling process, where possible, the composite diets for children were based on the models developed for adults using the same serve sizes.

An iterative modelling process was adopted. If the outputs did not appear to be able to reach the target nutrient reference value within food group and kilojoule limits, the acceptability or otherwise of those models were discussed with the NHMRC and either the model was revisited or deemed to be acceptable.

3.10 Nutrient database and nutrients that were modelled

The nutrient composition of the foods used throughout the modelling was primarily taken from AUSNUT07[5] updated with amendments for foods now required by regulation to be fortified (i.e. bread with folic acid and iodine).

Selenium, vitamin B6 and vitamin B12 data were not available from AUSNUT07 but some information was available from unpublished FSANZ data for key foods from NUTTAB09. As the FSANZ database did not include all the foods that were needed or in the same form, for some foods the data were adjusted or interpolated from that provided (see Appendix 9 for data used in analysis).

The nutrients included in the modelling were determined by the NHMRC (See Table 5). Analyses for other nutrients were included as output information only.

Table 5: Nutrients included in modelling or as outputs only (Nutrient values taken from AUSNUT07 unless specifically noted)

Energy and nutrients included as drivers in modelling[a]	Nutrients and food components to be assessed as outputs from modelling, for information only	
Energy	**Nutrients with an AI only**	**Nutrients with EAR/RDI available for key foods from NUTTAB09**
Protein	Linoleic acid	Vitamin B6
Thiamin	α-linolenic acid	Vitamin B12
Vitamin A as retinol equivalents[b]	LC n3 fatty acids[b]	Selenium[b]
Vitamin C[b]	Dietary fibre	**Other nutrients and food components reported as outputs**
Folate as Dietary Folate equivalents[b]	Vitamin D	Starches
Calcium	Vitamin E[b]	Sugars
Iodine	Potassium[b]	Cholesterol
Iron	Sodium[b]	Alcohol
Magnesium	**Nutrients with EAR/RDI available in AUSNUT07**	**Used to examine P:M:S output**
Zinc	Riboflavin	Saturated fat
	Niacin as Niacin Equivalents	Polyunsaturated fat
	Phosphorus	Monounsaturated fat
	Nutrients with AMDR	
	% energy as: protein, fat, carbohydrate, linoleic acid, α-linolenic acid	

[a] *This group of nutrients was selected by NHMRC to drive the modelling (see next section); all have an EAR and RDI*

[b] *Nutrients with a Suggested Dietary Target (SDT) for chronic disease prevention*

Rationale for choice of nutrients to be modelled

The NHMRC advised that nutrients with AIs (i.e. not RDIs) should not be included as drivers of the modelling, but included in results as outputs for information only. The evidence regarding the dietary requirements for these nutrients is less robust than for those with RDIs, and as AIs are set on the current mean population intakes (i.e. the highest level for any gender group) their inclusion as inputs would introduce bias within the modelling which would produce results of excessive energy and nutrients. Consequently the nutrients modelled were those for which an EAR and RDI had been established. After the modelling was completed the output data were checked against the AI's for nutrients and were found to generally provide adequate nutrition.

Selenium, vitamin B6 or vitamin B12 do have EAR and RDIs but are not included on AUSNUT07 as published data on the composition of Australian foods containing these nutrients are currently limited. FSANZ had some preliminary information for key foods on NUTTAB09 that was used as the basis for the analyses undertaken (Appendix 9). As the FSANZ data did not cover all foods needed, some data were derived or interpolated from the FSANZ database. Due to these limitations, these data were not included as drivers in the modelling.

In addition, riboflavin, niacin and phosphorus which have EAR and RDIs, were not included as drivers as the NHMRC advised that the intakes of these nutrients were not limiting in the Australian diet.

3.11 Use of the RDIs and EARs as the target reference values

Consideration was given to the most appropriate NRV for designing the new age/gender specific models for *Foundation* and *Total Diets*.

As one of the main purposes of the revision was to provide an evidence base to update the AGTHE98, the RDI was chosen as the appropriate target reference standard for composite food group modelling as recommended by the Dietary Reference Intakes (DRI) committee of the US and Canada in its publication *DRI:Applications in Dietary Assessment*[26]. Use of RDI as the target NRV for planning diets for individuals ensures that the needs of most people are covered by the modelled diets. It should be remembered that diets designed using composite foods and planned to achieve RDI will result in many actual diets being below RDI because of variability in nutrient composition across individual foods within food groups, but many will of course be above RDI for some nutrients. Whilst the CFG94 targeted 70% RDI, the AGTHE98 which covers all energy needs appears to have targeted RDI. This is not explicitly stated by the authors but the documentation does state they did not attempt to achieve RDI for iron and that the RDIs for pregnant and lactating females were targeted.

In developing their most recent MyPyramid Food Guide[11, 13–15] and the Canadian Food Guide[17,18] the US and Canadian governments, respectively, also considered their main purpose to be for individuals to plan their dietary intake. The US and Canada Governments thus used RDIs (their term RDAs) as well as AIs as their target reference values in initial composite food group modelling. Canada cross checked the patterns derived with 24 hour diets designed with individual foods and accepted the dietary pattern if 90% of their diet simulations met the EAR.

Using a similar approach to that used by the US and Canada, the RDIs for the 10 nutrients and the EER for the shortest (adults) or youngest (children) and most sedentary (Physical Activity Level (PAL) of 1.4[4]) category in each age and gender group were included as drivers in the model for the composite food group modelling. The dietary pattern derived in this way was then deemed to be acceptable if all 100 *7-day* simulations met the EAR for the 10 nutrients driving the model.

3.12 Age, gender and life stage groups assessed

The age, gender, life stage groups assessed in this revision were:

1. infants aged: 6–12 months
2. children aged: 13–23months, 2–3 yrs and 4–8 yrs
3. boys aged: 9–11 yrs, 12–13 yrs and 14–18 yrs
4. girls aged: 9–11yrs, 12–13 yrs and 14–18 yrs
5. men aged: 19–30 yrs, 31–50 yrs, 51–70 yrs and > 70 yrs
6. women aged: 19–30 yrs[1], 31–50 yrs, 51–70 yrs and > 70 yrs
7. pregnant females aged: 14–18 yrs, 19–30 yrs and 31–50 yrs
8. lactating females aged: 14–18 yrs, 19–30 yrs and 31–50 yrs.

For infants aged 0–6 months, exclusive breast feeding is the only food required so dietary modelling for this group was not undertaken. For infants aged 6–12 months the NRVs (2006) set AIs based on the nutrient composition of 600 ml of breast milk and the nutrient composition of additional foods based on US survey data. An assessment for this age group was undertaken assuming similar levels of breast milk or formula consumption as used to set the NRVs (2006). The complementary food that was modelled was a mix of some composite food groups for vegetables, fruits and meats and alternatives based on patterns attained for adults in the age group likely to be their primary carer, and individual foods commonly eaten by infants such as cheese, yoghurts, infant cereals and bread. For children aged 13–23 months no national dietary data were available so the composite foods derived for 2–3 year olds in the children's survey were used for modelling.

3.13 Cross-checking the *Foundation Diets*: 100 7-*day* simulations

During the first stage, modelling was undertaken solely with composites of food groups or subgroups. In this second stage, as foods within food groups can still vary widely in their nutrient composition, to further assess the results of the *Foundation Diet* modelling using values for composite food groups, each pattern was tested by constructing 100 7-*day* diets using actual, individual foods (e.g. carrots or pumpkins instead of a composite orange vegetable group). A specialised Monte Carlo algorithm written by Assoc Professor Peter Baghurst for use with the Statistical Program S Plus[27], was used for this purpose (Appendix 5). The food pattern and the 10 EARs were entered into the program and the program then selected individual foods from each food group to enter into the diet in proportion to how often individual foods were currently consumed by that age/gender group (based on the NNS95 or NSNPAS07 survey data). After composing 100 7- *day* diets for each food pattern, the program calculated the nutrient composition of each of the 7- *day* diets and then calculated how many diets were at or above the EAR for each nutrient. It also provided a mean intake from the total of all 100 7- *day* diets for each nutrient and a maximum and minimum for each nutrient from any of the 7-*day* diets as well as the mean % energy from fat, carbohydrate, protein and alcohol.

Patterns were only generally accepted in the present analysis if there were no 7-*day Foundation Diets* with nutrients below the EARs for the nutrients that were driving the model. If a high percentage of 7-*day* diets did not meet the EARs, the food patterns were modified in an iterative manner to see if there were alternative choices that could be made allowing all simulated diets to meet the key EARs. For example, if iron was limiting, more wholegrain cereals and less refined cereals were included in the pattern or if zinc was limiting, more serves of nuts and seeds were added. Some exceptions were made in discussion with NHMRC as noted in Section 5 of the Results section.

The lists of individual foods used at this stage of modelling are given in Appendix 9.

An analysis of the contribution of the various food groups and other food groupings to the nutrient content of the final 7-*day Foundation Diets* was also undertaken (see Appendix 13).

3.14 From *Foundation Diet* Models to *Total Diet* Models

Once the *Foundation Diets* for the different age/gender groups were established and cross-checked through the 7-*day Foundation Diet* simulations, a variety of sample *Total Diets* were constructed using the approach shown in Figure 2, and tested for the varying energy needs within age/gender groups.

To move from *Foundation* to *Total Diets* the modelling program freely chose additional serves of fruits, various vegetables, the two cereal sub-groups, and nuts and seeds to attain energy targets. No limits, other than that imposed by overall energy targets, were set on these food groups in the modelling process.

Some additional serves for the dairy, red meat and poultry/fish/seafood/eggs/legumes groups were added to the *Foundation Diet models* when constructing the *Total Diets,* but these were included in place of relevant amounts of 'Discretionary Choices' in consideration of the overall energy and macronutrient composition of the diet models.

'Discretionary Choices' includes foods and drinks which are generally less nutrient dense and higher in fat, added sugars, salt or alcohol. While it is recognised these foods are consumed regularly by the general population, from a nutritional perspective, they should be consumed with discretion. They were not included in *Foundation Diets* but for modelling purposes were considered in the *Total Diet* models and were limited in relation to overall energy targets using the guiding principles outlined in Figure 2.

The *Total Diets* were initially developed using the composite food groups and then reality tested by simulating 100 7-*day* diets. The range of foods used in the simulations of 7-*day* diets is shown in Appendix 9.

Samples of 7-*day Total Diets* for all groups with average energy needs (mid body size for adults or the mid-age group for children and a PAL of 1.7, representing light to moderate activity) within each age/gender and for the highest needs (tallest for adults or oldest age group for children both with a PAL of 2.0, heavy occupational or high leisure activity) were determined.

Figure 2: Options and guiding principles used in modelling additional foods to progress from *Foundation* to *Total Diets*

Choose freely from these vegetable, fruit, cereal, nuts and seeds categories in addition to the relevant *Foundation Diets* to meet your energy needs. Variety is to be encouraged.

Additional serves of the milks/yoghurts/cheese group, the red meats group and poultry/fish/seafood/eggs/legumes groups over those in the relevant *Foundation Diets* can be included instead of some of the 'Discretionary choices' allowances. (One serve of these food groups would equate to one 'Discretionary choices' serve).

Food group	Vegetables					Fruit	Whole-grain or higher fibre cereals	Refined or lower fibre cereals	Nuts and seeds	Dairy	Lean red meats	Poultry, fish, seafood, eggs, legumes	Additional categories	
	Starchy	Green & brassica	Orange	Legumes	Other								Unsaturated spreads and oils	Discretionary choices
Serve size	75g	75g	75g	75g	75g	150g	Equiv 40g bread	Equiv 40g bread	30g	Equiv 250g milk	65g	80g poultry; 100g fish, 2eggs, 170g legumes.	10g margarines 7g oils	600kJ equiv
Rounded kJ/serve	250	100	150	350	100	350	450	550	750	600	550	600	250	600

Up to 7000kJ	total limit (including *Foundation* amount for unsaturated margarine or oils) of 30g margarine or 20g oils per day (210g or 140g/week)
7100–8500kJ	total limit (including *Foundation* amount for unsaturated margarines or oils) of 40g margarine or 30g oils per day (280g or 210g/week)
8500–1000kJ	total limit (including *Foundation* amount for unsaturated margarines or oils) of 50g margarine or 35g oils per day (350g or 245g/week)
10000 kJ plus	total limit (including *Foundation* amount for unsaturated margarines and oils) of 60g margarine or 45g oils per day (420g or 315g/week)

Up to 7000kJ	From none to no more than 1/2 serve/day discretionary choices (3.5/week) (300kJ/day)
7100–10000kJ	From none to no more than 2 serves/day dicretionary choices (14/week) (1200kJ/day)
10100–12500kJ	From none to no more than 2.5 serves/day discretionary choices (17.5/week) (1500kJ/day)
12500 kJ plus	From none to no more than 3 serves/day discretionary choices (21/week) (1800kJ/day)

3.15 Limitations of the approach

Use of composite foods based on current consumption

The approach adopted in this modelling of using composite foods based on current consumption has advantages in terms of realism, practicality and likelihood of adoption. However there are a number of limitations.

First, current intake patterns may not be ideal when compared to dietary models. However, current intakes were only used to determine the proportional contribution of individual foods or sub-groups within the composite food group and in many instances these different choices are likely to have had a relatively small effect on nutrient composition of the dietary patterns (e.g. choice of carrot, pumpkin or sweet potato within the orange vegetable group). Much greater differences in nutrient intakes are likely to result from changing the number of serves across food groups (e.g. changing the number of serves of vegetables, cereals or meats).

Second, basing modelling on current usage may lead to higher than necessary amounts for a given food group if the foods from that group currently consumed are dominated by individual foods with lower nutrient density. For example, in the CFG94 analysis, potatoes, which have relatively low nutrient density compared to other vegetables, constituted 53% of the vegetable category. If a lower contribution from potatoes had been modelled (e.g. 25%), this would have had marked effects on the number of serves of 'vegetables' needed. The same could be true in relation to use of wholegrain versus refined cereals. The inclusion of sub-groups (such as darker green, orange or starchy vegetables and wholegrain and refined cereals) in the modelling helps to resolve some of these issues.

Foods used in modelling

The *7-day* modelling included a limited number of representative foods for each of the food groups and also from the additional categories of foods. Not all foods were therefore represented in this model. This is a common type of constraint for most modelling methodologies.

It should also be noted that the modelling did not take into account any discretionary use of salt.

Limited data on current intakes

One further limitation in relation to the use of 'current' data for adults is the age of the national dietary intake dataset. However, whilst some changes in consumption have undoubtedly occurred since the NNS95[6], a comparison of trends from the 1983 to 1995 National Nutrition Survey[28] and scrutiny of available (albeit limited) apparent consumption data[19] indicate that the general profile of the Australian diet is unlikely to be so different as to completely negate the value of this approach.

There were little data available about intakes for Australian children 13–23 months so the food preferences of 2–3 year olds were used but cross-checked against a recent publication reporting intakes in Australian children of this age[29].

4 RESULTS

Results

4.1 General issues and overview

Omnivore Foundation Diets

With the food group parameters preset to account for chronic disease, social diversity and availability within the Australian food supply for the composite food group modelling, the energy level needed to attain the Recommended Dietary Intakes (RDIs) in the Foundation Diets was generally equal to or just above the energy requirements of the smallest, least active (PAL 1.4) category of the age/gender group. In some instances, the RDI was not attained for all nutrients at this energy level (e.g. for iron in all young and pregnant women or in all very young children).

For the composite food modelling, the RDIs for the 10 key nutrients modelled were met within the kilojoule and food group limits for most nutrients for most age/genders. The exceptions were for iron in women 19–50 years, in pregnancy and in children from 2–8 years; iodine in lactation; and magnesium and zinc in men aged 50 years and above. For the *7-day Foundation Diet* modelling, with the aim to have all diet simulations reach the Estimated Average Requirement (EAR) of the 10 key nutrients used to drive the model, iron was the limiting nutrient for pregnancy.

Nutrients reported as outputs only, for example, riboflavin and niacin, were generally provided in adequate amounts by the *Foundation Diet models*. It should be noted that, for those nutrients with an Adequate Intakes (AI), it is difficult to identify a robust indicator of acceptability, as some AIs are based on median population intakes (e.g. fatty acids, dietary fibre, potassium), and some on limited experimental or physiological data (e.g. vitamins D and E or sodium). For discussion purposes the mean level of these nutrients in the *7-day* diets compared to AI was used as the benchmark. The only nutrient that was consistently low compared to the AI was vitamin D[2]. However as the AI assumes little exposure to sunlight and those who have moderate exposure to sunlight are likely to have lower requirements for vitamin D, this may not be an issue. Nevertheless, there is emerging evidence of vitamin D deficiency within the general population in Australia[20], and this issue may need to be further investigated.

While vitamin B6 and selenium appeared low to borderline in some *Foundation Diet models*, as the food composition data for these nutrients were incomplete and hence the models under-estimate content of vitamin B6 and selenium, this may not be an issue and caution is required in interpreting these results.

The patterns of intake which formed the basis of the analyses for infants, toddlers, children, men and women are shown in the individual results sections below. Details of the nutrient composition of diets obtained from the original composite food group analysis and from the 7-day simulated diets using individual foods including the percentages attaining the various RDI or EARs can be found in Appendices 11 and 12.

Total Diets

The additional energy available for *Total Diet models* for all but the smallest, least active age/gender groups meant that EARs of all relevant nutrients could be achieved, with the only exception being iron for pregnant girls and women, given their very high iron requirements.

Although the diets were not modelled to reach or exceed Acceptable Macronutrient Distribution Range (AMDRs), Suggested Dietary Targets (SDTs), or Upper Limits (ULs), the estimated amounts of nutrients provided by the simulated model *Total Diets* were compared to the relevant Nutrient Reference Values (NRV). AMDRs tended to be met for *Total Diets* but the SDTs for some nutrients were not achieved. The UL for sodium was exceeded in the higher energy *Total Diets*.

[2] *More recent evidence suggests this can be addressed in a future revision of the Nutrient Reference Values.*

4.2 Foundation Diets

In the results below, the findings related to those nutrients used as inputs in the modelling process are discussed first, followed by discussion of the outcome for other nutrients.

4.2.1 Infants 6–12 months

For infants 6–12 months, except for zinc and iron, all NRV recommendations are set as AIs. For infants the analysis was limited to development of a diet which attained required nutrients at the mid energy level for this group. As most infant NRV recommendations are AIs and as the analysis was done with a mix of individual foods commonly eaten by infants (e.g. infant cereal and yoghurt) and some composites, there is a single analysis for this group which was assessed against the AIs and the RDI for zinc and iron. The food pattern of the diets is shown in Table 6 together with the nutrient composition. Using breast milk as the milk source, it was possible to get levels approximating the AI for all nutrients at the mid level energy requirement except for carbohydrate, vitamin D and vitamin E. No data were available for selenium, vitamin B6 and vitamin B12 in breast milk so the data for these nutrients are for the complementary foods only, i.e. are incomplete for the total diet.

Table 6: Food patterns for infants 6–12 months

Infants 6–12 months	Serve weight (g)	Weekly Serves
Starchy vegetables	20	2
Green & brassica vegetables	20	3
Orange vegetables	20	3
Legumes	20	1
Other vegetables	20	3
Fruit	20	3
Bread 50:50 wg:refined	40	10
Infant cereal, dry, mixed grain, fortified	20	7
All Meat and alts minus red	30	2
Red meats (beef, lamb, veal, pork)	30	4
Breast milk or formula	600	7
Cheese	10	1
Yoghurt	20	2
Additional modelled allowance of unsaturated oils and spreads		
Polyunsaturated margarine*	5	7

**As a proxy for unsaturated spreads and oils and could be replaced with oil (7g/serve) or seeds or nuts (10g/serve) in appropriate spread/paste form*

Table 7: Nutrient composition of diet based on the Foundation Diet food pattern of infants aged 6–12 months

	Breast milk and food		Infant formula and food
Nutrient	Daily intake	AI	Daily intake
Energy, excluding dietary fibre (kJ)	3058.60		2968.60
Energy, including dietary fibre (kJ)	3098.03	2500–3500	3008.03
Protein (g)	23.12	14	29.12
Fat, total (g)	35.16	30	27.96
Carbohydrate, total (g)	83.03	95	84.83
Dietary Fibre (g)	5.13		5.12
Saturated fatty acids, total (g)	13.80		12.00
Monounsaturated fatty acids, total (g)	12.56		10.16
Polyunsaturated fatty acids, total (g)	5.09		
Linoleic acid (g)	4.67	4.6	
α-linolenic acid (g)	0.49	0.5	
LC n-3 fatty acids, total (mg)	30.15		
Vitamin A expressed as retinol equivalents (ug)	525.47	430	609.47
Thiamin (mg)	1.29	0.3	1.81
Riboflavin (mg)	0.36	0.4	1.05
Niacin equivalents, total (mg)	17.69	4	17.87
Folate, dietary folate equivalents (ug)	188.72	80	218.72
Vitamin C (mg)	39.10	30	63.10
Vitamin D (ug)	1.02	5	7.02
Vitamin E (mg)	1.72	5	5.68
Calcium (mg)	454.93	70	802.93
Iron (mg)*	14.79	11	20.61
Iodine (ug)	106.39	110	100.39
Magnesium (mg)	72.39	75	102.39
Phosphorus (mg)	386.78	275	632.78
Potassium (mg)	670.35	700	1000.35
Sodium (mg)	431.32	170	509.32
Zinc (mg)*	3.10	3	6.58
Selenium (ug)**	12.05**	15	20.45
Vit B6 (mg)**	0.22**	0.3	0.55
Vit B12 (ug)**	0.44**	0.5	1.64

**RDIs*

***data for breast milk analysis is for food component only and incomplete nutrient composition data*

The program was rerun using 600mls infant formula commonly used in Australia instead of breast milk. The resulting nutrient composition of the diet using infant formula was similar for many nutrients to that based on breast milk but higher for some other nutrients, notably vitamins D and E).

This should not be interpreted to mean that the formula-based diet is superior in quality to the breastmilk-based diet as nutrient intake in excess of that required does not confer additional benefit and may not be desirable in some cases. Where the breast milk-based diet was lower in nutrient profile, it was mostly still well above AI. It should also be reiterated that the nutritional standards for infants are AIs only and are based on estimates of usual intake of American infants at this age and therefore need to be interpreted with caution.

4.2.2 Toddlers 13 to 23 months

The *Foundation Diets* for toddlers are shown in Table 8; the composite food analysis of the diet is in Appendix 11 and the *7-day* modelling in Appendix 12. In modelling the composite diets, all nutrients except iron reached the RDI but in order to achieve this for girls their kJ level was exceeded by 9%. For boys, the nutrient EAR/RDIs are similar to girls but the estimated energy requirements are set somewhat higher.

7-day diet analysis

In the *7-day* diet modelling with individual foods, for the nutrients that were included in the modelling, all diets reached the 10 key EARs.

All diets reached the EARs for all the other nutrients with an EAR but which were not driving the model–riboflavin, niacin, phosphorus, selenium, vitamin B6 and vitamin B12. Considering other nutrients with AIs only, the mean estimates from all diets were equal to or higher than the AI for fibre, potassium and sodium and nearly all exceeded the AI for LCn3 fatty acids. Average levels of vitamin D and E in the diets were below AI (about 25% AI for vitamin D and about 70% AI for vitamin E). As noted previously, sunlight is an additional source of vitamin D and those with moderate sun exposure may have lower requirements for dietary vitamin D. For both linoleic acid and α-linolenic, 80% of the boys' and girls' diets reached AI. In interpreting these findings it should be remembered that the fatty acid AIs for this age (1–3 year olds) were based on intakes for 2–3 year olds as intake data for the younger children were not available, so the AIs may overestimate the needs at this age.

Table 8: Omnivore *Foundation Diets* for children aged 13–23 months; designed to attain RDI for this age within energy needs of those aged 13 months and very sedentary (PAL 1.4) children in that age group

Omnivore *Foundation Diets Toddlers (modelled serves per week)*		
Composite food group	Serve size	Toddlers 13–23 months
Starchy vegetables	75g	2.5
Green & brassica vegetables	75g	3.5
Orange vegetables	75g	3.5
Legumes	75g	1
Nuts/seeds*	30g	0
Other vegetables	75g	7
Fruit	150g	3.5
Wholegrain or higher fibre cereals/grains	Equiv 40g bread	16
Refined or lower fibre cereals/grains**	Equiv 40g bread	8.5
Meat and alts minus red	Equiv 65g red meats	3.5
Red meats (beef, lamb, veal, pork)	65g	3.5
Dairy foods (milks, yoghurts, cheeses)***	Equiv 250g milk	8
Additional modelled allowance of unsaturated oils and spreads		
Polyunsaturated margarine****	10g	3.5

**Nuts and seeds were excluded for the 2–3yr olds because of the potential for choking; at 4–8 years they can be added to the Total diets but the energy available was not sufficient to include them in Foundation Diets*

***Refined or lower fibre cereals were included as a group for cultural reasons; wholegrain or higher fibre can replace these if preferred.*

****Should be mostly low fat*

*****As proxy for unsaturated oils and spreads and could be replaced with oil (7g/serve) or seed s or nuts (in appropriate spread/paste form) (10g/serve).*

4.2.3 Children 2–18 years

The *Omnivore Foundation Diets* for boys are shown in Table 9 and for girls in Table 10; the composite food analyses of the diets are in Appendix 11 and the 7-day modelling in Appendix 12.

In general, composite food modelling attained the RDIs for most of the age/gender groups except for iron for children up to 8 years, girls 14–18 years and pregnant girls; for calcium in girls 12–13 years; and for iodine in lactating girls.

7-day diet analysis

For nutrients included in modelling

In both boys and girls aged between 2 and 18 years, and in teenage girls who are lactating, all 100 *7-day Foundation Diets* met all the EARs for all nutrients. For teenage girls who are pregnant, all 100 *7-day Foundation Diets* reached the EAR for all nutrients except iron where no diets reached the EAR. (See discussion of iron in women's section 4.2.5).

Other nutrients

For all ages and both genders and for teenage girls who are pregnant and/or lactating all 100 *7-day Foundation Diets* met the EARs for vitamins B6 and B12, selenium, riboflavin, niacin and phosphorus.

Table 9: *Omnivore Foundation Diets* for boys aged 2–18yrs; designed to attain RDI for each age group within energy needs of the youngest and very sedentary (PAL = 1.4) children in that group

Omnivore Foundation Diets Boys (modelled serves per week)						
Composite food group	Serve size	2–3yrs	4–8yrs	9–11yrs	12–13yrs	14–18yrs
Starchy vegetables	75g	2.5	3.5	5	7	7
Green & brassica vegetables	75g	3.5	7	7	7	7
Orange vegetables	75g	3.5	7	7	7	7
Legumes	75g	2	2	2	2	2
Nuts/seeds*	30g	0	0	2	2	4
Other vegetables	75g	7	10.5	14	14	14
Fruit	150g	7	10.5	14	14	14
Wholegrain or higher fibre cereals/grains**	Equiv 40g bread	19	19	23	28	32
Refined or lower fibre cereals/grains	Equiv 40g bread	9	9	12	14	17
Meat and alts minus red	Equiv 65g red meats	3.5	5.5	7	7	7
Red meats (beef, lamb, veal, pork)	65g	3.5	5	7	7	7
Dairy foods (milks, yoghurts, cheeses)***	Equiv 250g milk	10.5	14	17	25	25
Additional modelled allowance of unsaturated oils and spreads						
Polyunsaturated margarine****	10g	3.5	5	7	10.5	14

**Nuts and seeds were excluded for the 2–3yr olds because of the potential for choking; at 4–8 years they can be added to the Total diets but the energy available was not sufficient to include them in Foundation Diets*

***Refined or lower fibre cereals were included as a group for cultural reasons; wholegrain or higher fibre can replace these if preferred.*

****Should be mostly low fat*

*****As proxy for unsaturated oils and spreads.Could be replaced with oil (7g/serve) or seeds or nuts (only in appropriate spread/paste form for under 3 years (10g/serve). (See Appendix 7.2.7)*

Table 10: *Omnivore Foundation Diets* for girls aged 2–18yrs and for pregnant and lactating girls designed to attain the RDI for each age group within the energy needs of the youngest and very sedentary (PAL = 1.4) children in that group

Omnivore Foundation Diets Girls (recommended serves per week)								
Composite food group	Serve size	O					Pregnancy	Lactation
		2–3 yrs	4–8 yrs	9–11 yrs	12–13 yrs	14–18 yrs	14–18 yrs	14–18 yrs
Starchy vegetables	75g	2.5	3.5	5	5	5	5	7
Green & brassica vegetables	75g	3.5	7	7	7	7	7	7
Orange vegetables	75g	3.5	7	7	7	7	7	7
Legumes	75g	2	2	2	2	2	2	3
Nuts/seeds*	30g	0	0	2	2	2	2	4
Other vegetables	75g	7	10.5	14	14	14	14	14
Fruit	150g	7	10.5	14	14	14	14	14
Wholegrain or higher fibre cereals/grains	Equiv 40g bread	19	19	19	24	35	41	42
Refined or lower fibre cereals/grains**	Equiv 40g bread	9	9	9	11	14	19	21
Meat and alts minus red	Equiv 65g red meats	3.5	5.5	7	7	7	12	7
Red meats (beef, lamb, veal, pork)	65g	3.5	5	7	7	7	12	7
Dairy foods***	Equiv 250g milk	10.5	11.5	21	24.5	24.5	24.5	28.5
Additional modelled allowance of unsaturated oils and spreads								
Polyunsaturated margarine****	10g	3.5	5	7	7	14	14	14

**Nuts and seeds were excluded for the 2–3yr olds because of the potential for choking; at 4–8 years they can be added to the Total diets but the energy available was not sufficient to include them in Foundation Diets*

***Refined or lower fibre cereals were included as a group for cultural reasons; wholegrain or higher fibre can replace these if preferred.*

****Should be mostly low fat*

*****As proxy for unsaturated oils and spreads.Could be replaced with oil (7g/serve) or seeds or nuts (only in appropriate spread/paste form for under 3 years (10g/serve). (See Appendix 7.2.7)*

For nutrients with an AI, 50% or more of the diets (including those for adolescent pregnancy and lactation) had mean intakes above AI for fibre, LCn3 fatty acids, linoleic acid, α-linolenic acid, potassium, sodium, and vitamin E. For vitamin D the means of the diets were well below the AI for girls and boys of all ages and in pregnancy and lactation.

4.2.4 Men

The *Omnivore Foundation Diets* for men are shown in Table 11. For the two younger age groups, the higher energy requirements made it easier to construct diets with the composite food groups that attained the RDIs for all the modelled nutrients within the energy needs of the smallest, very sedentary group. For this reason, some additional nuts and seeds, legumes and polyunsaturated margarine were added over base needs to help improve the fatty acid profile of the diet. The *7-day Foundation Diets* were still well within the AMDR for fat at 32–33% with about one third coming from each of the poly and mono-unsaturated and saturated fatty acids. For men aged 51–70 years and 70+ years the RDIs for the 10 modelled nutrients (except for magnesium) could be met within energy constraints by composite food group modelling.

7-day diet analysis

For nutrients included in modelling

All 100 *7-day Omnivore Foundation Diets* for men aged 19–50 years reached the EARs for all nutrients. In the 51–70 year olds, all diets reached the EARs except for zinc (99% met EAR) and for men, aged 70+ years, all diets met the EARs except for magnesium (97% met).

Other nutrients

For riboflavin, niacin and phosphorus, all diets reached the EARs for all ages. All diets reached the EAR for vitamin B12 and selenium. For vitamin B6, all diets reached the EAR for the two younger groups and 90–94% of diets reached the EAR for the two older groups. However, it should be remembered that the nutrient database is incomplete for these nutrients so total intakes have been underestimated and results should be interpreted with care.

For dietary fibre, linoleic acid, α-linolenic acid, LCn3, vitamin E, potassium and sodium, the mean level in the diets was above the AI. Vitamin D was somewhat lower than AI in the younger groups (4 and 4.5µg compared to AI of 5ug) and was particularly low in the two older age groups (4.8 and 4.2µg) compared to the much higher AIs for these age groups of 10 and 15µg/day.

Table 11: *Omnivore Foundation Diets* for men age 19+yrs; designed to attain RDI for each age group within energy needs of the smallest (160cm) and very sedentary (PAL = 1.4) men in that group

Omnivore Foundation Diets Men (modelled serves per week)					
Composite food group	Serve size	19–30yrs	31–50yrs	51–70yrs	70+yrs
Starchy vegetables	75g	7	7	7	5
Green & brassica vegetables	75g	7	7	7	7
Orange vegetables	75g	7	7	7	7
Legumes	75g	7	7	2	2
Nuts/seeds	30g	7	7	4	4
Other vegetables	75g	14	14	14	14
Fruit	150g	14	14	14	14
Wholegrain or higher fibre cereals/grains	Equiv 40g bread	28	28	28	21
Refined or lower fibre cereals/grains*	Equiv 40g bread	14	14	14	10
Meat and alts minus red	Equiv 65g red meats	7	7	7	7
Red meats (beef, lamb, veal, pork)	65g	7	7	7	7
Dairy foods**	Equiv 250g milk	17	17	17	24
Additional modelled allowance of unsaturated oils and spreads					
Polyunsaturated margarine***	10g	28	28	28	14

**Refined or lower fibre cereals were included as a group for cultural reasons; wholegrain or higher fibre can replace these if preferred.*

***Should be mostly low fat*

****As proxy for unsaturated oils and spreads and could be replaced with oil (7g/serve) or seeds or nuts (10g/serve) (See Appendix 7.2.7)*

Table 12: *Omnivore Foundation Diets* for women age 19+yrs and in pregnancy and lactation; designed to attain RDI for each age group within energy needs of the smallest (150cm) and very sedentary (PAL = 1.4) women in that group

Omnivore Foundation Diets Women (modelled serves per week)									
Composite food group	Serve size					Preg.	Preg.	Lact.	Lact.
		19–30 yrs	31–50 yrs	51–70 yrs	70+ yrs	19–30 yrs	31–50 yrs	19–30 yrs	31–50 yrs
Starchy vegetables	75g	5	5	5	3	5	5	7	7
Green & brassica vegetables	75g	7	7	7	7	7	7	7	7
Orange vegetables	75g	7	7	7	7	7	7	7	7
Legumes	75g	2	2	3	3	2	2	3	3
Nuts/seeds	30g	2	2	3	3	2	2	4	4
Other vegetables	75g	14	14	14	14	14	14	14	14
Fruit	150g	14	14	14	14	14	14	14	14
Wholegrain or lower fibre cereals/grains	Equiv 40g bread	28	28	20	15	41	41	42	42
Refined or lower fibre cereals/grains*	Equiv 40g bread	14	14	8	6	19	19	21	21
Meat and alts minus red	Equiv 65g red meats	7	7	7	7	12	12	7	7
Red meats (beef, lamb, veal, pork)	65g	7	7	3	3	12	12	7	7
Dairy foods**	Equiv 250g milk	17	17	28	28	17	17	17	17
Additional modelled allowance of unsaturated oils and spreads									
Polyunsaturated margarine***	10g	14	14	14	14	14	14	14	14

*Refined or lower fibre cereals were included as a group for cultural reasons; wholegrain or higher fibre can replace these if preferred.

**Should be mostly low fat

***As proxy for unsaturated oils and spreads. Could be replaced with oil (7g/serve) or seeds or nuts (10g/serve). (See Appendix 7.2.7)

4.2.5 Women

Omnivore Foundation diets for women are shown in Table 12.

In composite food group modelling, it was possible to achieve RDI for all the modelled nutrients at all ages except for iron in the youngest two age bands and in pregnancy, and for iodine in lactation. It was not possible to model a diet within the 7100–7300kJ *Foundation Diet* limit which achieved the RDI of 18mg for iron given the pre-set food group parameters. Iron requirements are however very skewed as shown (Table 13) and the iron requirements for 90% of women of this age were met by the final model.

The Australian RDIs for iron for women were set using US distribution data assuming 17% oral contraceptive use, however recent data from Australia suggests that usage in Australia may be closer to 25%[30] (note however, that the RDI level derived using the 17% usage figure is still the current recommendation). As shown in Table 13, if the 25% figure is applied to the estimations, then a level of 10.09 mg/day would meet the needs of 80% of women, 12.01mg would meet the needs of 90% of women and a level of 14.09mg would meet the needs of 95% of women. The RDI is set to cover the needs of 97.5% of women. The average level of iron attained in the *7-day* modelling with individual foods for the two younger women's groups was 12.1–12.3 mg (i.e. meeting needs of 90% women).

Table 13: Estimated percentiles of the distribution of iron requirements for menstruating females (based on US data 26)

Percentile	Menstruating woman	Oral contraceptive (oc) user	Mixed population at 17% oc use*	Mixed population at 25% oc users**
2.5	4.42	3.63	4.18	4.22
5	4.88	4	4.65	4.66
10	5.45	4.45	5.19	5.20
20	6.22	5.06	5.94	5.93
30	6.87	5.52	6.55	6.53
40	7.46	5.94	7.13	7.08
50 (EAR)	**8.07**	**6.35**	**7.73**	**7.64**
60	8.76	6.79	8.39	8.27
70	9.63	7.27	9.21	9.04
80	10.82	7.91	10.36	10.09
90	13.05	8.91	12.49	12.01
95	15.49	9.9	14.85	14.09
97.5 (RDI)	**18.23**	**10.94**	**17.51**	**16.41**

**US figures used to set EAR/RDIs in NRVs*

***Recent Australian figure for use of contraceptives*[29]

7-day diet modelling

For nutrients included in modelling

For women who were not pregnant or lactating, all diets reached EAR for all modelled nutrients for all ages.

Other nutrients

For nutrients not included as inputs in the modelling, all met the EAR for all nutrients except for vitamin B6 in women 70+ years (97% met). However, the database is incomplete for vitamin B6 and so the modelling would have underestimated vitamin B6 and therefore results should be interpreted with caution.

For nutrients with an AI, the average levels of the diets all approximated the relevant AI except for vitamin D which averaged about 3.3–4.7µg across the age groups compared to AIs of 5µg for the youngest two groups, 10µg for those aged 51–70 years and 15µg for those over 70 years. As raised previously, as the AI for vitamin D assumes little exposure to sunlight, these results should not be over-interpreted.

4.2.6 Pregnancy and lactation

Omnivore Foundation diets for pregnant and lactating women are also shown in Table 12.

In composite food group modelling it was possible to attain all RDIs within energy constraints except for iron in pregnancy and iodine in lactation.

7-day diet modelling

For nutrients included in modelling

For pregnancy, the EAR for all nutrients except iron was reached by all 100 *7-day* diets. It was not possible to construct simulated diets within the lowest kilojoule limits that reached the EAR of 22mg for iron even allowing for increased meat consumption. All diets also reached the RDI for all nutrients with the exception of iron, as discussed above, and iodine (1–3% below RDI).

For lactation, all diets reached all EARs for the modelled nutrients.

Other nutrients

For nutrients not included as inputs in the modelling, all diets for pregnancy and lactation met all EARs.

For nutrients with an AI, mean vitamin D levels were below AI and vitamin E in lactation was a little lower than AI (9.9 *vs* 11mg). The mean level of α-linolenic acid was somewhat lower than AI in both age groups (0.9 and 1.0 *vs* an AI of 1.2mg) but the means for all other nutrients approximated or exceeded the relevant AI. Again, as AIs are less robust than RDIs, these results should not be over-interpreted.

4.3 Total Diets

Total Diets are not prescribed in terms of a set number of serves of food groups to be consumed by a given age/gender/activity group but are based on building upon *Foundation Diets* in a flexible manner (see Figure 2), hence the tables and discussion below are for illustrative purposes only.

Table 14 shows examples of some of the possible *Omnivore Total Diets* for men aged 31–50 years, of average height undertaking light to medium activity (PAL 1.7). There are many other possible combinations of food groups that would provide the nutrient and energy needs for this group. As energy needs for a given group are limited, increases in one food group will affect the potential for increasing others. The diets are based on the *Omnivore Foundation Diet* patterns for this age/gender group with additional serves from various food groups to attain their particular energy requirements.

Examples of *Omnivore Total Diets* for all other age/gender groups and their nutrient composition are given in Appendices 14 and 15.

Table 14: Sample Omnivore Total Diets for men aged 31–50yrs of average height (175 cm) undertaking light to medium activity (PAL 1.7, about 11,700kJ), expressed as serves per week

Composite food groups	Example 1	Example 2	Example 3	Example 4	Example 5	Example 6
Starchy vegetables	14	7	7	14	7	14
Green and brassica vegetables	7	14	7	14	7	7
Orange vegetables	7	14	7	7	7	14
Legumes	7	7	14	7	7	7
Nuts and seeds	7	14	14	7	7	7
Other vegetables	21	14	14	14	14	21
Total fruit	14	14	21	21	14	28
Wholegrain and higher fibre cereals/grains	42	28	35	35	28	42
Refined and lower fibre cereals/grains*	14	21	14	18	21	14
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red meats (beef, lamb, pork etc)	7	7	7	7	7	7
Dairy foods**	17	24	17	17	24	17
Additional categories						
Unsaturated oils and spreads***	28	28	28	28	28	28
Discretionary Choices (600kJ equivalents)	17.5	7	10.5	14	14	7

**Can be wholegrain if preferred*

***Should be mostly low fat*

****As proxy for unsaturated oils and spreads and could be replaced with oil (7g/serve) or seeds or nuts (10g/serve)*

Note: A serve of cereals is approximately 500kJ; nuts and seeds about 750kJ; both fruits and legumes are about 350kJ each per serve; starchy vegetables and unsaturated fats and oils, 250kJ; orange vegetables about 150kJ per serve and both green/brassica and other vegetables about 100kJ. 'Discretionary choices' are approximately 600kJ/serve (see Table A.7.1 for further details).

Again, to illustrate the general principles only, Table 15 shows an example of how a *Foundation Diet* could be built on to attain *Total Diets* of varying energy levels. In consideration of the overall energy and macronutrient composition of the diet models, the meat and dairy food categories generally were not increased over *Foundation Diet* quantities other than as part of the 'Discretionary Choices' increases in energy intake in the example below come from the fruit, vegetables, cereals, nuts and seeds categories, and within limitations, from the unsaturated oils and spreads and 'Discretionary Choices'. The table shows the new groups that were added at each step, for this example, in bold type.

Many other combinations of food groups are possible to attain the energy needs for the *Total Diet* of the individual so the example above is illustrative only. In this particular example, each diet builds on the previous diet with the addition of approximately 500kJ/day, although it is not necessary, of course, to use this stepwise approach to design *Total Diets*.

As the kilojoule content of individual foods within groups can vary, the food group patterns given here are for general example only. An electronic food modelling system which can take into account individual food preferences could obviously give a more accurate estimate of the energy content of a proposed diet by using the kilojoule content of individual foods rather than the food group mean.

Table 15: An example of how an *Omnivore Foundation Diet* could be built upon to derive *Omnivore Total Diets* for varying daily energy needs, expressed as serves per week

Food groups	*Omnivore Foundation Diet* of 7500kJ	Sample *Omnivore Total Diets*– approximate energy content/day									
	Serves per week										
	7500 kJ	8000 kJ	8500 kJ	9000 kJ	9500 kJ	10000 kJ	10500 kJ	11000 kJ	11500 kJ	12000 kJ
Starchy vegetables	5	5	5	5	**12**	12	12	12	12	12
Green/brassica	7	7	7	7	7	7	7	7	7	**10**
Orange vegetables	7	7	7	7	7	7	7	7	7	14
Legumes	2	2	2	2	2	2	**12**	12	12	12
Nuts/seeds	2	7	7	7	7	7	7	7	7	7
Other vegetables	14	14	14	14	14	14	14	14	14	**18**
Fruit	14	14	14	14	14	14	14	**24**	24	24
Wholegrain and higher fibre cereals/grains	28	28	28	**32**	32	32	32	32	32	32
Refined or lower fibre cereals/grains	14	14	14	**17**	17	17	17	17	17	17
Poultry/fish/seafood/eggs/ legumes	7	7	7	7	7	7	7	7	7	7
Red meats	7	7	7	7	7	7	7	7	7	7
Dairy foods*	17	17	17	17	17	17	17	17	17	17
Additional categories:										
Unsaturated oils and spreads**	14	14	14	14	**21**	21	21	21	21	**28**
Discretionary Choices	0	0	**6**	6	6	**12**	12	12	**18**	18

Bolded numbers *in the Table above show where incremental changes have been made to the previous diet by addition of serves of one or more food groups (e.g. in the table above when moving from a 7500kJ diet to the 8000kJ diet, an additional 5 serves a week of nuts and seeds were added to the pattern for the 7500kJ diet)*

**Should be mostly low fat*

***As proxy for unsaturated oils (7g serve) or seeds (10g) in Foundation Diets and could also be replaced with monounsaturated oils and spreads (7g/serve) seeds or nuts (10g/serve) in Total Diets*

Note: A serve of cereals is approximately 500kJ; nuts and seeds about 750kJ; both fruits and legumes are about 350kJ each per serve; starchy vegetables and unsaturated fats and oils, 250kJ; orange vegetables about 150kJ per serve and both green/brassica and other vegetables about 100kJ. 'Discretionary choices' are approximately 600kJ/serve (see Table A.7.1 for further details).

4.4 Comparison with other Nutrient Reference Values

4.4.1 Upper levels

There is an upper level of intake (UL) from food for retinol, LCn3 fatty acids, niacin as nicotinic acid (for fortified foods), vitamin B6 as pyridoxine, folic acid (from fortified foods), vitamin D, vitamin E (as α-tocopherol equivalents), calcium, iodine, phosphorus, sodium and selenium.

7-day Total Diets

For some age groups of children and particularly for those with the highest energy needs, sodium was the only nutrient that exceeded the UL. For those of average age, within each age group, with light to moderate activity, *7-day Total Diets* were either borderline or less than the UL for all age groups. For children with the highest energy needs in their group, only children aged 9–11 years could meet their needs without exceeding the UL for sodium with the *7-day Total Diets*.

For men, the only UL exceeded by the sample *7-day Total Diets* was for sodium with some *7-day Total Diets* for those with highest energy needs and aged 19–70 years exceeding the sodium UL (at about 2600–2700mg/day).

For non-pregnant, non-lactating females, no nutrients exceeded the UL. *Seven-day Total Diets* for pregnant and lactating women did not exceed UL for nutrients other than sodium, and this was only for women with higher energy needs.

4.4.2 Suggested Dietary Targets

The SDTs are not precise estimates of the needs for chronic disease prevention as it is difficult to set a point estimate from the epidemiological literature. They are generally set at the 90th percentile of current population intakes on the basis that these levels of intake are unlikely to cause harm and intakes within the top quintile of population intake often have benefits in epidemiology studies. Given this the failure to reach SDT should not be over interpreted especially for the lower energy *Total Diets*.

7-day Total Diets

For men, none of the sample diets were below the SDT for sodium. No *7-day Total Diets* met the SDT for LCn3 fatty acids. All diets met the folate SDT. The *7-day Total Diets* for men with higher energy needs met the vitamin C and vitamin E SDTs more so than the *7-day Total Diets* for men of average height with low to moderate activity, regardless of age. Diets for men aged 19–70 years met the potassium, dietary fibre, vitamin A and β-carotene SDTs. However, some *7-day Total Diets* for men 70+ years of average height and low to moderate activity, did not meet the fibre, vitamin A or beta-carotene SDTs.

For women 19–30 years of average height and light to moderate activity and women of all ages with higher energy needs, *7-day Total Diets* provided less sodium than the UL but more than the SDT. For women of average height and light to moderate activity, *7-day Total Diets* provided sufficient vitamin E to just reach the SDT (borderline) and just fell short for vitamin C for average needs. However, the SDT for these nutrients was met by *7-day Total Diets* for women with higher energy needs. Folate, vitamin A, β-carotene, potassium and dietary fibre SDTs were met (or borderline) for all *7-day Total Diets* for women.

For 14–18 year old boys and girls trends in *7-day Total Diets* in meeting SDTs were similar to young men and young women respectively.

4.4.3 Acceptable Macronutrient Distribution Range

The *Total Diets* were usually within the limits for the percentage of energy from fat, carbohydrate and protein set by the AMDRs, but protein was sometimes higher in the lower energy *Total Diets* which is not surprising given the energy constraints.

4.5 Comparison of *Omnivore Foundation* and sample *Omnivore Total Diet* intake patterns with existing recommendations, current dietary intake and food availability

To identify any potential issues in their implementation, the *Omnivore Foundation Diets* and a sample of *Omnivore Total Diet* models were compared with:

1. AGTHE98 and other national initiatives such as the 'Go for 2 and 5' fruit and vegetable promotion campaign as well as relevant overseas food guides
2. dietary intakes from the NCNPAS07 and the NNS95 and
3. Australian food availability.

4.5.1 Comparison of Omnivore Foundation and sample Omnivore Total Diets to recommendations from the AGTHE98 and overseas guides for equivalent groups

The *Omnivore Foundation Diets* and some sample *Omnivore Total Diets* for men and women were compared to Line A (increasing cereals with increasing energy) and Line B (increases in all food groups) in the AGTHE, US MyPyramid and Canadian recommendations. The *Foundation Diets* are also the *Total Diets* for the smallest and least active members of each age/gender group. Unsaturated fats and oil allowances also vary across Line A and B as they are linked to cereal recommendations.

There are some limitations in comparing these guides as serve size amounts and descriptors vary across guides. Amounts of foods may be expressed in household measures (e.g. cups) or in gram or ounce equivalents and the age/gender/activity categories do not always match perfectly. For example, the Canadian guide assumes an average body size for a given age/gender and activity and the US guide has three activity levels only. The AGTHE98 gives ranges for intake for a particular age/gender and the age brackets differ somewhat to those of the other comparable food guides.

For *Omnivore Foundation Diet* comparisons, the lowest level of activity was used from the US guide and the lower end of the recommended ranges of intake from AGTHE98. For the *Omnivore Total Diets* for people of average height and activity, the middle energy band for the US was used for comparison and the middle of the AGTHE98 range.

Foundation Diets and Total Diets for smaller, inactive people

Tables 16–19 show a comparison of the *Omnivore Foundation Diets* for men and women to the equivalent recommendations from the AGTHE98, US MyPyramid and Canadian guides. These *Omnivore Foundation Diets* are also the *Omnivore Total Diets* for sedentary men or women who are the smallest (150 cm women; 160 cm men) for their age/gender group. These heights are the lowest category for which energy requirements for women and men were calculated in the NRVs[4]. These heights are close to the 5th percentile for Australians from the NNS95. For some of the *Total Diets* some additional dairy foods were modelled as part of the 'Discretionary Choices'.

In general, the modelled patterns are similar to those for the equivalent lower end of the energy range for the AGTHE98 and the US and Canadian recommendations. Meat serves are similar to those for the current US and Canadian guides but generally higher than the AGTHE98. Serves for dairy foods, cereals (for AGTHE Line B), vegetables and fruit are similar to AGTHE98, US and Canadian recommendations. The AGTHE98 had two different figures published for the fats and oils allowance (1 and 2 teaspoons per 60% of cereal serves) so the range has been shown. For women, the modelled levels for unsaturated oils and spreads were within the range suggested by AGTHE98, at the lower end of the US recommendations but less than Canada's. For men, they were at the upper or middle end of the Line A (higher cereals) AGTHE98 range, higher than the US but lower than Canada's recommendations. The US also had an allowance for the equivalent of 'Discretionary Choices' or 'extras' (discretionary kJ allowance) at this level which was not included in the *Omnivore Foundation*, AGTHE98 or Canadian recommendations at this energy intake level.

Tables 20a and 20b show a similar comparison for a sample of *Omnivore Total Diets* for men and women aged 31–50 years of average height with light to moderate activity (PAL 1.7). The *Omnivore Total Diets* shown are just some of the possible food group combinations but again they generally aligned well with the AGTHE98, US and Canadian recommendations for men and women of similar age and activity.

Table 16: *Omnivore Foundation Diets* for women – weekly modelled serves* or amounts; comparison to AGTHE98
(Note: these *Omnivore Foundation Diet* patterns are also the *Omnivore Total Diet* patterns for smallest, sedentary women of that age)

	Omnivore Foundation Diet			AGTHE98			
Food Groups	150cm Very sedentary PAL 1.4 19–50 years (7100–7300kJ)	150cm Very sedentary PAL 1.4 51–70 years (6900kJ)	150cm Very sedentary PAL 1.4 70+years (6500kJ)	Line A Lower end of range 19–60 years	Line B Lower end of range 19–60 years	Line A Lower end of range 60+years	Line B Lower end of range 60 years
Cereals/Grains (40g bread equiv)	42	28	21	42	42	42	31.5
Total Vegetables (75g equivs)	35	35	35	35	28	35	28
Darker Green	*7*	*7*	*7*				
Orange	*7*	*7*	*7*				
Starchy	*5*	*5*	*3*				
Legumes	*2*	*3*	*3*				
Other	*14*	*14*	*14*				
Fruit (150g equiv)	14	14	14	14	14	14	14
Total Veges and Fruit	49	49	49	49	42	49	42
Dairy foods (250g milk equiv)	17.5	28	28	14	14	14	14
Red Meats**	455g (7 serves at 65g)	195g (3 serves at 65g)	195g (3 serves at 65g)	230–350g (3.5 serves at 65–100g)	230–350g (3.5 serves at 65–100g)	230–350g (3.5 serves at 65–100g)	230–350g (3.5 serves at 65–100g)
Poultry, fish, seafood, eggs, legumes	700g (7 serves at average of 100g)	700g (7 serves at average of 100g)	700g (7 serves at average of100g)	350g (3.5 serves at average100g)	350g (3.5 serves at average100g)	350g (3.5 serves at average100g)	350g (3.5 serves at average100g)
Total meats and alts	1155g	895g	895g	580–700g	580–700g	580–700g	580–700g
Nuts and seeds***	2	3	3	In meats and alts	In meats and alts	In meats and alts	In meats and alts
Additional categories:							
Unsaturated oils and spreads****	140g Poly margarine (as proxy) (100g poly oil)	140g Poly margarine (as proxy) (100g poly oil)	140g Poly margarine (as proxy) (100g poly oil)	90–180g Poly margarine/oil	90–180g Poly margarine/oil	90–180g Poly margarine/oil	70–140g Poly margarine/oil
Discretionary Choices (600kJ equiv)	0	0	0	0	0	0	0

**Serves for AGTHE converted to* Omnivore Foundation/Total Diet *amounts*
***AGTHE recommends red meats 3–4 times a week, the remainder has been allocated to non-red meats and alternatives*
****nuts and seeds included as part of meats/alts in AGTHE*
*****AGTHE says either 1 or 2 tsp poly-unsaturated margarine or oil /60% cereal serves in different places*

Table 17: *Omnivore Foundation Diets*–Women–weekly modelled serves* or amounts; comparison to translated US and Canadian recommendations *(These Omnivore Foundation Diet patterns for different age groups are also the Omnivore Total Diet patterns for smallest, sedentary women of that age)***

	Omnivore Foundation Diet			USA MyPyramid		Canadian Guide**	
Food Groups	150cm Very sedentary PAL 1.4 19–50 years (7100–7300kJ)	150cm Very sedentary PAL 1.4 51–70 years (6900kJ)	150cm Very sedentary PAL 1.4 70+years (6500kJ)	150cm Low exercise 19–50 years	150cm Low execrise 51+years	Average ht/ activity 19–50 years	Average ht/ activity 51+years
Cereals/Grains (40g bread equiv)	42	28	21	32	26	40	37
Total Vegetables (75g equivs)	35	35	35	35	28	V&F 52.5	V&F 49
Darker Green	*7*	*7*	*7*	*6*	*4*		
Orange	*7*	*7*	*7*	*4*	*3*		
Starchy	*5*	*5*	*3*	*12*	*5*		
Legumes	*2*	*3*	*3*	*12*	*5*		
Other	*14*	*14*	*14*	*13*	*11*		
Fruit (150g equiv)	14	14	14	10.5	10.5		
Total Veges and Fruit	49	49	49	45.5	38.5	52.5	49
Dairy foods (250g milk equiv)	17.5	28	28	21	21	14	14
Red Meats	455g (7 serves at 65g)	195g (3 serves at 65g)	195g (3 serves at 65g)	980g	980g	1050g	1050g
Poultry, fish, seafood, eggs, legumes	700g (7 serves at average of 100g)	700g (7 serves at average of 100g)	700g (7 serves at average of100g)				
Total meats and alts	1155g	895g	895g	980g	980g	1050g	1050g
Nuts and seeds (30g)	2	3	3	Included with oils; also in meat/alts	Included with oils; also in meat/alts	Included in meats and alts	Included in meats and alts
Additional categories							
Unsaturated oils and spreads	140g Poly margarine (as proxy) (100g poly oil)	140g Poly margarine (as proxy) (100g poly oil)	140g Poly margarine (as proxy) (100g poly oil)	140–175g oil from unsat oil, (equiv 210–245g margarine, seeds)	140–175g oil from unsat oils, (equiv 210–245g margarine, seeds)	210–315mls unsaturated oils and fats	210–315mls unsaturated oils and fats
Discretionary Choices (600kJ equiv)	0	0	0	up to 7	up to 7	0	0

**Serves for US and Canada converted to* Omnivore Foundation/Total Diet *equivalents*

***Canadian guide is for average height/activity only; only discriminates by age*

Table 18: *Omnivore Foundation Diets* – Men 19yrs+ – weekly modelled serves* or amounts – comparison to AGTHE98 (These *Omnivore Foundation Diet* patterns for different age groups are also the *Omnivore Total Diet* for smallest, sedentary men of that age)

	Omnivore Foundation Diet			AGTHE98			
Food Groups	150cm Very sedentary PAL 1.4 19–50 years (7100–7300kJ)	150cm Very sedentary PAL 1.4 51–70 years (6900kJ)	150cm Very sedentary PAL 1.4 70+years (6500kJ)	Line A Lower end of range 19–60 years	Line B Lower end of range 19–60 years	Line A Lower end of range 60+years	Line B Lower end of range 60 years
Cereals/Grains (40g bread equiv)	42	42	31.5	63	42	52.5	42
Total Vegetables (75g equiv)	42	37	35	35	35	42	28
Darker Green	7	7	7	*Not specified – variety encouraged*			
Orange	7	7	7				
Starchy	7	7	5				
Legumes	7	2	2				
Other	14	14	14				
Fruit (150g equiv)	14	14	14	14	14	21	14
Total Veges and Fruit	59	51	49	49	49	63	42
Milks (250g milk equiv)	17.5	17.5	24.5	14	14	14	14
Red Meats**	455g (7 serves at 65g)	455g (7 serves at 65g)	455g (7 serves at 65g)	230–350g (3.5 serves at 65–100g)	230–350g (3.5 serves at 65–100g)	230–350g (3.5 serves at 65–100g)	230–350g (3.5 serves at 65–100g)
Poultry, fish, seafood, eggs, legumes	700g (7 serves at ave of 100g)	700g (7 serves at ave of 100g)	700g (7 serves at ave of 100g)	350g (3.5 serves at ave of 100g)	350g (3.5 serves at ave of 100g)	700g (7 serves at ave of 100g)	350g (3.5 serves at ave of 100g)
Total meats and alts	1155g	1155g	1155g	580–700g	580–700g	580–700g	580–700g
Nuts/seeds (30g equiv)	7	4	2	In meats and alts	In meats and alts	In meats and alts	In meats and alts
Additional categories							
Unsaturated oils and spreads	280g Poly margarine (as proxy) (200g poly oil)	280g Poly margarine (as proxy) (200g poly oil)	140g Poly margarine (as proxy) (100g poly oil)	140–280g Poly margarine or oils	95–190g Poly margarine or oils	120–240g Poly margarines or oils	95–190g Poly margarine or oils

**Serves converted to* Foundation Diet *equivalent*

***AGTHE recommends red meats 3–4 times a week; the remaining serves have been allocated to non-red category*

Table 19: *Omnivore Foundation Diets* – Men 19yrs+ at lower end of energy need range – weekly modelled serves* or amounts–comparison to US and Canadian guides (Note *Omnivore Foundation Diet* patterns for groups of different ages are also the *Omnivore Total Diet* for smallest, sedentary men of that age)**

	Omnivore Foundation Diet			USA MyPyramid		Canadian Guide**	
Food Groups	150cm Very sedentary PAL 1.4 19–50 years (7100–7300kJ)	150cm Very sedentary PAL 1.4 51–70 years (6900kJ)	150cm Very sedentary PAL 1.4 70+years (6500kJ)	150cm Low exercise 19–50 years	150cm Low execrise 51+years	Average ht/ activity 19–50 years	Average ht/ activity 51+years
Cereals/Grains (40g bread equiv)	42	42	31.5	31	29	49	43
Total Vegetables (75g equivs)	42	37	35	42	35	V&F 63	V&F 49
Darker Green	*7*	*7*	*7*	*6*	*6*		
Orange	*7*	*7*	*7*	*4*	*4*		
Starchy	*7*	*7*	*5*	*12*	*6*		
Legumes	*7*	*2*	*2*	*6*	*6*		
Other	*14*	*14*	*14*	*14*	*13*		
Fruit (150g equiv)	14	14	14	14	10.5		
Total Veges and Fruit	56	51	49	56	45.5	63	49
Milks/alts (250g milk equiv)	17.5	17.5	24.5	21	21	14	21
Red Meats	455g (7 serves at 65g)	455g (7 serves at 65g)	455g (7 serves at 65g)	1176g	980g	1575g	1575g
Poultry, fish, seafood, eggs, legumes	700g (7 serves at average of 100g)	700g (7 serves at average of 100g)	700g (7 serves at average of 100g)				
Total meats and alts	1155g	1155g	1155g	1176g	980g	1575g	1575g
Nuts/seed (30g equiv)	7	4	2	Included with oils & meat/alts	Included with oils & meat/alts	Included in meats/ alts	Included in meats/alts
Additional categories							
Unsaturated oils and spreads	280g Polyunsaturated margarine (as proxy) (200g poly oil)	280g Polyunsaturated margarine (as proxy) (200g poly oil)	140g Polyunsaturated margarine (as proxy) (100g poly oil)	210g unsaturated oils (equiv 300g margarine)	175mls unsaturated oils (equiv 250g margarine)	210–315mls unsaturated oils and fats	210–315mls unsaturated oils and fats
Discretionary Choices (600kJ equiv)	0	0	0	no more than 14	no more than 9.5	0	0

**Serves for US and Canada converted to Omnivore Foundation/Total Diet equivalents*

***Canadian guide is for average height/activity only; only discriminates by age*

Table 20: Comparison of some other sample *Total Diets* for men and women of average height undertaking light to moderate activity with US, Canadian and AGTHE recommendations for people of similar age/height

a. Men 30–51 years; average height 175 cms; PAL 1.7 aged 31–50 years about 11700kJ–serves or amounts per week

Food Groups	*Australian Total Diets*						US MyPyramid	Canadian Guide	AGTHE98 19–60 years	
	Example 1	Example 2	Example 3	Example 4	Example 5	Example 6			Line A	Line B
Cereals (40g bread equiv)	56	59	49	53	49	56	49	56	94.5	63
Fruit (150g equiv)	14	14	21	21	14	28	18	V&F 56	14	25
Total Vegetables (75g equiv)	56	56	49	56	42	63	49		35	49
Green vegetables	*7*	*14*	*7*	*14*	*7*	*7*	*6*	Not specified Variety encouraged	Not specified Variety encouraged	
Orange	*7*	*14*	*7*	*7*	*7*	*14*	*5*			
Legumes	*7*	*7*	*14*	*7*	*7*	*7*	*7*			
Starchy vegetables	*14*	*7*	*7*	*14*	*7*	*14*	*14*			
Other vegetables	*21*	*14*	*14*	*14*	*14*	*21*	*17*			
Total vegetables and fruit	70	70	70	77	56	91	67	56	49	74
Dairy foods (250g milk equiv)	14	24	17	17	24	17	21	14	14	21
Red Meats	455g	455g	455g	455g	455g	455g	1402g	1568g	230–350g	230–350g
Poultry, fish, seafood, eggs, legumes	700g	700g	700g	700g	700g	700g			230–350g	560–850g
Totals meats and alts	1155g	1155g	1155g	1155g	1155g	1155g	1402g	1568g	460–700g	790–1200g
Nuts and seeds (30g equivalent)	7	14	14	7	7	7	In meats and alts and oils	In meats and alts	In meats and alts	In meats and alts
Additional categories										
Unsaturated Margarines (oils and spreads)	280g	280g	280g	280g	280g	280g	400g as unsat oils (equiv 570g as margarine)	300–450g unsat fats/ oils	210–420g as polyunsat marg	140–280g as polyunsat marg
Discretionary Choices (600kJ equiv)	17	7	10.5	14	14	7	10.5	0	10.5	10.5

b. Women aged 31–50; average height 165cms; PAL 1.7 and about 9800kJ – serves or amounts per week

Food Groups	*Australian Omnivore Total Diets*						US MyPyramid	Canadian Guide	AGTHE98 19–60 years	
	Example 1	Example 2	Example 3	Example 4	Example 5	Example 6			Line A	Line B
	Serves or amounts per week									
Cereals (40g bread equiv)	45	42	42	45	59	45	39	42	68	35
Vegetables (75g equiv)	35	49	35	42	35	56	42	V&F 49	35	39
Green vegetables	*7*	*7*	*7*	*7*	*7*	*14*	*6*		Not specified Variety encouraged	
Orange	*7*	*7*	*7*	*7*	*7*	*7*	*4*			
Legumes	*2*	*2*	*2*	*2*	*2*	*9*	*6*			
Starchy vegetables	*5*	*5*	*5*	*12*	*5*	*5*	*12*			
Other vegetables	*14*	*28*	*14*	*14*	*14*	*21*	*14*			
Fruit (150g equiv)	14	21	21	14	14	17	14		14	18
Total Vegetables and fruit	49	70	56	56	49	73	66	49	49	57
Dairy foods (250g milk equiv)	21	21	21	21	20	21	21	14	14	18
Red meats	455g	455g	455g	455g	455g	455g	1372g	1575g	230–350g	230–350g
Poultry, fish, seafood, eggs, legumes	700g	700g	700g	700g	700g	700g			230–350g	360–550g
Total meats	1155g	1155g	1155g	1155g	1155g	1155g	1372g	1575g	460–700g	590–900g
Nuts and seeds** (30g equiv)	4	4	4	3	4	4	In meats and alts and oils	In meats and alts	In meats and alts	In meats and alts
Additional categories:										
Unsaturated oils and spreads***	280g	280g	280g	280g	140g	280g	300g	300–450g	150–300g	120–240g
Discretionary Choices (600kJ equiv)	7	3.5	7	7	3.5	0	7	0****	9	9

**for meats reference serve size was 82.5g for meats (average of 65g for red meats and 100g for fish, poultry, eggs, legumes)*
***US includes nuts and seeds in unsaturated oils and in meat alternative; Canada and AGTHE includes in meat alternatives*
****US includes unsaturated oils as well as oils from nuts and seeds, avocado, margarines etc in this category–serves given as equivalent to margarines; Canada recommends 30–45mls a day for all groups; In AGTHE was linked to cereal consumption*
*****no discretionary energy or extras mentioned*

4.5.2 Comparison of Omnivore *Foundation Diets* with current intakes

Children and adolescents

Tables 21–25 show a comparison of the *Omnivore Foundation Diet* models for girls (F) and boys (M) aged 2–18 years with intakes from NCNPAS07 for ages 2–16 years and NNS95 for ages 17–18 years. To meet the *Omnivore Foundation Diet* models an approximate doubling of overall vegetables consumption would be required. However a one third decrease of current intake would be required for starchy vegetables and an increase of 150–350% for green and brassica vegetables, 160–370% for orange vegetables and 150–200% for other vegetables, depending on age. Legumes would need to increase nearly 200–300%. Similar comparisons for fruit suggest that estimated current fruit intakes were close to the amounts modelled for the the 2–3 years olds but would need to increase proportionately with age up to an increase of 223% for the 17–18 year olds.

Intake of cereals also varies with age and gender, with an increase of at least 19% for 9–13 year olds, and up to 60% more required for 17–18 year olds to meet the *Omnivore Foundation Diet models*. A decrease in refined cereals intake of 12–32% would be required in all groups except the 2–3 year olds, to correspond with the modelled amount in the *Omnivore Foundation Diets*.

For the meat categories, the *Foundation Diet* models would require 32–84% more of the 'poultry, fish and seafood and eggs' category and more red meats for children aged 2–16 (27–70% more) and approximately the same amount for children aged 17–18 years. Within the dairy food categories, there is a need for greater dairy food intake particularly in children over 9 years of age and for a change from higher and medium fat choices to low fat choices. For children over 8 years of age nuts and seeds intake would have to triple to meet modelled quantities, although the overall intake of nuts and seeds would still be modest.

Adults

Table 26 shows a comparison of the *Omnivore Foundation Diet* models for adult females (F) and males (M) aged 19 years and over with intakes from the NNS95. These *Omnivore Foundation Diets* would also be the *Total Diets* for smaller, sedentary people from the relevant group. To meet the *Foundation Diet models* a 100% higher consumption of fruit and 30% higher overall consumption of vegetables and cereals would be required. Within cereals, an increase of 160% in wholegrain and decrease of 30% in refined cereals would be needed. For vegetables, a decrease of 40% would be required for starchy vegetables and increases of 30% in green and brassica, 140% in orange and 90% in other vegetables. Legumes would need to increase nearly fivefold to correspond with modelled quantities.

Within the meat categories, the *Omnivore Foundation Diet models* include 40% more 'poultry, fish and seafood and eggs' but 20% less red meats than currently consumed, the latter applies mainly for men. With respect to fish and seafood specifically, the models provide 140g to 280 g per week, which is approximately 40% higher than current intakes. *Omnivore Foundation Diet* models contain more dairy food than currently consumed, but a change from high/medium dairy foods to low fat choices would be required for intake to correspond to the models. Intake of nuts and seeds would have to increase substantially to correspond to the models, but from a very low average intake base of only 4g /day.

A comparison for unsaturated margarines and oils was not possible as the available national survey data for margarines or oils did not account for the amounts used in cooking. For example, in NNS95 about 8% of polyunsaturated fats are listed as coming from potatoes and a further 8% from bread.

For both adults and children alike, in order to ensure energy requirements were not exceeded, increase in the intake of these basic nutrient-dense foods would have to come at the expense of foods which constitute the 'Discretionary choices' (e.g. cakes, biscuits, soft and alcoholic drinks, pastries, burgers, confectionary, jams, snack foods, deli meats etc) which were not included in *Omnivore Foundation Diet* modelling.

Implications for Omnivore Total Diets

The comparisons given here are for the *Omnivore Foundation Diets* or for *Total Diets* for those who are smaller and inactive. As *Omnivore Total Diets* for other groups can vary markedly in food group composition, it is difficult to make a direct comparison. In general, however, the modelled quantities for meats and dairy foods for most groups do not differ markedly from the *Omnivore Foundation Diets*, so comparisons would still largely be valid. The groups which would increase most when transitioning from *Omnivore Foundation* to *Omnivore Total Diets* would be cereal, fruits and vegetables all of which require increased intake over current consumption levels even for *Omnivore Foundation Diets*. Thus, the increases indicated for *Omnivore Foundation Diets* for these food groups are conservative estimates of the changes required to correspond to the dietary modelling for the population as a whole.

Table 21: Intakes from the NCNPAS07[6] (g/day) for 2–3 year olds compared to *Omnivore Foundation Diet models*

	Foundation (F)			NCNPAS07			Ratio	
	F	M	Ave	F	M	Ave	F/NCNPAS	Compared with NCNPAS07
Total vegetables	199	199	199	106	104	105	1.90	90% more
Starchy vegetables	*27*	*27*	*27*	*40*	*42*	*41*	*0.66*	*33% less*
Green & brassica vegetables	*38*	*38*	*38*	*16*	*14*	*15*	*2.53*	*153% more*
Orange vegetables	*38*	*38*	*38*	*14*	*15*	*14.5*	*2.62*	*162% more*
Other vegetables	*75*	*75*	*75*	*30*	*29*	*29.5*	*2.54*	*154% more*
Legumes	21	21	21	6	4	5	4.20	320% more
Nuts/seeds	0	0	0	2	2	2	0.00	–
Fruit	150	150	150	160	173	167	0.90	10% less
All Cereals	265	346	305.5	166	171	169	1.81	81% more
Wholegrain or hf cereals/grains*	157	138	147.5	55	59	57	2.59	159% more
Refined or lf cereals/grains	108	108	108	111	112	112	0.97	3% less
Meat and alts minus red**	45	51	48	31	33	32	1.50	50% more
Red meats (beef, lamb, veal, pork)	33	33	33	26	23	25	1.35	35% more
High/Medium fat dairy foods***	44	44	44	396	419	401	0.11	89% less
Low fat dairy foods	324	320	322	89	82	86	3.77	277% more
Total dairy foods	368	364	366	485	501	487	0.75	25% more

**hf = high fibre*
***excludes legumes*
****as milk equivalents*

Table 22: Intakes from the NCNPAS07 (g/day) for 4–8 year olds compared to *Omnivore Foundation Diet models*

	Foundation (F)			NCNPAS07			Ratio	
	F	M	Ave	F	M	Ave	F/NCNPAS	Compared with NCNPAS
Total vegetables	322	283.5	302.75	126	122	124	2.44	144% more
Starchy vegetables	*38*	*37.5*	*37.75*	*59*	*54*	*57*	*0.67*	*33% less*
Green & brassica veg	*75*	*75*	*75*	*16*	*17*	*17*	*4.55*	*355% more*
Orange vegetables	*75*	*75*	*75*	*17*	*15*	*16*	*4.69*	*369% more*
Other vegetables	*113*	*75*	*94*	*30*	*30*	*30*	*3.13*	*213% more*
Legumes	21	21	21	4	6	5	4.20	320% more
Nuts/seeds	0	0	0	2	2	2	0.00	2% less
Fruit	225	225	225	167	166	167	1.35	35% more
All Cereals	252	235	243.5	186	207	197	1.24	24% more
Wholegrain or hf cereal/grains*	149	133	141	52	55	54	2.64	164% more
Refined or lf cereals/grains	103	102	102.5	134	152	143	0.72	28% less
Meat and alts minus red**	79	79	79	39	47	43	1.84	84% more
Red meats (beef, lamb, veal, pork)	46	46	46	23	31	27	1.70	70% more
High/Medium fat dairy foods	50	81	69	281	314	301	0.23	77% less
Low fat dairy foods	362	413	388	78	86	82	4.73	373% more
Total dairy foods	412	494	457	359	400	383	1.11	19% more

**hf = high fibre*
***excludes legumes*

Table 23: Intakes from the NCNPAS07 (g/day) for 9–13 year olds compared to *Omnivore Foundation Diet models*

	Omnivore Foundation (F)			NCNPAS07			Ratio	
	F	M	Ave	F	M	Ave	F/NCNPAS	Compared with NCNPAS
Total vegetables	375	380	380	169	182	176	2.15	54% more
Starchy vegetables	*54*	*60*	*60*	*76*	*91*	*84*	*.71*	*22–35% less*
Green & brassica veg	*75*	*75*	*75*	*29*	*26*	*28*	*2.73*	*173% more*
Orange vegetables	*75*	*75*	*75*	*19*	*17*	*18*	*4.17*	*317% more*
Other vegetables	*150*	*150*	*150*	*42*	*42*	*42*	*3.57*	*257% more*
Legumes	21	21	21	3	6	5	4.67	367% more
Nuts/seeds	9	9	9	3	2	3	3.60	260% more
Fruit	300	300	300	152	149	151	1.99	99% more
All Cereals	251	347	300	215	262	239	1.25	26% more
Wholegrain or hfcereal/grains*	144	193	169	48	62	55	3.07	207% more
Refined or lf cereals/grains	107	154	131	167	200	184	0.71	29% less
Meat and alts minus red**	88	96	92	55	61	58	1.59	59% more
Red meats (beef, lamb, veal, pork)	65	65	65	37	45	41	1.59	59% more
High/Medium fat dairy foods***	68	263	219	246	336	292	0.79	25% less
Low fat dairy foods	362	610	486	91	126	109	4.45	345% more
Total dairy foods	470	873	705	337	462	401	1.76	76% more

**hf = high fibre*
***excludes legumes*
****as milk equivalents*

Table 24: Intakes from the NCNPAS07 (g/day) for 14–16 year olds compared to *Omnivore Foundation Diet models*

	Omnivore Foundation (F)			NCNPAS07			Ratio	
	F	M	Ave	F	M	Ave	F/NCNPAS	Compared with NCNPAS
Total vegetables	375	396	385.5	200	230	215	1.79	79% more
Starchy vegetables	*54*	*75*	*64.5*	*90*	*112*	*101*	*0.64*	*36% less*
Green & brassica veg	*75*	*75*	*75*	*30*	*32*	*31*	*2.42*	*142% more*
Orange vegetables	*75*	*75*	*75*	*23*	*19*	*21*	*3.57*	*257% more*
Other vegetables	*150*	*150*	*150*	*51*	*59*	*55*	*2.73*	*173% more*
Legumes	21	21	21	6	8	7	3.00	200% more
Nuts/seeds	9	17	13	3	4	4	3.71	271% more
Fruit	300	300	300	129	121	125	2.40	140% more
All Cereals	413	378	395.5	221	310	266	1.49	49% more
Wholegrain or hfcereal/grains*	245	229	237	54	64	59	4.02	302% more
Refined or lf cereals/grains	168	149	158.5	167	246	207	0.77	23% less
Meat and alts minus red**	97	94	95.5	59	86	73	1.32	32% more
Red meats (beef, lamb, veal, pork)	65	65	65	36	66	51	1.27	27% more
Medium fat dairy foods	138	212	175	245	370	308	0.57	43% less
Low fat dairy foods	723	735	729	92	126	109	6.69	569% more
Total dairy foods	861	947	904	337	496	417	2.16	116% more

**hf = high fibre*
***excludes legumes*

Table 25: Intakes from the NNS95 for 17–18 year olds (g/day) compared to *Omnivore Foundation Diet models*

	Omnivore Foundation (F)			NNS95			Ratio	
	F	M	Ave	F	M	Ave	F/NNS95	Compared with NNS95
Total vegetables	375	396	385.5	217	337	277	1.39	39% more
Starchy vegetables	*54*	*75*	*64.5*	*102*	*205*	*154*	*0.42*	*58% less*
Green & brassica vegetables	*75*	*75*	*75*	*34*	*49*	*42*	*1.81*	*81% more*
Orange vegetables	*75*	*75*	*75*	*22*	*24*	*23*	*3.26*	*226% more*
Other vegetables	*150*	*150*	*150*	*54*	*53*	*54*	*2.80*	*180% more*
Legumes	21	21	21	5	6	6	3.82	282% more
Nuts/seeds	9	17	13	6	2	4	3.25	225% more
Fruit	300	300	300	100	86	93	3.23	223% more
All Cereals	413	428	420.5	217	307	262	1.60	60% more
Wholegrain or hf cereals/grains*	245	229	237	44	61	53	4.51	351% more
Refined or lf cereals/grains	168	199	183.5	173	246	210	0.88	12% less
Meat and alts minus red**	97	94	95.5	53	83	68	1.40	40% more
Red meats (beef, lamb, veal, pork)	65	65	65	56	83	70	0.94	6% less
High/Medium fat dairy foods***	138	213	175	231	426	332	0.53	47% less
Low fat dairy foods	723	735	729	78	124	101	7.22	622% more
Total dairy foods	861	948	904	309	550	433	2.09	109% more

**hf = high fibre*
***excludes legumes*
****as milk equivalents*

Table 26: Intakes from the NNS95 for adults (g/day) compared to *Omnivore Foundation Diet models*

	Omnivore Foundation (F)			NNS95			Ratio	
	F	M	Ave	F	M	Ave	F/NNS95	Compared with NNS95
Total vegetables	351	373	362	245	298	272	1.3	30% more
Starchy vegetables	*51*	*73*	*62*	*87*	*125*	*106*	*0.6*	*40% less*
Green & brassica vegetables	*75*	*75*	*75*	*54*	*60*	*57*	*1.3*	*30% more*
Orange vegetables	*75*	*75*	*75*	*30*	*32*	*31*	*2.4*	*140% more*
Other vegetables	*150*	*150*	*150*	*74*	*80*	*77*	*1.9*	*90% more*
Legumes	26	55	40	6	9	7	5.7	470% more
Nuts/seeds	10	25	18	3	4	4	4.5	350% more
Fruit	300	300	300	143	141	142	2.1	110% more
All Cereals	331	375	353	242	300	271	1.3	30% more
Wholegrain or hf cereals/grains*	208	226	217	72	93	83	2.6	160% more
Refined or lf cereals/grains	123	149	136	170	207	188	0.7	30% less
Meat and alts minus red**	97	101	99	58	82	70	1.4	40% more
Fish and seafood	30	28	29	17	24	21	1.4	40% more
Red meats (beef, lamb, veal, pork)***	50	65	58	54	99	77	0.8	20% less (men)
High/medium fat dairy foods****	108	108	108	202	261	233	0.5	54% less
Low fat dairy foods	641	516	578	107	99	103	5.6	460% more
Total dairy foods	749	624	684	309	360	336	2.0	103% more

**hf = high fibre*
***excludes legumes*
****provided by Omnivore Foundation diets*
*****as milk equivalents*

4.5.3 Comparison of *Foundation Diets* to the Australian food supply

In the CFG94, the authors reported that the amounts of foods required for the Core Food Groups (foods supplying 70% RDI in 50% energy) could be supplied in the case of cereal foods, vegetables, meats, poultry fish and eggs and for milk but not for fruit for which a 24% increase in production would be needed. An additional 4% would be covered by home production based on a 1992 ABS census of home production[30]. The estimated amounts of cereals required was about 56% of available supply, vegetables were 96%, meats, poultry, fish and eggs 44% and milk was 72%.

Table 27 shows equivalent data comparing the latest food availability figures from FAOSTAT[19] for the years 2001–2003 compared with requirements for the *Foundation Diets* which are also the *Total Diets* for the smallest and least active member of an age/gender group. The availability data were adjusted for comparison as cereals are recorded as dry grain weight, vegetables and fruits as unpeeled or cored, and meats, poultry, fish as uncooked etc. As with the 1994 analysis, the only food group for which current 'availability' would not cover needs for the *Foundation Diets* were the fruits where availability (including home grown) would be only 87% of need. It should be remembered that availability data are not equivalent to production figures as they take into account amongst other things, food that is exported in one form or another. These figures may also be an underestimate of supply as the ABS has not repeated their Home Production[31] survey since 1992, just before the CFG94 analysis.

Table 27: Comparison of available foods and amounts needed for *Omnivore Foundation Diet models* (per 1000 tonnes per year for the Australian population*)

Foodstuff	FAOSTAT 2001–2003	Home prod. 1992**	*Total*	As eaten***	Amounts modelled in *Omnivore Foundation* dietary patterns					Avail. minus modelled
					Men	Women	Boys	Girls	*Total*	
Cereals (as grain)	3709		**3709**	3418	941	875	311	265	**2392**	1026
Fruits	2043	110	**2153**	1722	745	781	228	217	**1971**	–249
Total vegetables	2928	153	**3081**	2773	1062	980	304	281	**2627**	146
Starchy roots	*1056*		**1056**	*844*	*181*	*132*	*48*	*38*	**399**	*445*
All other Veg.	*1851*		**1851**	*1666*	*745*	*781*	*237*	*225*	**1988**	*–323*
Legumes	*21*		**21**	*20*	*136*	*67*	*19*	*18*	**260**	*–240*
Nuts (shelled)	143		**143**	143	62	27	6	4	**99**	44
Red meat	1628		**1628**	1140	228	180	73	69	**550**	590
Poultry fish seafood eggs	1261	51	**1312**	918	248	260	77	73	**658**	260
Milk****	4908		**4908**	4908	1574	1990	500	637	**4701**	207
Additional category										
Polyunsaturated vegetable oils	319		**319**	319	66	18	7	5	**96**	223

**ABS census data for the year of 2003 was used for population estimates*

***1992 ABS Home production of foodstuffs survey [29]–latest data*

****Adjustments made for reporting on raw basis or inedible portions. Note most edible cereal foods have water and other ingredients added during the cooking process, therefore the weight of the food is greater than the grain weight.*

*****Assessed on basis of all serves as milk; no comparative cheese data on FAOSTAT*

The CFG94 analysis did not look at the supply of subgroups of vegetables but FAOSTAT does give some breakdown that shows that although overall vegetable availability covers needs, much of this is due to 'over' supply of starchy roots with 'under' supply of legumes and all other vegetables. Red meat supply was over twice that needed for *Foundation Diets* and poultry, fish, seafood and eggs as well as nuts were about 50% higher than needed. Milk supply was just above the level required.

Whilst this comparison is with amounts required for *Foundation Diets*, as the food group profiles for *Total Diets* can vary considerably, it is difficult to make a direct comparison but it appears that increased availability of both fruits and vegetables with the exception of starchy vegetables would be required.

Care needs to be taken in the interpretation of the data because of the lack of current knowledge about home consumption, the overall age of the FAOSTAT data, the gross estimations that are made in estimating wastage and the resulting FAOSTAT summary data of food availability.

5 DISCUSSION

Discussion

A series of *Foundation Diets* using four different eating patterns and informed by current scientific evidence derived from the literature, the most current national intake data, culinary practices and the NHMRC's 2006 Nutrient Reference Values[4] were developed as the proposed basis for a new national food modelling system for Australia. The various *Foundation Diets* outline the numbers of serves of food groups and sub-groups (expressed as the number of serves per week) needed to provide sufficient amounts of 10 key nutrients within the estimated energy requirements of the smallest and very sedentary category for each age and gender group. These *Foundation Diets* based on low energy requirements were then tested using 100 *7-day* simulations with the aim that all of the simulations would meet the Estimated Average Requirements (EARs) of the 10 key nutrients. The most limiting nutrient of the 10 nutrients modelled in the low energy *Omnivore Foundation Diets* was iron- the dietary models developed were unable to provide sufficient iron to fulfil the estimated requirements of pregnant females as a group. Magnesium for older men was also potentially limiting but to a much lesser extent than iron for pregnant women and girls.

A flexible system of *Total Diets* to cover increasing energy requirements for larger and more active people within each age and gender group was also developed by preferentially adding further serves of some of the food groups used in the *Foundation Diets* (e.g. fruit and vegetables) and by providing an option to include 'Discretionary Choices' higher in energy and generally with lower nutrient density. 'Discretionary Choices' could also potentially be replaced by additional serves of some of the food groups used in the *Foundation Diets* (e.g. red meats, fish and/or dairy foods). The *Total Diets* generally conformed to the Accepted Macronutrient Distribution Ranges (AMDRs) for protein, carbohydrate and total fat in the diets devised for those aged 14 years and over. For other nutrients not included as drivers in the model results for sodium, long chain fatty acids and vitamin D are complex to interpret and will be discussed below.

When this project to update the Core Food Groups1994 (CFG94) began, the intention was to model diets which attained the Recommended Dietary Intakes (RDIs) for the lowest energy possible such that total energy needs could then be attained in a variety of ways according to personal preference. Some limitations on the final dietary patterns were expected to ensure that they were still acceptable in terms of the balance of protein, carbohydrate and fats and that they did not exceed the NRV Upper Levels (ULs) for nutrients. It was originally envisaged that issues such as chronic disease, social diversity and availability within the Australian food system would be taken into account during the modelling process. After consideration, it was agreed that to ensure realistic, practical models were developed, chronic disease would be addressed at the beginning of the modelling by setting food group parameters based on a series of systematic evidence-based reviews which were being undertaken for the dietary guidelines review. Following this, further qualitative filtering of food groups were used to consider variety, cultural acceptability, accessibility and availability within the Australian food supply. Taking the guidance from the NHMRC's review of the evidence, the subsequent dietary pattern for the lowest energy level at which all or nearly all RDIs could be attained was very close to the energy needs of the smallest and least active members of each age/gender group. This energy level thus became the revised target for modelling of Foundation Diets.

In adults, the energy level for *Foundation Diets* equated to the needs of a person with a sedentary lifestyle and body size of 150cm for women or 160cm for men. These are the body sizes that align with the lowest categories for which energy levels were set in the Nutrient Reference Values (NRVs) and with the smallest 0.1–5% of the adult population. Most people, i.e. those that are small but active and all other size/activity groups will therefore require additional energy in their *Total Diets* which can be provided by additional serves from the foods forming the *Foundation Diets* and limited amounts from a range of foods and drinks which constitute 'Discretionary Choices'. For children, energy needs are set by age rather than body size so requirements for the youngest child in the age band with a PAL of 1.4 became the level used for the *Foundation Diet*.

In interpreting the *Foundation Diets* modelling, it needs to be born in mind that people of smaller body size may have requirements for some nutrients that are less than that of the median person in their age/gender group. The median need for a particular age/gender group is expressed as the EARs and the RDI is set at the level that is more than the needs of 97.5% of the group. With obesity being a major issue in Australia, models for dietary patterns (both *Foundation* and *Total*) need to be seen as a general guide only. Individual energy requirements vary even within age/gender/activity groups so energy intake needs to be matched to energy output at the individual level to prevent weight gain over time.

For a few nutrients, in some groups, it was not possible to attain RDI, and in a few models, EAR within energy limits. When modelling the *Omnivore Foundation Diets* with composite food groups, the RDI for iron could not be met by 100% of the diets in some young children, in younger women and in pregnant females, although EAR was met by all diets except those for pregnant females. The magnesium EARs were not always met in diets for older men. The modelling included an estimate of the amount of folate that would be provided by the now mandatory fortification of bread flour. In this context it should be remembered that the dietary folate EAR/RDI recommendations,

expressed as dietary folate equivalents in the NRVs, against which the diets were assessed do not include the additional amount of folic acid proposed to reduce the risk of neural tube defects.

The overall fat content of the final *Foundation Diets* was relatively low but within the relevant AMDR. When modelling, a small allowance of oils and spreads was included to reflect current culinary behaviour and to ensure that the energy these foods provided was within the energy constraints of the *Foundation Diets*. Margarine was used as a proxy for unsaturated oils and spreads However, unsaturated oils or seeds or nuts could have also been used in the models.

For *Total Diets*, additional amounts of unsaturated oils and spreads were included depending on the overall energy content of the diet. This mirrors the 'allowance' for unsaturated oils and spreads in the current AGTHE98 where the increase in the allowance is linked to cereal consumption levels. As with the AGTHE98, fats and oils were considered alongside the 'discretionary' or 'extra foods' category .

The only nutrient that was consistently low compared to the AI was vitamin D. However as the AI assumes little exposure to sunlight and those people who have moderate exposure to sunlight are likely to have lower requirements for vitamin D, this may not be problematic. Nevertheless, there is emerging evidence of vitamin D deficiency in Australia in the general population, and this issue may need to be further investigated and addressed.

The *Total Diets* generally conformed to the AMDRs and did not exceed ULs except for sodium in some higher energy diets. With increasing intakes of fruits, vegetables and cereals in the *Total Diets*, the SDTs for vitamins C and E were often met. However, as intakes of the two meat categories were modelled at 65g a day red meat equivalent or less for *Omnivore Foundation Diets*, the SDT for LCn3 fats was not met. As the modelling included a variety of fish both high and low in fat, ways to overcome this may need to be addressed in future food guides, for example, by specific reference to inclusion of rich sources of LCn3, including increased consumption of specific fish high in LCn3 and/or fortified foods. However it should also be noted that SDTs are not as robust as RDIs/EARs, and failure to reach SDTs should not be over interpreted especially for the lower energy Total Diets.

In conclusion, the approach modelled here is based on the concept of *Foundation Diets* which attain RDIs within set energy limits to replace the concept of the Core Food Groups. *Total Diets* which are an extension of *Foundation Diets* but provide in a structured way for additional energy needs, also provide a more flexible approach to food choice than the Australian Guide To Healthy Eating 1998 (AGTHE98) recommendations. The *Omnivore Foundation* and sample *Omnivore Total Diets* generally aligned well with recommendations from the US and Canada and for the most part with the AGTHE98 Line B recommendations although there were some disparities as some nutrient recommendations have changed since the AGTHE98 was developed. Modelled intakes for *Omnivore Foundation Diets* were higher than currently consumed for most vegetable categories, legumes, nuts and seeds, fruits and wholegrain cereals, poultry/fish/seafood/eggs/legumes and lower fat dairy foods but lower for starchy vegetables, refined cereals, higher fat dairy foods, red meats in men and foods in the 'Discretionary choices' category. Comparison of modelled versus current intake for red meats varied with age and gender. It was not possible to assess the unsaturated oils and spreads as the survey data for these foods do not include amounts used in cooking.

Food availability data indicate that there is sufficient food available to provide the quantities included in the models although for fruit, unless overall production is increased, additional supplies into the food consumption sector from other sources such as export may be required.

It is envisaged that this new approach to dietary modelling will replace the now-rescinded CFG94[1] and in doing so, will provide models which deliver sufficient amounts of 10 key nutrients and most other nutrients assessed, within a flexible system for all but pregnant females who have very high iron requirements.

For the purpose of providing guidance to the population, these models will, of course, have to be translated into realisticand practical food guides and dietary guidelines. Issues such as availability, accessibility and affordability will be further considered during this process. The serve sizes and food groupings used in the modelling exercise will not necessarily be retained for subsequent food guides; some food sub-groups may be merged within the larger group and serve sizes may be changed to better align with usual practice eg for young children. The possibilities for dietary patterns that could constitute the *Total Diets* for any age/gender are now much more flexible, so guidance as to the range of options will also be necessary in future dietary guidance. It is envisaged that such future dietary guidance will be culturally acceptable as it will be based on the most recent consumption data and scientifically relevant as it will be fully informed by a thorough review of the scientific literature, and thus will facilitate health and well-being once disseminated and adopted.

6 REFERENCES

References

1. National Health and Medical Research Council. *The Core Food Groups. The scientific basis for developing nutrition education tools*. Canberra: NHMRC, 1994
2. Commonwealth Department of Health & Family Services. *The Australian Guide to Healthy Eating.* Canberra: CDHFS, 1998.
3. National Health and Medical Research Council. *A Review of the Evidence to Address Targeted Questions to Inform the Revision of the Australian Dietary Guidelines* **WEBSITE REF TO BE ADDED**
4. National Health and Medical Research Council, Commonwealth Department of Health and Ageing (Australia), Ministry of Health (New Zealand) *Nutrient Reference Values for Australia and New Zealand including Recommended Dietary Intakes*. Canberra: NHMRC, 2006.
5. Food Standards Australia and New Zealand 2008. AUSNUT07 Australian Food, Supplement & Nutrient Database. Canberra: FSANZ http://www.foodstandards.gov.au/monitoringandsurveillance/foodcompositionprogram/ausnut2007/
6. Department of Health and Ageing. *National Children's Nutrition and Physical Activity Survey, 2007 Kids Eat, Kids Play.* Canberra: DOHA, 2008. Report in preparation
7. Australian Bureau of Statistics. *National Nutrition Survey: foods eaten. Australia 1995*. ABS Cat No. 4804.0 Commonwealth of Australia, 1999
8. National Health and Medical Research Council. *Dietary guidelines for Children and Adolescents in Australia*. Canberra: NHMRC, 2003
9. National Health and Medical Research Council *Dietary Guidelines for Australian Adults*. Canberra: NHMRC, 2003
10. National Health and Medical Research Council *Dietary Guidelines for Older Australians*. Canberra: NHMRC, 1999. Rescinded Dec 2005
11. Britten P, Lyon J, Weaver CM, Kris-Etherton PM, Nicklas TA, Weber JA, Davis CA MyPyramid Food Intake Pattern Modelling for the Dietary Guidelines Advisory Committee *J Nutr Educ Behav* 2006;38:S143-S152
12. Australian Bureau of Statistics. *Apparent consumption of foodstuffs and nutrients 1989–1990*. Canberra: ABS, 1992
13. USDA MyPyramid http://mypyramid.com. Accessed 4 January 2008
14. Britten P, Marcoe K, Yamini S, Davis C. Development of Food Intake Patterns for the MyPyramid Food Guidance System *J Nutr Educ Behav* 2006;38:S78-S92
15. Haven J, Burns A, Britten P, Davis C. Developing the Consumer Interface for theMyPyramid Food Guidance System *J Nutr Educ Behav* 2006;38: S124-S135.
16. Marcoe K, Juan W, Yamini S, Carlson A, Britten P. Development of Food Group Composites and Nutrient Profiles for the MyPyramid Food Guidance System. *J Nutr Educ Behav* 2006;38:S93-S107.
17. Canada Food Guide http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/context/evidfond/ food_intake-modeles_aliment_e.html Accessed 4 January 2008
18. Katamay SW, Esslinger KA, Vigneault M, Johnston JL, Junkins BA, Robbins LG, Sirois IV, Jones-McLean EM, Kennedy AF, Bush MAA, Brulé D, Martineau C. Eating well with Canada's Food Guide (2007): Development of the food intake pattern. *Nutrition Reviews*, 2007; 65 155–166
19. FAO. *FAOSTAT Database. Food Balance Sheets* http://apps/fao.org/page/collections Accessed 4 January 2008
20. Borradale D, Camlin M. Vitamin D in health and disease: an insight into traditional functions and new roles for the 'sunshine vitamin' *Nutr Res Rev*. 2009 Nov 10:1–19
21. National Health & Medical Research Council. *Recommended Dietary Intakes for use in Australia* (rescinded). Canberra: NHMRC, 1991.
22. National Health & Medical Research Council. *Dietary Guidelines for Australians.* Canberra: AGPS, 1992.
23. Lewis J, English R. *Composition of food Australia*. Canberra: AGPS, 1990.
24. Australian Bureau of Statistics *Apparent consumption of foodstuffs ABS cat no 43061997-98 and 1998–99*. Canberra: ABS, 1999.

25. Baghurst K, Baghurst P. *Perfect diets? A report to the Australian Nutrition* Trust; Adelaide, November, 2004

26. US Institute of Medicine. *Dietary Reference Intake; Applications in Dietary Assessment.* Washington DC: US National Academy of Science, 2000.

27. Insightful Corporation *S- PLUS* USA

28. Cook T, Rutishauser I, Seelig M. *Comparable Data on food and nutrient intake and physical measurements fom the 1983, 185 and 1985 national nutrition surveys.* Canberra: Commonwealth of Australia, 2001

29. Webb, K., Rutishauser, I. and Knezevic, N. 2008, *Foods, nutrients and portions consumed by a sample of Australian children aged 16–24 months,* J Nutr Diet, 65: 56–65

30. Gray E, McDonald P *Contraceptive practice and the reproductive life course.* Paper prepared for HILDA Survey Research Conference, University of Melbourne; Melbourne, 2007

31. Australian Bureau of Statistics. *Home Production of selected foodstuffs, Australia, for the year ended April 1992.* ABS, Canberra, 1994

7 PROCESS REPORT

Process Report

7.1 Introduction

In 2006 the NHMRC published the *Nutrient Reference Values for Australia and New Zealand Including Recommended Dietary Intakes* (NRVs). The NRVs (2006) include the levels of intake of essential nutrients considered to be adequate to meet the known nutritional needs of practically all healthy people for prevention of deficiency states. The Department of Health and Ageing and the Defence Science Technology Organisation have provided funding to the NHMRC to revise the *Core Food Groups* (1994) to align with the NRVs (2006).

The NHMRC established the *Dietary Guidelines Working Committee* to oversee and provide advice on the revision of the *Core Food Groups* (1994), *Dietary Guidelines* and the *Australian Guide to Healthy Eating* (AGTHE) (1998). A consortium headed by the Dietitians Association of Australia (DAA) won the contract to revise the *Core Food Groups* (1994) through an open tender process.

7.2 Terms of reference

The National Health and Medical Research Council have contracted the Dietitians Association of Australia and its specialist consultants to:

(a) update a key nutritional analysis document, the *Core Food Groups* (1994) (CFG) (revoked 2000) to be aligned with the *Nutrient Reference Values for Australia and New Zealand* (NRVs) (2006), giving consideration to current food supply and food consumption patterns; and

(b) provide a detailed qualitative and quantitative analysis of the types and amounts of core foods and any additional foods required to meet nutrient recommendations for different subgroups of the Australian population. This will involve developing the methodology to recommend an up-to-date core food grouping system, and additional food modelling as required to adjust the core foods to be suitable under specialised conditions, such as high energy needs due to increased physical activity.

7.3 Members Dietary Guidelines Working Committee

Dr Amanda Lee (Chair), Queensland Health and University of Queensland

Professor Colin Binns (Deputy Chair), Curtin University of Technology

Professor Linda Tapsell, University of Wollongong

Professor Sandra Capra, AM, University of Queensland

Dr Karen Webb, University of Sydney (2008–2009)

Professor Peter Davies, University of Queensland

A/Professor Mark Lawrence, Deakin University

Dr David C K Roberts (until May 2010)

Dr Dorothy Mackerras, Food Standards Australia New Zealand

Dr Rosemary Stanton, OAM

Ms Clare Hughes, Choice

Associate Professor Sharon Friel, Australian National University (from 14 July 2008)

Dr Geoffrey Annison, Australian Food and Grocery Council (from 13 August 2010)

Observers

Dr Christine Booth, Defence Science Technology Organisation

Ms Leticia White, Department of Health and Ageing

Ms Erica Nixon, Department of Health and Ageing

Ms Jacinta McDonald, Department of Health and Ageing

Ms Marina Dron, Department of Health and Ageing

NHMRC Project Team

Mrs Vesna Cvjeticanin, Director

Ms Cathy Mitchell, Director

Dr Stuart Barrow, Assistant Director

Ms Cheryl Cooke, Assistant Director

Ms Tess Winslade, Assistant Director

Ms Marisa Bialowas, Senior Project Officer

Mrs Marion Carey, Acting Senior Project Officer

7.4 Contractors and Expert Consultants

Contractor: Dietitians Association of Australia (DAA)

Project Manager, Ms Annette Byron

Expert consultants to DAA

Professor Katrine Baghurst

Associate Professor Peter Baghurst

Professor Lynne Cobiac, Flinders University

Dr Anthea Magarey, Flinders University

7.5 Acknowledgements

This report has been prepared by consultants, Professor Katrine Baghurst, Associate Professor Peter Baghurst, Professor Lynne Cobiac and Dr Anthea Magarey; and DAA, Ms Annette Byron. We would like to thank Ms Lily Chan and Ms Chelsea Moss, of Flinders University, for undertaking the analysis of the Children's data and contributing to the final report.

DAA would like to acknowledge the direction of the Dietary Guidelines Working Committee (DGWC) and the NHMRC at key points in the modelling process and the contribution of the DGWC to the editing of this report.

Special thanks to FSANZ for making the NUTTAB 2009 database available to the contractors ahead of its scheduled release date.

7.6 Project process

After public tender, the project was awarded to the DAA and carried out by expert consultants contracted to the DAA. Oversight of the process of the program to revise and extend the *Dietary Guidelines* has been provided by the NHMRCs *Dietary Guidelines Working Committee*. The recommendations were developed using a computer-based modelling process incorporating nutrient needs alongside consideration of chronic disease, social diversity and availability within the Australian food supply. The process was iterative in manner with ongoing contact between the consultants and the committee during the development phase.

After an initial draft, submitted in August 2008, the process was halted by NHMRC for a year to allow for a series of evidence-based literature reviews to be carried out to further inform the modelling and provide updated evidence to inform drafting of the new Dietary Guidelines. The second draft incorporated advice from the NHMRC based on these reviews and was submitted for consideration in December 2009.

There were several inputs early in the project from consultation processes arranged by NHMRC and a public consultation of the draft report in April/May 2010 after which the models were finalised.

7.7 Evidence base

Evidence-based Literature Reviews[1]

A series of evidence-based literature reviews were commissioned by the NHMRC to inform the modelling of the revision of the CFG94 and to guide the revision of the 2003 Dietary Guidelines, the writing of Dietary Guidelines for Pregnant and Breastfeeding Women and revision of the AGTHE98. The review were a complex undertaking which comprised evidence-based, umbrella and narrative reviews regarding the food-diet-health interrelationship for different population subgroups. Where possible the reviewers were asked to quantify the amount of food needed for an effect, in order to inform the number of serves required in the modelling of the revised CFG94.

Nutrient Reference Values (NRVs)[2]

Modelling was performed with composite food groups using Recommended Dietary Intakes (RDI) for selected nutrients. The resulting diet patterns were cross-checked by modelling 100 *7-day* diets with individual foods with attainment of EAR for all nutrients for all diets as the benchmark for acceptability of patterns. RDIs and EARs for some other nutrients and some AIs, AMDRs, SDTs and ULs were used for output assessment of diets only. The NRVs (2006) used to assess nutritional adequacy of modelled dietary patterns are available at the NHMRC website http://www.nhmrc.gov.au/publications/synopses/n35syn.htm.

Australian Food Composition Tables[3]

The foods and nutrients used in the dietary modelling were derived from AUSNUT07. AUSNUT07 is a nutrient database developed specifically for estimating nutrient intakes from foods and beverages consumed as part of the NCNPAS07. For more information about the database, refer to the FSANZ website http://www.foodstandards.gov.au/. This website also contains information about the limitations of the database. Food descriptors used in the AUSNUT99 database developed for NNS05 were matched to most the more recent database using the 'AUSNUT07- AUSNUT99 matching file' developed by FSANZ.

The *NUTTAB 2009 Australian Food Composition Tables* were also made available to the contractors by FSANZ in order to supplement the AUSNUT07 database with the latest selenium, vitamin B6 and vitamin B12 values for key commonly consumed foods. These data are preliminary and are incomplete. As many of the foods for which data was required were not covered directly by the FSANZ database, for these foods the content for these nutrients had to be interpolated so caution in interpreting results is needed.

NNS05[4] and NCNPAS07[5]

Australian food consumption patterns were identified from the NCNPAS07 for children aged 2–16 years and from the NNS05 for people 17 years and older. For children 12–24 months of age, food consumption patterns were based on children aged 2–3 years from the NCNPAS07. A study by Webb[6] et al. investigated the foods and nutrients consumed by a sample of Australian children aged 16–24 months (n=429). This study was used to cross-check the validity of using 2–3 year old intake patterns for 12–24 month old children. This cross-check found the dietary intakes of both groups of children to be similar.

7.8 The Early Consultation Process

Conferences with APHNAC, AIFST, Nutrition Society

During the development of the models, NHMRC held a number of workshops and the proposed approach was presented in 2008 at several professional conferences including APHNAC, AIFST and Nutrition Society by NHMRC and the consultants. Some questionnaire data were also available from a DAA conference and an online questionnaire conducted by the NHMRC.

A poster and brochure was produced and presented at these conferences (see Attachment 1). The abstract for the poster is included below.

Abstract for the *Public Health Nutrition in Australia: Principles to Practice, Rhetoric to Reality* conference

Title: Methodological consideration re. the update the *Core Food Groups* (1994)

The National Health and Medical Research Council (the NHMRC) has undertaken to update the NHMRC *Dietary Guidelines* to be aligned with the *Nutrient Reference Values for Australia and New Zealand* (NRVs) (2006). An NHMRC *Dietary Guidelines Working Committee* (the Working Committee) has been established to oversee the project. The first stage is the update of the NHMRC *Core Food Groups* (CFG) (1994). The tender for this stage was won by the Dietitians Association of Australia.

To revise the CFG, an evidence-based approach is required to translate scientifically based nutrient recommendations into recommended types and amounts of core foods, and additional non-core foods, to be consumed in order to meet the nutrient recommendations for various sub-groups of the Australian population. The resulting CFG recommendations will inform the education tools used to provide food and nutrition advice to the Australian population in order to address nutrition-related chronic disease, promote optimal nutritional status and prevent nutritional deficiencies.

Some of the considerations when preparing the CFG methodology include:

the suitability of the current CFG;

the inclusion of new categories into the CFG;

the environmental and social aspects of nutrition;

availability of current food databases and food and nutrient consumption patterns; and

defining which NRV measure to use in the dietary modelling.

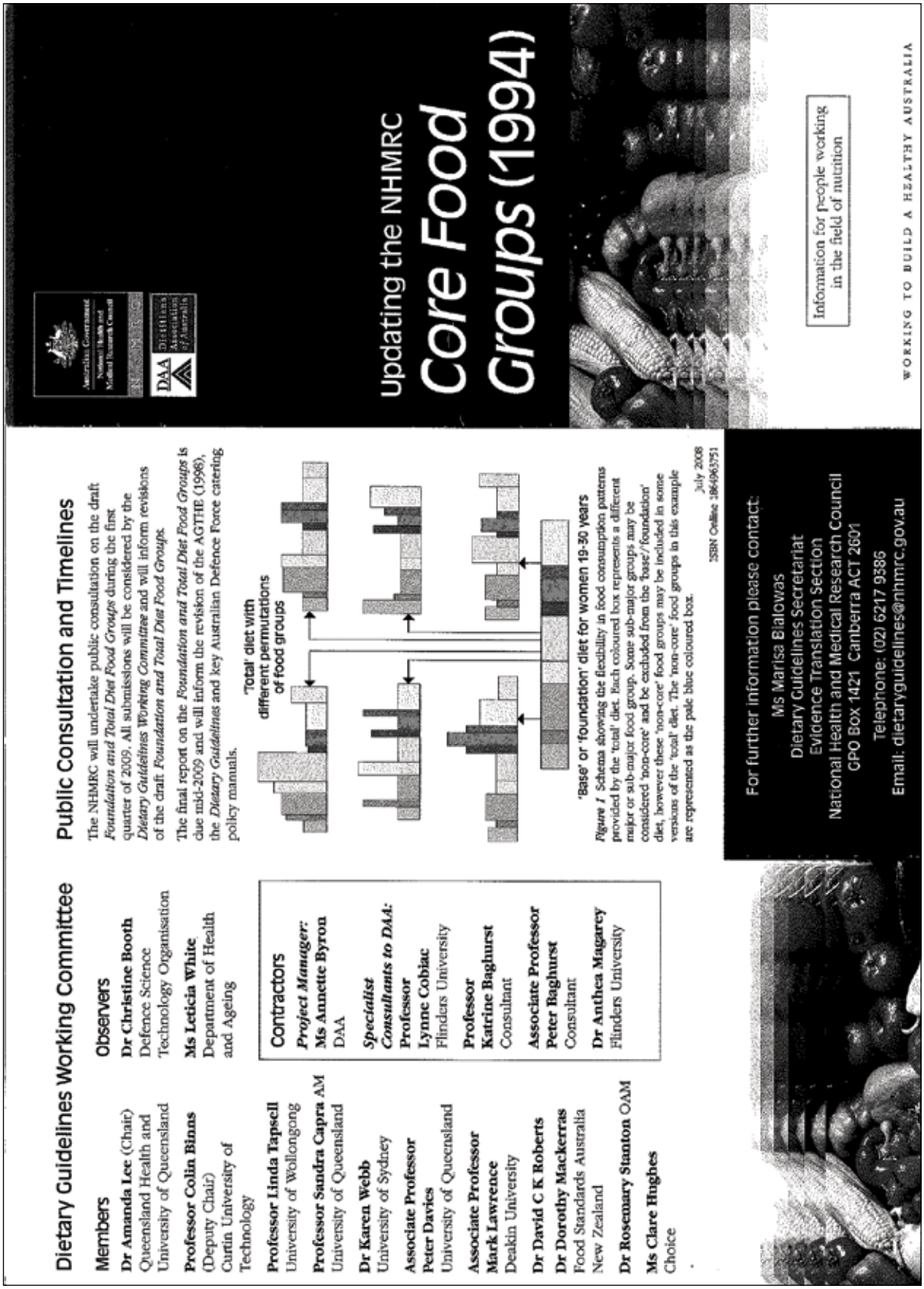
The methodology of the CFG analysis is currently being finalised by the Contractors and will be submitted to the Working Committee in late May. The final approved method would be ready for presentation in July 2008.

Information Dissemination: Brochure, Poster and Website

The NHMRC website forms the basis for dissemination of information to interested parties. Key documents relating to the project are available online at http://www.nhmrc.gov.au/your_health/healthy/nutrition/review.htm. A brochure containing information on the proposed method to update the *Core Food Groups* (1994) is available on the website, as well as submissions received by the NHMRC addressing the proposed method to update the *Core Food Groups* (1994).

Submissions received by the NHMRC on the addressing the proposed method to update the *Core Food Groups* (1994) are available for viewing on the website at http://www.nhmrc.gov.au/your_health/healthy/nutrition/review.htm

7.9 Brochure of the methodology for modelling the revised CFG94



Dietary Guidelines Working Committee

Members

Dr Amanda Lee (Chair)
Queensland Health and
University of Queensland

Professor Colin Binns
(Deputy Chair)
Curtin University of
Technology

Professor Linda Tapsell
University of Wollongong

Professor Sandra Capra AM
University of Queensland

Dr Karen Webb
University of Sydney

Associate Professor
Peter Davies
University of Queensland

Associate Professor
Mark Lawrence
Deakin University

Dr David C K Roberts

Dr Dorothy Mackerras
Food Standards Australia
New Zealand

Dr Rosemary Stanton OAM

Ms Clare Hughes
Choice

Observers

Dr Christine Booth
Defence Science
Technology Organisation

Ms Leticia White
Department of Health
and Ageing

Contractors

Project Manager:
Ms Annette Byron
DAA

Specialist
Consultants to DAA:
Professor
Lynne Cobiac
Flinders University

Professor
Katrine Baghurst
Consultant

Associate Professor
Peter Baghurst
Consultant

Dr Anthea Magarey
Flinders University

Public Consultation and Timelines

The NHMRC will undertake public consultation on the draft *Foundation and Total Diet Food Groups* during the first quarter of 2009. All submissions will be considered by the *Dietary Guidelines Working Committee* and will inform revisions of the draft *Foundation and Total Diet Food Groups*.

The final report on the *Foundation and Total Diet Food Groups* is due mid-2009 and will inform the revision of the AGTHE (1998), the *Dietary Guidelines* and key Australian Defence Force catering policy manuals.

'Base' or 'foundation' diet for women 19-30 years

Figure 1 Schema showing the flexibility in food consumption patterns provided by the 'total' diet. Each coloured box represents a different major or sub-major food group. Some sub-major groups may be considered 'non-core' and be excluded from the 'base'/'foundation' diet, however these 'non-core' food groups may be included in some versions of the 'total' diet. The 'non-core' food groups in this example are represented as the pale blue coloured box.

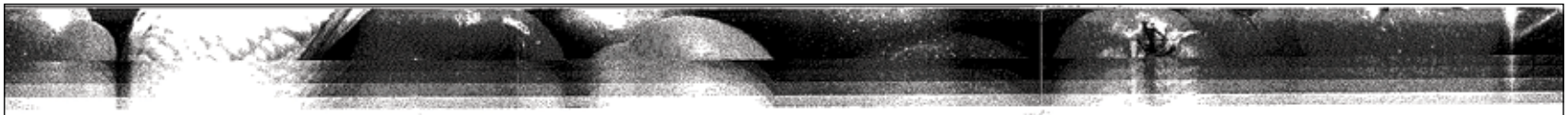
July 2008
ISBN Online: 1864963751

For further information please contact:
Ms Marisa Bialowas
Dietary Guidelines Secretariat
Evidence Translation Section
National Health and Medical Research Council
GPO Box 1421 Canberra ACT 2601
Telephone: (02) 6217 9386
Email: dietaryguidelines@nhmrc.gov.au

Updating the NHMRC
Core Food Groups (1994)

Information for people working in the field of nutrition

WORKING TO BUILD A HEALTHY AUSTRALIA



Updating the NHMRC *Core Food Groups* (1994)

Alignment with the NHMRC *Nutrient Reference Values for Australia and New Zealand Including Recommended Dietary Intakes* (2006) – from nutritional principles to dietary practice

Authors:
Professor Lynne Cobiac and
Professor Katrine Baghurst

Introduction

In 2006 the NHMRC published the *Nutrient Reference Values for Australia and New Zealand Including Recommended Dietary Intakes* (NRVs)[1]. The NRVs (2006) include the levels of intake of essential nutrients considered to be adequate to meet the known nutritional needs of practically all healthy people for prevention of deficiency states. The Department of Health and Ageing and the Defence Science Technology Organisation have provided funding to the NHMRC to revise the *Core Food Groups* (1994) to align with the NRVs (2006).

The NHMRC has established the *Dietary Guidelines Working Committee* to oversee and provide advice on the revision of the *Core Food Groups* (1994), *Dietary Guidelines* and the *Australian Guide to Healthy Eating* (AGTHE) (1998). A consortium headed by the Dietitians Association of Australia (DAA) won the contract to revise the *Core Food Groups* (1994) through an open tender process.

[1] National Health and Medical Research Council (NHMRC) (2006) *Nutrient Reference Values for Australia and New Zealand Including Recommended Dietary Intakes*, Canberra.

Method

The goal is to translate the NRVs (2006) into the food consumption patterns that:

- deliver the nutrient requirements for individuals/groups of both sexes and differing ages, activity levels and life-stages; and
- reflect current Australian food supply and food consumption patterns and consider social equity, ethnic diversity and environmental issues.

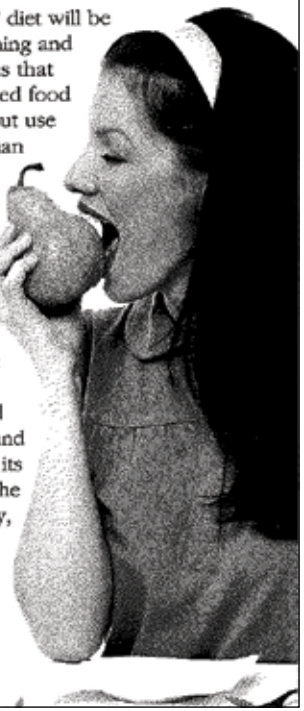
Separate modelling will be performed using Recommended Dietary Intake (RDI) or Adequate Intake (AI) to identify the pattern for individual-level advice and use Estimated Average Requirement (EAR) or AI for group-level advice.

Steps include:

- Using Australian food composition data and food consumption patterns, major food groups (for example vegetables), and sub-major food groups (for example legumes), will be identified on the basis of nutritional equivalence. Botanical origins and traditional culinary usage will also be taken into consideration.
- A generalised nutrient profile will be determined for composite food groupings within each of the major and sub-major food groups. Computer modelling will be used to identify the numbers of serves of each of the major and sub-major food groups needed each day to meet the nutritional requirements for individuals and/or groups of both sexes and differing ages, activity levels and life-stages within minimal energy levels. This will be termed the 'base'/'foundation' diet.
- Further modelling with the composite food groupings will develop a range of different food consumption patterns, to be consumed in addition to the 'base'/'foundation' diet, to meet the remaining energy needs. This will be termed the 'total' diet and provides flexibility in total diet recommendations to individuals so that they can have variety, follow different cuisine options and meet specialised requirements (refer to *Figure 1*). For example members of the Australian Defence Force may benefit from a higher energy food consumption pattern.

The 'total' diet will be assessed against the Acceptable Macronutrient Distribution Ranges (AMDR) for percent energy as fat, protein and carbohydrate, the Suggested Dietary Targets (SDT) for chronic disease prevention and the Upper Level of Intakes (UL).

- The 'base'/'foundation' diet will be reality tested by designing and assessing 7-day menus that conform to the proposed food consumption pattern but use specific foods rather than the composite food groupings, eg carrots or pumpkin rather than the 'orange vegetable' food grouping.
- The 'base'/'foundation' diet and the 'total' diet will be compared to current Australian food consumption patterns and food availability, and its viability considered in the context of social equity, ethnic diversity and environmental issues.



7.10 Public consultation process

The NHMRC undertook public consultation on the draft *Foundation and Total Diet Food Groups* in April/May 2010. Fifty six submissions were received.

7.10.1 Organisations and individuals who submitted to the public consultation

1. Ms Jeanine Almond
2. Home Economics Institute of Australia
3. Australian Division of World Action on Salt and Health
4. Mr Trevor Beard
5. Food Standards Australia and New Zealand
6. Dietitians Association of Australia Vegetarian Interest Group
7. Dietitians Association of Australia
8. Australian Oilseed Federation
9. Mr Shaun Centa
10. George Western Foods Limited
11. Dr Gyorgy Scrinis, RMIT University
12. Dr John, Coveney, Flinders University
13. Seafood Experience Australia Limited
14. Dr Olivia Wright, University of Queensland
15. Australian Egg Corporation Limited
16. Nu Mega Ingredients Pty Ltd
17. Royal Children's Hospital and Murdoch Children's Research Institute
18. Australian Beverages Council
19. Fruit Juice Australia
20. The Omega-3 Centre
21. Australian Food and Grocery Council
22. Kellogg Company
23. Seafood Services Australia
24. Australian Nut Industry Corporation and Nuts for Life
25. Heart Foundation
26. School of Health Sciences, University of Wollongong
27. Australian Dried Fruits Association and Manassen Food Group
28. Eat Well Queensland and Queensland Public Health Forum
29. Children's Hospital at Westmead
30. Sanitarium Health Food Company
31. Meat and Livestock Australia
32. H.J. Heinz Company Australia Limited
33. Dr David Crawford, Deakin University
34. Murray Goulbourn Ltd
35. National Foods Limited
36. Goodman Fielder
37. Associate Professor Geoff Marks, University of Queensland
38. Unilever Australia
39. Public Health Association of Australia

40. Department of Health Tasmania, Chief Health Officer
41. Go Grains Health and Nutrition Ltd
42. Associate Professor Alexandra McManus, Curtin University
43. Western Australian Department of Health
44. Australian Mushroom Growers
45. Dairy Australia
46. Boden Institute of Obesity, Nutrition and Exercise
47. Dr Sarah McNaughton, Deakin University
48. Cereal Partners Worldwide : Oceania
49. Diabetes Australia
50. CSIRO
51. Mr Bill Schrapnel
52. Dr Susan Ash, Queensland University of Technology
53. Ms Michelle Harrison
54. Queensland Health, Chief Health Officer
55. Victorian Department of Health, Chief Health Officer
56. South Australian Department of Health

7.10.2 Clarification of issues raised at public consultation

All submissions were considered by the *Dietary Guidelines Working Committee* and informed a revision of the draft document.

Public consultation suggested the need for greater clarification in describing the modelling purpose, context, process, constraints and application of results, but did not provide evidence for the draft models to be changed substantially.

Some additional clarification is provided here in the form of Answers to Frequently Asked Questions to address many of the key issues raised during Public Consultation.

a. What was the purpose of the modelling?

The purpose of the modelling was to develop theoretical dietary patterns which met key nutrient reference values (NRVs), were consistent with recent evidence regarding promotion of health and well being, and were also culturally acceptable, practical and realistic.

The dietary models provide a theoretical reference for the development of revised food guides and Dietary Guidelines for Australians. In such future guidance the food groups and serve sizes in the theoretical models would not necessarily be translated directly, but the dietary patterns developed would provide both qualitative and quantitative information on optimal food choices within and/or across different categories of foods.

b. Why was the modelling based on 'current' intakes which are not optimal and in the case of adults, not even very current?

Use of current food intake patterns only related to choices within food groups e.g. how many apples are consumed versus raspberries, how much beef versus kangaroo, how much carrot versus pumpkin etc. These within-group intakes do not seem to change greatly over time. The computer patterns modelled for the various age-gender groups were generated by the modelling process itself and are not historical. The models also included an 'aspirational' rather than 'historical' component in that the foods chosen to represent the nutritional profile of food groups were the 'healthier' options, i.e. those with little added salt, fat and/or sugar. Thus a balance was reached between practical and aspirational considerations.

c. Why were only RDIs used in the modelling, why not use AIs or SDTs as initial targets for composite food group modelling?

The NHMRC used Recommended Dietary Intakes (RDIs) for the initial composite food group modelling as the Adequate Intakes (AIs) and Suggested Dietary Targets (SDTs) are based on less rigorous evidence than that used to develop RDIs. In the NHMRC document on the NRVs it is stated that for many of the AIs the needs may be

overstated, as recommendations are often based on population median intakes using the indicator of absence of any notable deficiency in the population at this level of intake. Other AIs are based on very limited experimental or physiological data. For SDTs, the levels were generally set on the 90th percentile of population intake and have the same limitations. It was felt that the additional uncertainty that would be introduce if AIs and SDTs were used to drive the modelling process rather than RDIs was not justified and could skew the final models, particularly towards higher energy levels.

The nutrient profiles of the final Total Diet models were compared to the AIs and SDTs retrospectively; few issues were apparent and can be addressed in the subsequent development of dietary guidance.

d. If composite Foundation diet models for a particular age-gender did not reach all RDIs, and/or the 7-day Foundation diet models did not attain all EARs, does this mean that the models may not provide sufficient nutrients and that dietary supplementation may be necessary?

No. The *Foundation Diets* were designed to meet the needs of most people (97.5%) in a particular age-gender group within the energy needs of the smallest (or youngest for children) and least active sub-group. The energy requirement of most of the population is well above this and the additional foods comprising the *Total Diet models* should cover this requirement. It should be remembered that the requirements for most of the population lie well below the RDI and, by definition, the requirements of half the population will be below the EAR . It is not known which sections of the population will fall in this category, so a conservative approach is warranted. However, there may be some population sub-groups where supplementation is required for specific reasons, eg iron in pregnant females, but such considerations lie outside the scope of the modelling exercise.

e. Discretionary salt was not used in the modelling. Is this realistic?

The models describe optimum dietary patterns, and therefore are not necessarily constrained by current consumption. As use of discretionary salt is not recommended, this was not included in the models.

f. Why was water not included in the analysis? What about fruit and vegetable juices?

Water has an AI so, in keeping with the methodology of the modelling process was not included as a driver in the models. Some of the requirement for water comes from the water content of foods themselves and some from additional fluids. As water does not provide energy, it did not need to be considered specifically during the *Foundation Diet* modelling process. Advice about consumption of water can be included in subsequent food guides and the Dietary Guidelines.

The only fluid that was modelled in the *Foundation Diets* was milk because of its key contribution to calcium in the diet. Fruit and vegetable juices were not included in the modelling process as the nutrients they provided are also available from fruit and vegetables themselves. However advice about consumption of fruit and vegetable juices can be considered in the development of subsequent food guides and the *Dietary Guidelines*.

g. Why is there an emphasis on the omnivore diets compared to more plant-based lacto-ovo vegetarian diets?

The modelling process developed four different but equal types of dietary patterns: plant-based (lacto-ovo-vegetarian) diets; two different cuisines that use more pasta or rice, vegetables and legumes as staple items, and; omnivore diets. The models provided a range of flexible options for all four forms. For ease of reading, only one type dietary pattern is discussed in the body of the document. The equivalent information for the other dietary patterns is provided in the Appendices. It should also be noted that the *Omnivore Foundation* and *Total Diet models* generally include more plant-based foods than the current Australian diet.

h. Why were polyunsaturated fats included in the Foundation Diets?

A small allowance of oils and spreads was included in the *Foundation Diet* modelling to reflect current culinary behaviour and to ensure that the energy thus provided was within total energy constraints. This helped to ensure models were realistic and practical. However, unlike other foods, the inclusion of oils and spreads in the models was not weighted for levels of consumption of each age/gender group as relevant data are not available. Unsaturated oils and spreads were chosen rather than saturated fats based on the evidence of their health benefits outlined in the evidence-based reviews[1] . Poly-unsaturated options were included due to their content of essential fatty acids such as linoleic and alpha-linolenic acid, and poly-unsaturated margarine was included in the modelling as a proxy for these. Although other foods can provide these essential fatty acids, in energy-constrained diets such as the *Foundation Diets*, it can be beneficial to include concentrated sources of these essential fatty acids (as for all nutrients). In higher energy diets relevant amounts of unsaturated oils or seeds or nuts or legumes could be modelled instead.

For *Total Diets*, additional amounts of unsaturated oils and spreads were included depending on the overall energy content of the diet. This mirrors the 'allowance' for unsaturated fats and oils in the current AGTHE98 where the increase in the allowance was linked to cereal consumption levels. As with the AGTHE98, unsaturated oils and spreads were considered alongside the 'discretionary' or 'extra foods' category . The food groupings applied in the modelling exercise, including those of different types of fats and oils, will not necessarily be retained in subsequent food guides.

i. How are increased energy needs met by building on the Foundation Diet model?

In building on *Foundation Diets* to develop Total Diets which account for total energy needs, some general principles were set to ensure that modelled diets remained within AMDRs and the ULs. The principles included modelling free addition of vegetables (including legumes/beans), fruits, and cereal (mostly wholegrain) foods and encouraging a variety of choice of additional foods consistent with the evidence-based reviews relevant to chronic disease. Allowances for additional unsaturated spreads and oils and for energy-dense 'Discretionary Choices' were modelled in relation to energy intake, with increasing amounts potentially added as energy needs increased, in proportion to energy requirements. However it is not necessary that 'Discretionary Choices' be included in total diets so *Total Diet* options containing no 'Discretionary Choices' were also modelled for all age and gender groups. Additional serves of lean meats and poultry, fish, eggs, and milk, yoghurt, and cheese (mostly reduced fat) and unsaturated oils and spreads, can be included in *Total Diet* models instead of 'Discretionary Choices' if desired. This concept of flexibility will be translated in subsequent food guides.

j. Why are there sometimes differences in the diet models for boys and girls when nutrient recommendations are similar ?

Whilst for some age groups the recommendations for certain nutrient intakes for boys and girls might be similar, energy requirements are generally lower in girls than in boys from birth. This sometimes resulted in slightly different *Foundation Diet* food group patterns for boys and girls being modelled within the different energy constraints. For example, the energy requirements for sedentary 4 year olds which forms the basis of the *Foundation Diet* models for 4–8yr olds is 5,200 kJ for boys but only 4,800 kJ for girls requiring a slightly different dietary pattern to maximise the nutrient content of the diet within energy constraints. As most of the population in relevant age groups will need increased energy intakes over the *Foundation Diet* such discrepancies between gender need not occur for *Total Diets*.

k. For the smallest and least active population sub-group the Foundation Diet models equates to the Total Diet models. It seems very restrictive not to include Discretionary Choices and limit this model to specific food groups in the Foundation Diet models.

There are two things to consider here. Firstly, RDIs were used in the initial modelling of composite food groups to identify *Foundation Diet* dietary patterns. These RDIs cover the needs of 97.5% of the population and are well in excess of the needs of most of the population. The EARs which were used to cross-check adequacy of 7-day 'real food' dietary models, are the requirements of the median person in an age/gender group. Hence the approach adopted is a conservative method to ensure nutrient adequacy for most of the population is achieved.

Secondly, it is highly likely, although not certain, that the smallest in an age/gender group will have lower nutrient requirements than the average. The modelling also assumed that the population is largely sedentary and the results highlighted the importance of physical activity in allowing for dietary flexibility. For example for 31–50 year old women who are 150 cm in height, energy needs increase from 7.3 MJ (the target used for the *Foundation Diet* for that group) to 8–9MJ/day for a light to moderately active women of this body size and 10.4 MJ for those who engage in heavy occupational work or highly active leisure.

Therefore increasing physical activity will enable greater dietary flexibility and the inclusion of 'Discretionary Choices' if desired. However, *Foundation Diet* modelling suggests that there is insufficient energy available for the smallest and least active members of each age/gender group to consume any options other than nutrient-dense foods in order to achieve optimum nutrition.

7.11 Dissemination and implementation

The revised document *A Modelling Sytem to Inform the Revision of the Australian Guide to Health Eating* will inform the revision of the AGTHE98, the *Dietary Guidelines* and key Australian Defence Force catering policy manuals. The revised AGTHE98 will be the practical application of *A Modelling System to Inform the Revision of the Australian Guide to Healthy Eating* that communicates the amounts (serve sizes and number of serves) and types of foods to consume each day. Ideally, the development of an electronic version of the revised AGTHE98 would allow individuals to tailor their diet in line with dietary recommendations. The team being contracted to develop the revised AGTHE98 would benefit from liaising with the current contractors regarding the methodology and the outcomes of the development of *A Modelling System to Inform the Revision of the Australian Guide to Healthy Eating* should continue to be informed by and be periodically reviewed as further developments in the scientific literature and intake data become available.

7.12 Evaluation plan to assess the effectiveness of the analysis for the revision of the Core Foods Groups and the development of the *Foundation Diets*

Key documents that informed the development of the *Foundation Diets* included the following

1. Nutrient Reference values for Australia and New Zealand (2006)
2. National Nutrition Survey 1995 (to define the composition of serves of each food group for all groups aged 17 and older)
3. Children's Nutrition and Physical Activity Survey 2007 (to define the composition of serves of each food group for those aged 2 to 16 years)

In turn the energy and nutrient composition of the foods consumed in each of these surveys was based on food composition data available at the time.

The validity of the *Foundation Diets* analysis could be affected by the following

1. Changes in consumption patterns

   Intake for any population sub-group is different from that used in the analysis with respect to the contribution of sub-groups of foods within a food group such as an increase/decrease in relative contribution of bread to cereal intake, beef to red meat intake)

   This is potentially a greater risk for age groups 17 years and over as the data used in the modelling was from 1995.
2. Changes in the food supply due to
   a. loss of availability of existing foods
   b. development of new foods.
3. Changes in the nutrient composition of existing foods due to
   a. changes in fortification
   b. more recent food composition analysis.
4. Changes to requirements as defined by NRVs.e.g. more recent data defining requirements for specific sub-groups

Quantitative evaluation

The forthcoming National Health Risk Factor survey provides an opportunity to test the validity of the new guide.

a. Identify those participants whose food consumption pattern equate to that defined in the *Foundation Diets* and/or the revised AGTHE98 document and determine if the nutrient intake of these participants meets requirements.

b. Check the composition of the food groups in the *Foundation Diets* as defined for adults using data from the new survey.

c. Identify those sub-groups for whom energy requirements are low and thus for whom there is minimal flexibility in their food choice as defined by the *Foundation Diets*. Within these sub-groups of participants identify those who meet their nutrient requirements and compare their food pattern with that defined by *Foundation Diets*.

The limited data on intake of infants from 6 to 24 months has been identified.

Qualitative evaluation

The *Foundation Diets* will be used as the basis for the development of the revision of the food selection guide AGTHE98. Some key considerations for those developing the guide will be a thorough understanding of the analysis used in developing the guide. This understanding will need to be conveyed in supporting documents for the food guide (e.g. information for health professionals).

We recommend focus groups with key stakeholder users to ascertain understanding of the *Foundation Diets* analysis.

Those population sub-groups with high nutrient but low energy requirements are the most vulnerable with respect to achieving their recommended food intake pattern as there is limited flexibility in food selection. We recommend an investigation with such sub-groups to determine if the recommended meal pattern is acceptable.

7.13 References

1. National Health and Medical Research Council. *A review of the evidence to address targeted questions to inform the revision of the Australian Dietary Guidelines* www.nhmrc.gov.au
2. National Health and Medical Research Council, Commonwealth Department of Health and Ageing (Australia), Ministry of Health (New Zealand) *Nutrient Reference Values for Australia and New Zealand including Recommended Dietary Intakes*. Canberra: NHMRC, 2006.
3. Food Standards Australia and New Zealand 2008. AUSNUT07 Australian Food, Supplement & Nutrient Database. Canberra: FSANZ http://www.foodstandards.gov.au/monitoringandsurveillance/foodcompositionprogram/ausnut2007/
4. Australian Bureau of Statistics. *National Nutrition Survey: foods eaten. Australia 1995*. ABS Cat No. 4804.0 Commonwealth of Australia, 1999
5. Department of Health and Ageing. *National Children's Nutrition Survey, 2007 Kids Eat, Kids Play.* Canberra: DOHA, 2008. Report in preparation
6. Webb, K., Rutishauser, I. and Knezevic, N. 2008, Foods, nutrients and portions consumed by a sample of Australian children aged 16–24 months, J Nutr Diet, 65: 56–65

8 ABBREVIATIONS AND ACRONYMS

Abbreviations and acronyms

ABS	Australian Bureau of Statistics
AI	Adequate Intakes
AMDR	Acceptable Macronutrient Distribution Range
AGTHE98	Australian Guide to Healthy Eating 1998
AUSNUT07	Nutrient database prepared by FSANZ for National Children's Survey
CFG94	Core Food Groups 1994
DFE	Dietary Folate Equivalents
DGWC	Dietary Guidelines Working Committee
DRI	Dietary Reference Intakes (US; Canadian equivalent to NRVs (2006)
EAR	Estimated average requirement
EER	Estimated energy requirements
EPSFIZ	Energy Protein Starch Fibre Iron Zinc
FAO	Food and Agriculture Organisation
FDA	Food and Drug Administration
FSANZ	Food Standards Australia and New Zealand
kJ	kilojoule
LCn3	Long chain n-3 fatty acids (also referred to as Long chain omega3 fatty acids in food database)
MJ	megajoule
NCNPAS07	National Children's Nutrition and Physical Activity Survey: Kids Eat, Kids Play 2007
NHMRC	National Health and Medical Research Council
NNS95	National Nutrition Survey 1995
NUTTAB08	Nutrient Composition Tables prepared by FSANZ
PAL	Physical Activity Level
RDI	Recommended dietary intake (RDA in US and Canada)
SDT	Suggested Dietary Target
WCRF	World Cancer Research Fund
WHO	World Health Organisation
UK	United Kingdom
UL	Upper Limit
US	United States of America

9 GLOSSARY

Glossary

AI Adequate Intake (used when an RDI cannot be determined)

The average daily nutrient intake level based on observed or experimentally determined approximations or estimates of nutrient intake by a group (or groups) of apparently healthy people that are assumed to be adequate. They were sometimes based on limited experimental or physiological data or on the Australian/New Zealand population median intake for the highest consuming age group within each gender.

AMDR Acceptable Macronutrient Distribution Range

The range of intake for each macronutrient for individuals (expressed as % contribution to energy), that would allow for an adequate intake of all the other nutrients, whilst maximising general health outcome.

Composite food groups

The nature of the composite food groups was determined after preliminary modelling of a wide range of potential food groups, starting with the previous Core Food Groups and considering botanical, culinary and nutrient composition of the individual foods. Nutrient compositions were then devised using consumption relativities from NNS95 and NCNPA07 databases. Serve size for individual foods was based on the AGTHE98 as well as determined on the basis of energy density and key nutrients for that food group.

Core Food Groups

Those foods that form the basis of a healthy diet. Based on or developed with consideration of the RDI's and '*Dietary Guidelines for Australians*'. Used as the basis for developing nutrition education tools such as food selection guides e.g. AGTHE98.

EAR Estimated Average Requirement

A daily nutrient level estimated to meet the requirements of half the healthy individuals in a particular life stage and gender group.

EER Estimated Energy Requirement

The average dietary energy intake that is predicted to maintain energy balance in a healthy adult of defined age, gender, weight, height and level of physical activity, consistent with good health. In children and pregnant and lactating women, the EER is taken to include the needs associated with the deposition of tissues or the secretion of milk at rates consistent with good health.

Foundation Diet

The *Foundation Diet* was informed by current scientific evidence derived from the literature, the most current national intake data and the NHMRC's 2006 Nutrient Reference Values[3]. The diets were modelled to provide as close to 100% of the RDIs of 10 key nutrients as was feasible and to provide the estimated energy requirements of the smallest and very sedentary category (PAL 1.4) for each age and gender group. These *Foundation Diets* based on low energy requirements were then tested using 100 7-day simulations with the aim that all of the simulations would meet the EARs of the 10 key nutrients.

Nutrient Reference Values

Amounts of nutrients required on an average daily basis for adequate physiological function and prevention of deficiency disease (EAR, AI or RDI) or chronic disease prevention (AMDR or SDT). Include a UL.

Discretionary Choices

The foods in this category are generally higher in energy density, saturated fat and/or added sugars or alcohol with limited additional nutrient value. This category includes foods and drinks such as cakes, biscuits, confectionary, sugary soft drinks, burgers and pizzas, cream and high saturated fat spreads, cordials and (for adults) alcoholic drinks. The category termed 'Discretionary choices' is similar to the 'extras' category of the AGTHE98 except that unsaturated fats and oils were excluded. These 'Discretionary choices' were not included in modelling of *Foundation Diets* but were later included for *Total Diet*

RDI Recommended Dietary Intake

The average daily dietary intake level that is sufficient to meet the nutrient requirements of nearly all (97.7 per cent) healthy individuals in a particular life stage and gender group.

Sentinel foods

For the within group serve equivalents, a sentinel food and its serve size was identified (e.g. a bread serve of 40g or a reduced fat milk serve of 250g) and the other food serve sizes (e.g. for breakfast cereals, rice, pasta or for cheese and yoghurt) were determined based on equivalence for key nutrients.

SDT Suggested Dietary Targets

These targets relate to nutrients for which there is a reasonable body of evidence of a potential chronic disease preventive effect at levels substantially higher than the EAR/RDI or AI. As the evidence base for chronic disease prevention is mainly derived from studies and health outcomes in adults, these AMDRs and STs apply only to adults and older adolescents (14 years and over). They were often set at the 90th percentile level of current intake.

Total diet

Progression from *Foundation Diets* to *Total Diets* can occur when total energy needs are greater than the energy provided by a *Foundation Diet* for a particular age and gender group. General principles were determined to ensure that diets remained within acceptable limits for percentage of energy from fat and the various fat components, protein and carbohydrate (AMDRs), the Upper Levels (ULs) and Suggested Dietary Targets (SDTs) for chronic disease prevention. The principles allow free addition of vegetables (including legumes), fruits, nuts and seeds, and cereal foods and encourage a variety of choice of additional foods while defining the choices allowed in the modelling for the meat, dairy foods and unsaturated margarines and oils categories. 'Discretionary choices' can be included but it is important to note that they do not need to be included in the diet, and *Total Diets* without inclusion of any 'Discretionary choices' were also modelled for all age and gender groups.

UL Upper Level of Intake

The highest average daily nutrient intake level likely to pose no adverse health effects to almost all individuals in the general population. As intake increases above the UL, the potential risk of adverse effects increases.

Unsaturated Fats and Oils

This category includes spreads, oils, seeds and nuts which contain predominantly poly- and monounsaturated fatty acids.

10 APPENDICES

Appendix 1: The Core Food Groups (1994)

For the Core Food Groups 1994 (CFG94) analysis[1], the developers used a weighted composite 'food' to represent each of the food groups for modelling purposes. There was no specific definition given for 'core' foods in this document but the groups were listed as: cereals, fruit, vegetables, meats and meat alternatives, and milk.

For the meats, fruit and vegetable categories the composite food was based on relative proportions of foods available for consumption as published in the Apparent Consumption data (1989–90)[13]. These types of data are a gross estimate of population intakes. For the "meat" category, only meats, poultry, fish and eggs were included in the composite food for modelling. Vegetarian alternatives such as legumes and nuts, as depicted in the subsequent Australian Guide to Healthy Eating 1998 (AGTHE98)[2], were not modelled at this stage but an undefined 'equivalent' for a portion of beans was given in footnotes to CFG94 tables.

The authors stated that suitable Apparent Consumption data were not available for the cereal or milk groups as the descriptors were not appropriate, so proportions and types of these food groups for the group composite food were selected by the developers. For cereals they selected 6 parts bread to three parts breakfast cereal and one part rice/pasta. The milk food group was modelled solely on milk but cheese and yoghurt 'equivalents' were given in footnote to tables in the CFG94 document. Again the basis of the equivalent was not defined.

Three models were trialed with one having all the cereals as wholegrain and all the milk, skimmed and included only lean meat and skinless poultry (Model A); a second with all non-wholegrain cereals, all full fat milk and 'as purchased' meats and poultry (Model C); and a third, in between, with 50:50 wholegrain cereals and reduced fat milk, 75% trimmed meat and 50% skinless poultry (Model B). A Model B approach was later used for the AGTHE98 modelling.

The CFG94 developers then assessed the quantity of these composite foods from each group needed to provide recommended nutrient intakes.

Initial modelling was done with the 100% RDI for nutrients as the target for

1. Children aged 4–7; 8–11 and 12–18 years
2. Adults, pregnant & lactating women. An elderly sub-group was not considered.

The following nutrients were considered

1. Energy
2. Macronutrients (protein, fat, CHO, sugar, starch, cholesterol, fibre)
3. Vitamins (Vitamin A, retinol, β-carotene equivalents, thiamin, riboflavin, niacin equivalents, vitamin C, folate, vitamin B12)
4. Minerals (Ca, Mg, Fe, Zn, Na, K)

The energy level used for each age/gender group was at the top of the then recommended energy range (i.e. about 9.6kJ for younger women).

The resulting diets achieved the RDI, or more, for most nutrients within 45-78% energy requirements (depending on age/gender) for Models A and B and 57–99% energy requirements for Model C. The higher % energy need was within the pregnant/lactation group, women in general and older men. The nutrients that were borderline were, firstly, zinc followed by vitamin A, magnesium and calcium.

As the analysis using 100% RDI left little flexibility in choice for some groups, the developers decided to remodel and target 70% of the age/gender specific RDI within 50% of the upper end of energy requirements to develop the Core Food Group recommendations. They argued that the RDI applied to group needs with individual's needs expected to be less (70% chosen on the basis that it approximated average requirement).

The diets modelled achieved 70% RDI for all nutrients within 50% energy for Model B but for Model A and C, zinc, calcium, magnesium and vitamin A were below 70% for some lifestage groups so some additions were made to the model before the CFG94s were finalized.

The inclusion of a 'fats' group had been considered as part of the CFG94 analysis as a 'fat' group (butter and table margarine) had been included in the earlier Five Food Group food guide. In 1994 'fats' were not designated as a Core Food Group as the developers stated that its main contribution was to vitamin A and overall fatty acid profile (P:M:S ratio, linoleic acid and % energy as saturated, polyunsaturated and monounsaturated fats). They felt that these requirements were covered sufficiently by other food groups in their modelling. They did not model adequacy of fat-soluble vitamins other than vitamin A nor alpha-linolenic acid, total LCn-3 or n3/n6 ratios.

Table A1.1: Quantities of Core food Groups that provided 70% RDI in 50% energy requirements developed in 1994

Age	Cereals*	Fruit	Vegetables (cooked wt)	Meat and meat alternatives (cooked wt)	Milk
	g	g	g	G	ml
4–7yrs	120	150	150	35	400
8–11yrs	150	150	225	65	450
12–18yrs	180	300	300	85	550
19+yrs	210	300	300	85	450
Pregnant	240	600	375	125	450
Lactating	330	600	525	190	450

**expressed as weight of bread*

The developers noted that, if adopted, the amounts recommended for cereals, fruits and vegetables appeared to be more than currently available requiring increased production of these categories. For example, the fruit recommendation would require 136kg per capita/yr. Production at that time was only 110.5kg per capita/yr although they noted that home grown production would have contributed.

Appendix 2: Modelling of the Australian Guide to Healthy Eating 1998

A2.1 Food group considerations

The Australian Guide to Healthy Eating 1998 (AGTHE98)[2] modelling was based on the Core Food Groups 1994 (CFG94)[1] analyses but expanded to a whole of diet approach to account for total energy needs.

For this expanded analysis, the foods shown in Table A2.1 were chosen for modelling selected food groups.

Table A2.1: Types of foods included in modelling during development of the AGTHE98

Milk, yoghurt, cheese	For adults, reduced fat milk only (no cheese or yoghurt) For children and adolescents, 50:50 reduced fat milk and full cream cheese
Lean meat, fish, poultry, eggs, legumes	75% fat-trimmed meat and 50% skinless chicken and 50% lean + skin on chicken (no eggs, legumes, nut or fish were included in the model)
Bread, cereals, rice, pasta, noodles, rice	50% wholegrain, 50% white bread plus white rice, pasta, noodles
Fats	An allowance of one or two teaspoons of polyunsaturated margarine per serve to 60% of the bread, cereals, rice, pasta, and noodle serves (CFG (1994) document says one tsp on page 21 but 2 tsp on page 22). This would equate to 15 or 30g/day for 6 serves cereal or 23–45g/day for 9 serves)
'Extra' foods	Not modelled for adults; for children, one extra food based on additional 0.5 serves of oil, 0.25 serves ice cream, 0.25 serves cake (to account for higher fat recommendations in children)
Fruits	Types not specified
Vegetables & legumes	Types not specified

A2.2 Age (and energy ranges) modelled for AGTHE98

Diets were modelled for:

Children	4–7yrs	(6.4–8.3MJ)
Children	8–11yrs	(7.7–9.8MJ)
Adolescents	12–18yrs	(8.1–13.5MJ)
Women	19–60yrs	(7.2–11.3MJ)
Women	60^{+}yrs	(6.5–9.3MJ)
Pregnant women		(8.1–10.9MJ)
Breastfeeding women		(9.2–12.3MJ)
Men	19–60yrs	(9.0–13.7MJ)
Men	60^{+}yrs	(7.4–11MJ)

A2.3 Sample serve sizes developed for the AGTHE98

Vegetables	75g cooked vegetable, 1 cup salad vegetable 1 small potato
Fruit	150g (medium piece) fruit, 2 small pieces 150g (1 cup) diced fresh or canned 125 ml (1/2 cup) fruit juice 1 ½ T sultanas
Bread, cereals, rice, pasta, noodles	60 g (2 slices) bread 180g (1 cup) cooked rice, pasta, or couscous 40 g (1 1/3 cup) ready to eat cereal

continues…

continued…

Milk and Alternatives	250 ml (1 cup) milk or calcium-fortified soy beverage 200g (¾ cup) yogurt 40 g cheese 250ml (1 cup) custard
Meat , fish, poultry, eggs, nuts, legumes	65 – 100g cooked lean meat or chicken 80g (1/2 cup) cooked beans 80 – 120g cooked fish 2 eggs 1/3 cup peanuts ¼ cup seeds
'Extras'	25g (1/2 small chocolate bar 30g potato crisps 60g hot potato chips 400ml beer 35g plain sweet biscuits 75g (1 ½) scoops icecream

A2.4 Eating patterns

Two patterns of eating were developed for each age/gender/lifestyle group. The first had increasing levels of the 'cereal' group and 'extras' serves to account for the higher energy needs of some people within that particular population group; the second eating pattern had additional energy derived across all food groups and extras.

These were modelled by:

- making an energy allowance for 'extra' foods according to overall energy needs;
- adding an allowance of one or two (different amounts given in text) teaspoons polyunsaturated margarine/serve for 60% serves of breads, cereal, rice, pasta and noodles;
- deriving an energy requirement range for each age/gender group
- apportioning the difference between this and the energy supplied by minimum daily serves as given in the CFG94 document and
- converting the remaining energy needs into five food groups in the two different ways.

It should be noted that although the CFG94 were actually modelled on only a limited range of choices for the meat and alternative (no legumes/nuts) or milk (no yoghurt/cheese) groups, the AGTHE98 included these foods in their recommendations. These latter additional foods were included in footnotes to CFG94 tables as 'equivalents' to foods used in modelling on an unspecified basis.

Additional qualitative messages in the AGTHE98 included:

- Drink plenty of water
- Eat more wholegrain/wholemeal
- Include variety e.g. dark green vs. orange vs. cruciferous vs. starchy vs. salad vegetables and legumes and similar for fruit categories
- Try frozen and canned fruits, vegetables and fish as an alternative to fresh re convenience, storage
- Try raw vegetables
- Use dried fruits or juice instead of fruit in limited amounts
- Eat skin of fruit
- Do not count soft cheeses as milk serve
- Use of reduced fat milks, cheeses preferable
- Restrict full fat cheese to 3–4 times a week
- Choose lean meats and trim fat/remove skin from meats/poultry
- Avoid fat, sugar, salt-based cooking/food preparation methods
- Include red meat 3–4 times a week or high iron-replacement foods needed

Table A2.2: Final food serve recommendations developed for the AGTHE98. Two patterns of eating are included.

Age	Bread, cereals, rice, pasta, noodles (includes a polyunsaturated fat allowance)	Vegetables/ legumes	Fruit	Milk, yoghurt, cheese	Meat, fish, poultry, eggs, nuts, legumes	Extras
4–7yrs	5–7	2	1	2	1/2	1–2
	3–4	4	2	3	½–1	1–2
8–11yrs	6–9	3	1	2	1	1–2
	4–6	4–5	1–2	3	1–1½	
12–18yrs	5–11	4	3	3	1	1–3
	4–7	5–9	3–4	3–5	1–2	1–3
19–60yrs						
Men	6–12	5	2	2	1	0–3
	5–7	6–8	3–4	2–4	1½–2	0–3
Women	4–9	5	2	2	1	0–2½
	4–6	4–7	2–3	2–3	1–1½	0–2½
Pregnant	4–6	5–6	4	2	1½	0–2½
	No alternative given					
Breastfeeding	5–7	7	5	2	2	0–2½
	No alternative given					
60+yrs						
Men	4–9	5	2	2	1	0–3
	4–6	4–7	2–3	2–3	1–1½	0–2½
Women	4–7	5	2	2	1	0–2
	3–5	4–6	2–3	2–3	1–1½	0–2

Appendix 3: Reanalysis of the Core Food Groups 1994 and the Australian Guide to Healthy Eating 1998

A3.1 Core Food Groups 1994

The Core Food Groups 1994 (CFG94) were developed to attain 70% 1991 RDIs in 50% of the top of the range of energy needs for that age/gender group. They were modelled on composite foods representing food groups. A reanalysis of the CFG94 recommendations using the Nutrient Reference Values (NRVs) 2006 and the AUSNUT07 nutrient database, showed that, for some groups intake would not reach Estimate Average Requirement (EAR) for thiamin, calcium, iron, magnesium, phosphorus, zinc or selenium.

A3.2 Australian Guide to Healthy Eating 1998

The Australian Guide to Healthy Eating 1998 (AGTHE98) Line A recommendations (increasing cereal) including the allowance for polyunsaturated margarine, were analysed with the NRVs (2006) and the AUSNUT07 nutrient database. These recommendations were based on modelling with the composite food groups derived for the development of *Foundation Diets* to represent food groups. As the AGTHE98 recommendations are for total diet, they were assessed against both RDIs and EARs as they may be used either for individual or group purposes. Recommendations for food groups are given as a range in AGTHE98 to cover the varying energy requirements within an age-gender group. Analyses were done for both the lower and higher end of the range of recommended cereal consumption.

For children, AGTHE98 recommendations generally met EARs and most RDIs with the exception of some nutrients for the lower end of the cereal range. Mean values lower than RDI were found for calcium in some 8–18yr olds; iron in 4–7 yr olds and 12–18yr olds, zinc for 12–18yr olds and selenium for 12–18yr olds.

For women, the AGTHE98 analysis was low compared to RDI for all ages for both the lower and upper range of cereal intake for calcium for all ages and, iron and selenium for younger women. Iron in pregnant females was below EAR at both ends of the cereals range. Iodine was below RDI for both pregnancy and lactation at the lower end of the cereal range but only for pregnancy at the higher end. Selenium was low at the bottom end of the cereals range for women of all ages and vitamin B6 did not reach the RDI in pregnancy.

For men, at the lower end of the cereal consumption range, the diets were below RDI for magnesium, zinc and selenium for 19–60yr olds. For 60 years plus diets were below RDI for calcium at both ends of the cereals range, and below EAR at the lower end. This age group were also below EAR for magnesium, zinc and selenium, and below RDI for vitamin B6.

For all children and younger men the sodium level of the upper cereal range was above the age-relevant Upper Level.

Table A3.1. Reanalysis of the Core Food Groups

Core Food group analysis	4–7 y	8–11 y	12–18 y	19+ y	Pregnant	Lactating	EAR	Ave EAR	Ave EAR	Ave EAR	Preg EAR	Lact EAR
							Child	B/G	B/G	M/F		
Meant to provide 70% RDI (equiv EAR)							4–8 y	9–13 y	14–18 y	19–70 y	19–50 y	19–50 y
Nutrient												
Energy, excluding dietary fibre (kJ)	694.0	835.7	1141.8	1069.8	1424.7	1639.3						
Energy, including dietary fibre (kJ)	2721.2	3452.0	4566.6	4567.2	5960.4	7458.1						
Protein (g)	36.4	49.7	63.4	61.4	77.6	103.3	16.0	27.5	42.0	45	49	54
Fat, total (g)	10.7	14.5	18.4	17.8	22.2	29.6						
Carbohydrate, total (g)	96.2	116.2	157.2	160.0	212.2	255.2						
Sugars, total (g)	49.4	55.3	80.7	75.2	110.5	116.8						
Starch (g)	46.1	60.3	75.3	83.7	99.7	136.4						
Dietary Fibre (g)	12.9	16.8	24.0	25.0	35.6	44.3						
Alcohol (g)	0.0	0.0	0.0	0.0	0.0	0.0						
Saturated fatty acids, total (g)	4.8	6.2	7.8	7.1	8.5	10.8						
Monounsaturated fatty acids, total (g)	3.3	4.7	6.0	5.9	7.5	10.3						
Polyunsaturated fatty acids, total (g)	1.4	2.0	2.6	2.8	3.6	5.0						
Linoleic acid (g)	1.3	1.8	2.2	2.4	3.0	4.1						
Alpha linolenic acid (g)	0.2	0.2	0.3	0.3	0.4	0.5						
LC n-3 fatty acids, total (mg)	51.5	94.7	124.3	124.1	181.4	275.3						
Vitamin A expressed as retinol equivalents (ug)	366.7	501.1	681.2	661.6	862.5	1114.5	275.0	432.0	557.0	560	550	800
Preformed Vitamin A (retinol) (ug)	92.7	110.8	137.6	119.0	131.3	150.3						
Provitamin A as beta-carotene equivalents (ug)	1654.1	2351.8	3277.1	3269.3	4407.6	5804.5						

continues…

continued…

Core Food group analysis	4–7 y	8–11 y	12–18 y	19+ y	Pregnant	Lactating	EAR	Ave EAR	Ave EAR	Ave EAR	Preg EAR	Lact EAR
							Child	B/G	B/G	M/F		
Meant to provide 70% RDI (equiv EAR)							**4–8 y**	**9–13 y**	**14–18 y**	**19–70 y**	**19–50 y**	**19–50 y**
Nutrient												
Thiamin (mg)	0.5	0.6	0.8	0.9	1.2	1.6	0.5	0.7	1.0	0.95	1.2	1.2
Riboflavin (mg)	1.2	1.5	1.9	1.7	1.9	2.3	0.5	0.8	1.0	1	1.2	1.3
Niacin equivalents, total (mg)	19.0	25.5	32.6	31.9	39.9	52.8	6.0	9.0	11.5	11.5	14	13
Folate total (ug)	212.1	255.1	347.1	332.2	441.1	513.1						
Folate dietary folate equivalents (ug)	284.8	346.0	456.3	459.5	586.6	713.2	160.0	250.0	330.0	320	520	450
Vitamin C (mg)	55.4	71.8	110.8	110.8	172.5	205.2	25.0	28.0	28.0	30	40	60
Vitamin D (ug)	0.9	1.2	1.5	1.3	1.6	2.0						
Vitamin E (mg)	1.7	2.3	3.3	3.4	5.1	6.4						
Calcium (mg)	559.4	650.4	811.1	717.4	787.6	877.0	520	800–1050	1050	840–1100	840	840
Iron (mg)	3.6	5.1	6.7	7.1	9.5	12.8	4	6	8	7	22	6.5
Iodine (ug)	112.2	132.3	162.9	148.0	161.0	187.0	65	75	95	100	160	190
Magnesium (mg)	145.7	185.5	246.1	244.7	317.3	397.0	110	200	320	300	300	265
Phosphorus (mg)	728.5	927.9	1177.0	1114.3	1337.4	1685.2	405	1055	1055	580	580	580
Potassium (mg)	1804.6	2327.5	3181.9	3064.4	4111.5	5055.9						
Sodium (mg)	441.2	556.1	687.9	699.7	813.0	1059.2						
Zinc (mg)	4.7	6.6	8.5	8.3	10.8	14.6	3	5	8.5	9.3	9	10
Selenium (ug)*	20.2	29.9	38.2	38.7	50.4	71.5	25	40	55	55	55	65
Vit B6 (mg)*	0.6	0.9	1.2	1.2	1.6	2.0	0.5	0.8	1.1	1.2	1.6	1.7
Vit B12 (ug)*	3.5	4.3	5.3	4.6	5.2	6.2	1	1.5	2	2	2.2	2.4

Using reduced fat dairy foods; half lean red meats, half lean poultry/fish/eggs/legumes; vegetable categories in CFG94 proportions; half wholegrain and half refined cereals; fruit in proportion to current consumption

**Incomplete dataset available for selenium, vitamin B6 and vitamin B12. Results are therefore invalid and are provided for information only.*

Nutrients below EAR

Note: CFG94 and EAR age bands do not match for children. EAR age bands somewhat higher thus may be overestimate of needs for CFG94 age bands(~600kJ)

Table A3.2: AGTHE98 analysis without extras; two thirds wholegrain cereals with margarine allowance at AGTHE98 serve size; vegetables evenly spread across subcategories; reduced fat dairy foods with cheese 3 times a week; meats half red, half poultry/fish/seafood/legumes; nuts 15g/week; extras not added

Children AGTHE98	4–7yrs	4 –7yrs	8–11yrs	8–11yrs	12–18yrs	12–18yrs
	lower cereals	upper cereals	lower cereals	upper cereals	lower cereals	upper cereals
Energy, excluding dietary fibre (kJ)	5963.0	7535.0	7214.4	9576.1	7690.3	12461.6
Energy, including dietary fibre (kJ)	6157.2	7779.4	7453.6	9890.8	7977.2	12900.8
Protein (g)	65.6	77.8	84.9	103.2	92.2	129.3
Fat, total (g)	36.5	45.3	44.5	57.8	43.1	70.6
Carbohydrate, total (g)	207.8	269.3	244.8	337.1	269.5	454.4
Sugars, total (g)	62.6	69.6	68.3	78.8	114.7	135.7
Starch (g)	144.6	199.2	175.9	257.8	153.2	317.1
Dietary Fibre (g)	25.2	31.6	31.4	41.0	37.4	56.8
Alcohol (g)	0.0	0.0	0.0	0.0	0.0	0.0
Saturated fatty acids, total (g)	12.5	14.6	14.8	18.0	15.7	22.2
Monounsaturated fatty acids, total (g)	11.2	13.9	14.0	18.0	13.1	21.7
Polyunsaturated fatty acids, total (g)	9.9	13.2	12.1	17.1	10.6	20.9
Linoleic acid (g)	9.1	12.2	11.0	15.7	9.5	19.2
Alpha linolenic acid (g)	0.7	1.0	0.9	1.2	0.9	1.6
LC n-3 fatty acids, total (mg)	74.5	74.5	142.1	142.1	142.6	142.6
Vitamin A expressed as retinol equivalents (ug)	722.9	788.3	1014.8	1114.0	1251.6	1448.8
Preformed Vitamin A (retinol) (uGu)	269.7	328.3	310.7	399.7	330.5	507.3
Provitamin A as beta-carotene equivalents (ug)	2727.1	2766.5	4231.6	4291.4	5545.3	5664.5
Thiamine (mg)	1.4	1.9	1.8	2.5	1.7	3.1
Riboflavin (mg)	1.9	2.2	2.1	2.6	2.7	3.6
Niacin equivalents, total (mg)	35.3	43.3	45.2	57.1	47.8	72.0
Folate, total (ug)	353.0	419.3	413.3	512.8	534.6	736.9
Folate, dietary folate equivalents (ug)	662.9	853.2	785.2	1070.7	844.5	1418.7
Vitamin C (mg)	55.2	55.7	72.5	73.2	131.6	133.0
Vitamin D (ug)	2.3	2.6	2.7	3.3	2.9	4.0
Vitamin E (mg)	6.1	7.7	7.5	10.0	7.9	13.1

continues…

continued…

Children AGTHE98	4–7yrs	4 –7yrs	8–11yrs	8–11yrs	12–18yrs	12–18yrs
	lower cereals	upper cereals	lower cereals	upper cereals	lower cereals	upper cereals
Calcium (mg)	881.2	1002.0	969.1	1150.3	1225.2	1589.4
Iron (mg)	9.3	11.9	11.9	16.0	12.0	20.1
Iodine (ug)	187.9	227.2	213.8	272.9	246.6	364.7
Magnesium (mg)	294.3	366.0	358.0	465.6	398.3	617.7
Phosphorus (mg)	1278.7	1522.6	1548.7	1914.5	1747.0	2487.8
Potassium (mg)	2282.1	2568.4	2847.1	3276.5	3876.8	4747.8
Sodium (mg)	1321.4	1704.8	1571.3	2146.8	1503.5	2654.1
Zinc (mg)	8.7	10.3	11.5	14.0	12.3	17.3
Cholesterol (mg)	91.0	93.4	142.0	145.8	155.7	163.2
Selenium (ug)*	46.1	56.6	62.3	78.0	60.0	92.7
Vit B6 (mg)*	1.0	1.2	1.3	1.5	1.6	2.1
Vit B12 (ug)*	4.0	4.1	4.7	4.9	6.3	6.7

Nutrients below average RDI

Nutrients below RDI; for one subgroup or top RDI range

**Incomplete dataset available for selenium, vitamin B6 and vitamin B12. Results are therefore invalid and are provided for information only.*

Women AGTHE98								
	Women	Women	Women	Women	Pregnant	Pregnant	Lactating	Lactating
	19–60y	19–60y	60+y	60+y				
Nutrients	lower cereals	upper cereals	lower cereals	upper cereals	lower cereals	upper cereals	lower cereals	upper cereals
Energy, excluding dietary fibre (kJ)	6221.7	10159.3	6221.7	8583.5	7190.0	8881.4	8882.6	10454.5
Energy, including dietary fibre (kJ)	6472.1	10535.4	6472.1	8909.4	7497.4	9254.5	9277.8	10900.1
Protein (g)	77.5	108.1	77.5	95.9	91.2	104.9	113.2	125.4
Fat, total (g)	37.2	59.4	37.2	50.5	41.0	50.5	49.9	58.7
Carbohydrate, total (g)	209.6	363.5	209.6	301.9	245.3	310.9	304.1	365.6
Sugars, total (g)	81.6	99.0	81.6	92.0	114.2	123.2	138.2	145.2
Starch (g)	126.9	263.4	126.9	208.8	129.1	185.6	163.3	217.9
Dietary Fibre (g)	33.2	49.2	33.2	42.8	40.2	48.8	52.0	58.4
Alcohol (g)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Saturated fatty acids, total (g)	13.0	18.3	13.0	16.2	14.2	16.5	16.7	18.8
Monounsaturated fatty acids, total (g)	11.8	18.5	11.8	15.8	13.2	16.2	16.3	18.9
Polyunsaturated fatty acids, total (g)	9.3	17.7	9.3	14.3	9.8	13.4	12.3	15.6
Linoleic acid (g)	8.4	16.2	8.4	13.0	8.7	12.0	10.8	13.9
Alpha linolenic acid (g)	0.7	1.3	0.7	1.1	0.8	1.1	1.0	1.2
LC n-3 fatty acids, total (mg)	142.2	142.3	142.2	142.2	209.7	209.8	277.4	277.4
Vitamin A expressed as retinol equivalents (ug)	1283.6	1449.3	1283.6	1382.7	1370.2	1589.9	1853.8	1919.1
Preformed Vitamin A (retinol) (ug)	252.0	400.7	252.0	341.0	265.4	325.1	308.4	367.0
Provitamin A as beta-carotene equivalents (ug)	6199.4	6299.3	6199.4	6259.2	6646.5	7604.5	9291.8	9331.2
Thiamin (mg)	1.4	2.7	1.4	2.2	1.6	2.1	2.0	2.5
Riboflavin (mg)	2.0	2.7	2.0	2.4	2.2	2.5	2.6	2.9
Niacin equivalents, total (mg)	40.1	59.9	40.1	52.0	46.2	55.1	57.7	65.7
Folate, total (ug)	425.8	591.7	425.8	525.3	510.2	594.3	626.6	692.9
Folate, dietary folate equivalents (ug)	673.7	1149.5	673.7	959.2	758.1	966.2	936.5	1126.8
Vitamin C (mg)	125.0	126.2	125.0	125.7	170.4	187.2	226.6	227.1
Vitamin D (ug)	2.3	3.3	2.3	2.9	2.6	3.0	3.1	3.4

continues…

continued…

Women AGTHE98								
	Women	Women	Women	Women	Pregnant	Pregnant	Lactating	Lactating
	19–60y	19–60y	60+y	60+y				
Nutrients	lower cereals	upper cereals	lower cereals	upper cereals	lower cereals	upper cereals	lower cereals	upper cereals
Vitamin E (mg)	7.1	11.3	7.1	9.6	8.5	10.6	10.9	12.5
Calcium (mg)	899.1	1201.1	899.1	1080.3	942.0	1077.5	1060.9	1181.7
Iron (mg)	10.7	17.4	10.7	14.7	12.3	15.4	15.8	18.5
Iodine (ug)	176.7	275.1	176.7	235.7	184.5	224.4	212.1	251.5
Magnesium (mg)	333.1	512.5	333.1	440.7	382.2	466.2	476.1	547.8
Phosphorus (mg)	1409.4	2019.0	1409.4	1775.2	1565.1	1843.6	1894.2	2138.1
Potassium (mg)	3308.5	4024.2	3308.5	3737.9	4025.8	4539.8	5104.1	5390.4
Sodium (mg)	1222.6	2181.9	1222.6	1798.1	1275.1	1673.7	1545.2	1928.6
Zinc (mg)	10.7	14.8	10.7	13.1	12.8	14.7	16.1	17.7
Cholesterol (mg)	139.6	145.8	139.6	143.3	189.4	191.9	240.5	243.0
Selenium (ug)*	54.3	80.5	54.3	70.0	65.0	76.4	82.4	92.8
Vit B6 (mg)*	1.5	1.9	1.5	1.7	1.8	2.1	2.3	2.4
Vit B12 (ug)*	4.5	4.9	4.5	4.7	5.2	5.3	5.9	6.0

Below average RDI

Below RDI; for one subgroup or top RDI range

Below both RDI and EAR

**Incomplete dataset available for selenium, vitamin B6 and vitamin B12. Results are therefore invalid and are provided for information only.*

Men AGTHE98	Men 19–60y	Men 19–60y	Men 60+	Men 60+
	lower cereal	upper cereal	lower cereal	upper cereal
Energy, excluding dietary fibre (kJ)	**7767.4**	**12487.1**	**6191.7**	**10129.2**
Energy, including dietary fibre (kJ)	8064.9	12935.5	6438.8	10502.1
Protein (g)	88.9	125.6	76.7	107.3
Fat, total (g)	45.9	72.3	37.1	59.2
Carbohydrate, total (g)	270.6	455.3	209.0	362.9
Sugars, total (g)	88.7	109.7	81.8	99.2
Starch (g)	180.7	344.5	126.1	262.6
Dietary Fibre (g)	39.2	58.3	32.8	48.8
Alcohol (g)	0.0	0.0	0.0	0.0
Saturated fatty acids, total (g)	15.1	21.5	12.9	18.3
Monounsaturated fatty acids, total (g)	14.5	22.5	11.8	18.5
Polyunsaturated fatty acids, total (g)	12.5	22.5	9.1	17.5
Linoleic acid (g)	11.4	20.7	8.2	16.0
Alpha linolenic acid (g)	0.9	1.6	0.7	1.3
LC n-3 fatty acids, total (mg)	142.2	142.3	142.2	142.3
Vitamin A expressed as retinol equivalents (ug)	1358.5	1555.6	1292.0	1457.6
Preformed Vitamin A (retinol) (ug)	311.7	488.5	252.0	400.7
Provitamin A expressed as beta-carotene equivalents (ug)	6289.7	6408.6	6249.6	6349.5
Thiamin (mg)	1.9	3.4	1.4	2.6
Riboflavin (mg)	2.3	3.2	2.0	2.7
Niacin equivalents, total (mg)	47.9	71.7	39.9	59.8
Folate, total (ug)	487.0	686.1	420.7	586.5
Folate dietary folate equivalents (ug)	858.9	1429.8	668.6	1144.4
Vitamin C (mg)	127.7	129.1	127.2	128.4
Vitamin D (ug)	2.7	3.8	2.3	3.3
Vitamin E (mg)	8.8	13.8	7.1	11.3
Magnesium (mg)	400.5	615.7	328.7	508.1
Phosphorus (mg)	1642.5	2374.0	1398.7	2008.2
Potassium (mg)	3588.1	4446.9	3301.9	4017.5
Sodium (mg)	1605.8	2756.3	1222.0	2181.3
Zinc (mg)	12.2	17.2	10.6	14.7
Cholesterol (mg)	142.1	149.5	139.6	145.8
Selenium (ug)*	64.4	95.9	53.9	80.1
Vit B6 (mg)*	1.7	2.1	1.5	1.9
Vit B12 (ug)*	4.7	5.1	4.5	4.9

Nutrients below average RDI
Nutrients below RDI; for one subgroup or top RDI range
Nutrients below both RDI and EAR

**Incomplete dataset available for selenium, vitamin B6 and vitamin B12. Results are therefore invalid and are provided for information only.*

Appendix 4: Overseas food guides; modelling approaches and recommendations

A4.1 US approach to modelling their national food guide[1] (My Pyramid)

Between 2003 and 2006, the US updated their food guidance system to bring it in line with their new Dietary Reference Intakes (DRIs) that were being published at that time. This revision resulted in the release of the electronically-based, MyPyramid food guide[1]

The process is outlined below:

The early modelling was undertaken before the completion of the US: Canadian DRIs so they had to establish relevant energy levels.

Step 1. 'Set Energy Levels'

Energy levels were based on estimated energy requirements (EER) formulae using standard reference body sizes and a sedentary physical activity level (PAL 1.4) to meet a wide range of energy (calorie) needs of various age/gender groups. They determined that food patterns were needed at energy levels ranging from 1000 to 3200 calories (about 4000–13000kJ). Sedentary in this guide means a lifestyle that includes only the physical activity of independent living.

To meet differing needs, 12 energy levels in 200-calorie increments within this range were selected for the development of food intake patterns and they assigned one target energy level for each age/gender group that matched closest to the EER for that age and gender group.

e.g. for Men 35–40 years[1]

Age	EER*	Chosen energy level for group
35yr	2397	2200
40yr	2350	
45yr	2302	
50yr	2254	

**using standard reference body size and sedentary activity level*

Step 2. 'Set Nutrient Goals'

Based on Dietary Reference Intake (DRI) standards if available. Used RDI and AIs for modelling within AMDR.

Step 3. 'Establish Food Groupings'

Based on nutrient content, use in meals, and familiarity – major food groups used were cereals, fruits, vegetables, meats and alternatives, milks and alternatives, unsaturated fats and oils. Sub-major food groups were retained for grains (whole and refined) and vegetables (dark-green vegetables, orange vegetables, dry beans and peas, starchy vegetables, and other vegetables).

An allowance for oils and soft margarines was included in the food intake patterns because these foods were identified as the primary sources of essential fatty acids and vitamin E for Americans.

Step 4. 'Calculate Nutrient Composition of each of the food groups'

The nutrient compositions were derived from a survey-based, consumption-weighted average nutrient content for foods in each major and sub-major food group.

Step 5. 'Determine Food Intake Patterns that will meet the nutrient goals'

This was an iterative modelling process to identify food group amounts that met nutrient goals within the 12 energy bands ranging from 1000–3200 kcals. The developers first assessed the base need (energy needed to attain RDI); then set a discretionary allowance for each group and then made up the difference with additional servings from food groups.

Table A4.1: US food serve recommendations for 12 different energy bands[1]

	Energy Level of Pattern											
kcals	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200
kJ	*4182*	*5016*	*5852*	*6508*	*7524*	*8360*	*9196*	*10032*	*10868*	*11704*	*12540*	*13376*
	Daily Amount of Food (vegetable subgroup amounts are per week)											
Fruits cup/d	1	1	1½	1½	1½	2	2	2	2	2½	2½	2½
Vegetables cup/d	1	1½	1½	2	2½	2½	3	3	3½	3½	4	4
Dark-green vegetables c/wk	1	1½	1½	2	3	3	3	3	3	3	3	3
Orange vegetables c/wk	½	1	1	1½	2	2	2	2	2½	2½	2½	2½
Dry beans and peas c/wk	½	1		2½	3			3½				
Starchy vegetables c/wk	1½	2½	2½	2½	3	3	6	6	7	7	9	9
Other vegetables c/wk	4	4½	4½	5½	6½	6½	7	7	8½	8½	10	10
Grains oz equiv	3	4	5	5	6	6	7	8	9	10	10	10
Whole grains oz equiv	1½	2	2½	3	3	3	3½	4	4½	5	5	5
Refined grains	1½	2	2½	2	3	3	3½	4	4½	5	5	5
Meat and Beans oz equiv	2	3	4	5	5	5½	6	6½	6½	7	7	7
Milk cup/day	2	2	2	3	3	3	3	3	3	3	3	3
Oils g/day	15	17	17	22	24	27	29	31	34	36	44	51
Discretionary calorie allowance	165	171	171	132	195	267	290	362	410	426	512	648

A4.2 The Canadian approach to modelling the Rainbow Food Guide[2]

The following summary describes the work undertaken to develop the current Canadian Food Guide as described on the referenced website .

'The work to inform the revision of the Canadian Food Guide included modelling of food intake patterns. Modelling tested combinations of types and amounts of food until a pattern was found that met the nutrient requirements of most Canadians and contributed to a reduced risk of chronic disease'.

A specially adapted version of the 1997 Canadian Nutrient File (CNF) reflecting the mandatory addition of folic acid to flour and enriched pasta was used as the source of nutrient values for the nutrient content of foods.

A two step process was used.

Step One. Creation of 'composite' foods

Composite foods were created for major food groups or sub-major food groups to be used for modelling, taking data from Statistics Canada's 2001 Food Expenditure Survey (FoodEx). 'The amounts of these groups were manipulated until a satisfactory pattern was found' that met the US; Canadian RDAs (equivalent to our RDI) within the AMDRs. 'Composites were used to simplify the process of testing different amounts of food groups relative to nutrient standards'.

Step Two. Testing with 'real' foods

'Using the pattern from Step One, 500 simulated diets were created for each age and gender group using individual foods. For example, if the food intake pattern created in Step One recommended three servings of fruit, four simulated diets may include the following combinations: 1 apple, 1 banana, 1 pear; 1 plum, 1 orange, 1 banana; 3 apples; 1 apple, 2 bananas'.

In designing simulated diets, for Step Two the modellers 'drew on food choices documented in the four most recent provincial food and nutrition surveys (British Columbia, Manitoba, and Ontario surveys for adult data; and the Quebec youth survey for children's data)' as no national dataset was available.

'The simulated diets were evaluated to see if nutrient requirements were met. When evaluation of simulated diets yielded less than satisfactory results, modelling returned to step one to find a better pattern to test. More than fifty patterns were assessed before a satisfactory pattern was achieved'.

Nutrient distributions of simulated diets were assessed relative to the relevant EAR using recommended methodologies.

- 'For vitamins and minerals with an EAR' (folate, magnesium, niacin, phosphorus, riboflavin, thiamin, vitamin A, vitamin B6, vitamin B12, vitamin C, zinc, and iron), 'the aim was to have 10% or less of all simulated diets with a nutrient content below the EAR'.
- 'For nutrients with an AI', (calcium, linoleic acid, alpha-linolenic acid, potassium, sodium, fibre, and vitamin D) 'the median nutrient content of simulated diets was compared to the AI'.
- 'The majority (at least 80%) of simulated diets should have carbohydrate, fat, and protein content within the AMDRs'.
- 'Saturated fat and dietary cholesterol content of simulated diets should be as low as possible. Benchmarks of 10% or less of calories from saturated fat and 300mg or less of cholesterol were used'.
- 'Median energy content of simulated diets should be at or below the median sedentary Estimated Energy Requirements (EERs). These EERs were calculated for each age and sex based on median height, weight derived from the median of normal BMI, and using a sedentary level of activity. A sedentary level of activity was considered most appropriate so that there was no overestimation of requirements'.

'In addition to the modelling, a summary of reported associations between foods and chronic diseases was done based on findings from two large reports: The *2003 WHO/FAO Joint Report on Diet, Nutrition and the Prevention of Chronic Diseases*[3] and the *2005 US Dietary Guidelines Advisory Committee Report* .[4] From this work, the association between specific foods with chronic diseases was examined.

Foods that were assessed included: whole grains, vegetables and fruit, red and processed meats, legumes, nuts, eggs, vegetables oils, fish, energy-dense foods, sweetened beverages, milk products, and salt-preserved foods. These foods were assessed in relation to the risk of some chronic diseases such as overweight/obesity, diabetes, cardiovascular disease, cancer and osteoporosis. This work provided additional information for the development of guidance on specific foods'.

Table A4.2: Canadian Guide–Final Number of Food Group Servings for males and females[1]

		2–3yrs	4–8yrs	9–13yrs	14–18yrs	19–30yrs	31–50yrs	51–70yrs	71+yrs
Vegetables and fruit	M	4	5	6	8	10	8	7	7
	F	4	5	6	7	8	7	7	7
Grain products	M	3	4	6	7	8	8	7	7
	F	3	4	6	6	7	6	6	6
Milk and alternatives	M	2	2	3–4	3–4	2	2	3	3
	F	2	2	3–4	3–4	2	2	3	3
Meat and alternatives	M	1	1	2	3	3	3	3	3
	F	1	1	1	2	2	2	2	2
Unsaturated fat (g)	M	30	30	30	45	45	45	45	45
	F	30	30	30	30	30	30	30	30

Serve sizes used were:

Vegetables and Fruit

125 mL (½ cup) fresh, frozen or canned vegetable or fruit or 100% juice
250 mL (1 cup) leafy raw vegetables or salad
1 piece of fruit

Grain Products

1 slice (35 g) bread or ½ bagel (45 g)
½ pita (35 g) or ½ tortilla (35 g)
125 mL (½ cup) cooked rice, pasta, or couscous
30 g cold cereal or 175 mL (¾ cup) hot cereal

Milk and Alternatives

250 mL (1 cup) milk or calcium-fortified soy beverage
175 g (¾ cup) yogurt
50 g (1 ½ oz.) cheese

Meat and Alternatives

75 g (2 ½ oz.)/125 mL (½ cup) cooked fish, shellfish, poultry or lean meat
175 mL (¾ cup) cooked beans
2 eggs
30 mL (2 Tbsp) peanut butter

'In addition, the following statements were developed to provide guidance on the types of foods to choose. These statements reflect the types of foods used in modelling to achieve acceptable results and were judged to be consistent with findings from the review of reported associations between foods and chronic diseases.

- Eat at least one dark green and one orange vegetable each day.
- Choose vegetables and fruit prepared with little or no added fat, sugar or salt.
- Have vegetables and fruit more often than juice.
- Make at least half of your grain products whole grain each day.
- Choose grain products that are lower in fat, sugar or salt.
- Select lower fat milk alternatives
- Have meat alternatives such as beans, lentils and tofu often.
- Eat at least two Food Guide Servings of fish each week.
- Select lean meat and alternatives prepared with little or no added fat or salt.
- Include a small amount–30 to 45 ml (2 to 3 Tbsp) of unsaturated fat each day.

Simulated diets that followed these food intake patterns (including the statements) yielded satisfactory results across all nutrients and macronutrients examined. In particular, for nutrients with an EAR, the prevalence of inadequate nutrient content in simulated diets based on the final food intake patterns was less than ten percent.

The median nutrient content of these simulated diets approximately meets the US: Canadian AI for calcium, alpha-linolenic acid and vitamin D (except for those older than 50 years). Nutrients for which less than perfect results were accepted after discussion with experts and advisors included: linoleic acid, potassium, fibre (particularly for children), vitamin D for those older than 50 years, and sodium'.

For sodium, median content of simulated diets was at or above the Tolerable Upper Level for most groups e.g. for adults 19–30 years the TUL is 2300mg but the median for the diets were 2962mg, 3019mg, 3054mg and 3046mg for the four adult male groups and 2697mg, 2334mg, 2458mg and 2607mg for the four women's group. The picture was similar for children and adolescents.

'The assessment of simulated diets relative to macronutrients and energy content yielded satisfactory results'.

A4.3 New Zealand[5]

The Ministry of Health in New Zealand has a series of recommendations for food group intakes in children, adults, older adults and for pregnancy and breastfeeding.

The amounts and serve sizes recommended are shown in the table below

	Preschool (at least)	Schoolchild up to 12yrs (at least)	Teenager (at least)	Adult (at least)	Pregnant	Breast feeding	Older adults
Vegetables	2	3	3	3	4	4	3
Fruit	2	2	2	2	2	2	2
Breads/cereals	4	5–6	6	6	6	7	6
Lean meats/alts	1	1	1–2		2	2	1
Milk and milk products	2–3	2–3	3	2	3	3	2

Serve sizes used were:

Vegetables: 1 medium potato; half cup cooked vegetable

Fruits: 1 apple, banana, orange, ½ cup fruit salad, 1 cup fruit juice

Breads & cereals: 1 medium slice bread, 1 cup pasta, 2 plain sweet biscuits, 1 muffin

Lean meats, chicken, seafood, eggs, dried beans, peas, lentils; 2 slices cooked meat; 1 egg; 1 medium steak; ¾ cup dried, cooked beans; 2 drumsticks

Milk and milk products: 1 glass milk; 2 slices cheese, 1 pot yoghurt

These recommendations were not based on a specific modelling exercise.

A4.4 United Kingdom[6]

The Eatwell Plate guide from the United Kingdom gives one set of recommendations for all ages and genders under the general recommendations to try to 'eat plenty of fruit and vegetables, plenty of bread, rice, potatoes, pasta and other starchy foods (wholegrain where possible); some milk and dairy foods and some meats, fish, eggs, beans and other non-dairy sources of protein'. The guide shows the proportions that should be eaten from the five food groups displayed.

The process used by the UK was based on an agreed core structure of five food groups which was arrived at by 'scientific consensus' but tested at a later stage against nutrient recommendations.

The five groups were:

- 'Breads, other cereals and potatoes (key nutrients, carbohydrates, non-starch polysaccharides (NSP), vitamin B complex, calcium and iron)
- Fruit and vegetables (key nutrients range of vitamins and minerals, NSP and carbohydrates)
- Meat fish and alternatives (key nutrients, protein, iron, B vitamins, zinc, magnesium and, for pulses, NSP)
- Milk and dairy foods (key nutrients, calcium, protein, vitamin B12, vitamins A, D, E)
- Fatty and sugary foods (key nutrients, essential fatty acids, fat-soluble vitamins, fat, sugar)'

Specific serve information where given is shown below:

Food group	Comment	Serve or portion
Milk and milk products	No comments on amounts; just safety and choosing lower fat options	
Fruit and vegetables	Five a day is a good target	Serve = 80g fruit or vegetables
Starchy foods	Should make up a third of your food	
Fish and shellfish	2 'portions' a week; one of oily fish	Portion not specified
Pulses	Count as vegetables but no more than one serve a day	Serve 3 heaped tablespoons
Meat	No comments on amounts; mainly choosing lean and safety aspects	

Current patterns of intake as well as chronic disease, cultural and social equity issues and flexibility were considered alongside the attainment of the UK Dietary Reference Values.[7]

To be consistent with existing recommendations, the relative proportions between food groups proposed in the 1994 Committee on Medical Aspects of the Food Supply (COMA) report "Nutritional Aspects of Cardiovascular Disease" were initially adopted.[8] The COMA review group had earlier carried out a computer modelling exercise using the data from the UK National Food Survey on average diets. Out of the many possible permutations, the group identified some general principles of the sorts of dietary changes which would achieve their nutrient and food group recommendations and which would be appropriate for most of the population. Details of the modelling process are not given.

The report's general recommendations were that' the average consumption of vegetables, fruit, bread and potatoes at that time in the UK should be increased by 50 per cent; that on average, people should eat one portion of oily fish a week; that people continue to substitute low and reduced fat spreads and dairy foods for the full fat varieties; and that people replace fats rich in saturated fatty acids with fats and oils low in saturates and rich in monounsaturates'.

These recommendations were incorporated in the National Food Guide, the Balance of Good Health in which the two food groups, fruit and vegetables, and bread, other cereals and potatoes each provide about one third of the diet. Milk and dairy foods, meat, fish and alternatives and fatty and sugary foods make up the remainder but in unequal proportions.

A4.5 References

1. US MyPyramid guide. http://www.mypyramid.gov/. Accessed 4th Jan 2008
2. Canadian Food Guide. http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php. Accessed 4th Jan 2008
3. Joint WHO/FAO Expert Consultation on Diet, Nutrition and the Prevention of Chronic Disease. *Diet, nutrition and the prevention of chronic diseases: report of a joint WHO/FAO expert consultation* (WHO technical report series: 916) Geneva: WHO, 2003
4. 2005 Dietary Guidelines Advisory Committee. Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 2005. Available at http://www.health.gov.dietaryguidelines/dga2005/report/. Accessed Feb 1 2007
5. New Zealand Food Guide (http://www.healthed.govt.nz//moh.nsf/indexmh/ nutrition-healtheducationresources#foodforhealth). Accessed 4th Jan 2008
6. UK Eat Well Plate http://www.eatwell.gov.uk/healthydiet/eatwellplate/. Accessed 4th Jan 2008
7. Committee on Medical Aspects of Food Policy (1991), *Dietary Reference Values for Food Energy and Nutrients for the United Kingdom*, HMSO, London, Department of Health Report on Health and Social Subjects, No.41, .
8. Committee on Medical Aspects of Food Policy (1994), *Nutritional Aspects of Cardiovascular Disease*, HMSO, London, Department of Health Report on Health and Social Subjects, No.46 .

Appendix 5: Linear programming as a tool to derive diets which provide nutrient requirements within minimal dietary energy

What is linear programming?

Simply defined, linear programming is the optimisation of an outcome based on some set of constraints using a linear mathematical model.

More specifically, linear programming, sometimes known as linear optimisation, involves maximising or minimising a linear function over a convex polyhedron specified by linear and non-negativity constraints. Linear programming theory falls within convex optimisation theory and is also considered to be an important part of operations research.

Linear programming is heavily used in microeconomics and business management, either to maximise the income or minimise the costs of a production scheme. Some examples are food blending, inventory management, portfolio and finance management, resource allocation for human and machine resources, planning advertisement campaigns, etc.

Linear programming had its origins in food and nutrition, notably the need, expressed by Nobel Prize winner George Stigler in 1945[1], to identify a mathematical method for designing least-cost, adequate diets. Soon after, in 1947, Danzig formally solved the problem; using the simplex method he had just developed[2].

> *Quote from Danzig: "One of the first applications of the simplex algorithm was to the determination of an adequate diet that was of least cost. In the fall of 1947, Jack Alderman of the Mathematical Tables Project of the National Bureau of Standards undertook, as a test of the newly proposed simplex method, the first large-scale computation in this field. It was a system with nine equations in seventy-seven unknowns. Using hand-operated desk calculators, approximately 120 man-days were required to obtain a solution." "The particular problem solved was one which had been studied earlier by George Stigler (who later became a Nobel Laureate) who proposed a solution based on the substitution of certain foods by others which gave more nutrition per dollar. He then examined a "handful" of the possible 510 ways to combine the selected foods. He did not claim the solution to be the cheapest but gave his reasons for believing that the cost per annum could not be reduced by more than a few dollars. Indeed, it turned out that Stigler's solution (expressed in 1945 dollars) was only 24 cents higher than the true minimum per year $39.69."*

This led to the theory of linear programming.[3] Since then, possibly because of the complex mathematics and time required to undertake the analyses, it has rarely been used in nutrition. With the advent of programs such as SOLVER interest in this approach has been rekindled.

This technique was used to assess the feasibility of the draft NRVs in 2004[4] and it has also been used in recent years to devise supplementary feeding regimes for infants and toddlers[5] and to assess the viability of nutrient profiling as a tool in dietary planning.[6]

How can linear programming be used to define diets which provide nutrient requirements within minimal energy expenditure?

If dietary energy is ignored, it is relatively easy to design diets that will conform to a given set of nutrient requirements (both minimal and maximal). Achieving this for a reasonable or minimal energy cost is more complex. Linear programming provides a tool to do this.

Algebraically, if food or food group i (i = 1…m) is consumed in fixed amounts s^i grams (called the serving size or portion size), the total daily intake of nutrient j is given by the summation (over i):- $\sum n_i.s_i.c_{ij}/100$,

where n_i = the number of portions of food/food group i consumed
and c_{ij} is the amount of nutrient j in 100g of food/food group i.

If 100 gm of food/food group i contributes e_i kilojoules of energy to the daily diet, the nutritionist's problem is to choose a set of servings { $n_i \geq 0$, i = 1…m) from a list of m possible foods/food groups such that the total daily energy intake

$$E = \sum_{i=1}^{m} n_i.s_i.e_i/100 \qquad (1)$$

is minimised, and such that the Nutrient Reference Values (NRV) for each of the 'nutrients' j = 1…v are all satisfied simultaneously, i.e.,

$$\sum_{i=1}^{m} n_i.s_i.c_{ij}/100 \geq NRV_j,\ j = 1 \ldots v \qquad (2)$$

To include consideration of issues such as palatability, cultural norms, chronic disease or environmental sustainability, the program may be adjusted to choose no more or no less than some fixed number, v, of any food or group of foods, i.e.

$$\sum_{k \in V} n_k \leq v \qquad (3)$$

where V is the set of (say) all vegetable foods.

Since the energy intake to be minimised (1), and the constraints (2) and (3) which were placed on the model are all linear in n_i, the problem of identifying a selection of foods (a 'diet') such that all the daily NRVs are satisfied, is known in Operations Research as a Linear Programming Problem. The total energy intake (1), which is to be minimised subject to the constraints (2) and (3) is often referred to as the Objective Function. Software with limited capacity to solve such problems is distributed as an "Add-In" called 'Solver' with standard releases of the Microsoft Office product Excel. A more advanced Excel version of Solver is available from Frontline Systems (Nevada).

In the implementation of the method to minimise energy intake subject to the parameters that were included in the model as described above, many solutions yielded number of serves of particular foods which were not whole numbers or integers – and some discretionary rounding was necessary. When choosing a diet for a whole week, these adjustments typically resulted in only small changes in the total energy consumed – and it was felt that the more computing-intensive methods of 'integer-programming' which would have circumvented the need to make such adjustments were not warranted.

References

1. Stigler G, May J. The cost of subsistence. *J Farm Ec* 1945;27:303–14.
2. Dantzig GB. The diet problem. *Interfaces* 1990;20:43–07.
3. Dorfman R. The Discovery of Linear Programming. *Annals Hist Comput* 1984;6:283–095.
4. Baghurst KI, Baghurst PA. *Perfect Diets?* A report to the Australian Nutrition Trust. Adelaide, 2004
5. Briend A, Darmon N, Ferguson E, Erhardt JG. Linear programming: a mathematical tool for analyzing and optimizing children's diets during the complementary feeding period. *J Pediatr Gastroenterol Nutr.* 2003 Jan;36(1):12–22.
6. Maillot M, Ferguson EL, Drewnowski A, Darmon N. Nutrient profiling can help identify foods of good nutritional quality for their price: a validation study with linear programming. *J Nutr*. 2008 Jun;138(6):1107–13.

Appendix 6: Proportions of foods constituting food groups for composite food group modelling

The following tables show the proportions that each food contributed to the food group for each age/gender. When combined with their nutrient composition these proportions were used for composite food group modelling. The nutrient composition for some of these items (e.g. refined bread) had previously been derived using the relative proportions of different breads such as plain refined bread, rolls, bagel, damper, foccacia, naan, French stick, Italian-style breads, sour dough, cornbread or fruitbread. The proportions were derived from NNS95 for adults and 17–18yr olds and from NCNPAS07 for other children as described in the main document.

	Men				Women			
	19–30y	31–50y	51–70y	70+y	19–30y	31–50y	51–70y	70+y
	%	%	%	%	%	%	%	%
Wholegrain or higher fibre cereals/grains								
Breads wholegrain	40.1	45.1	48.7	52.2	43.6	52.8	49.0	49.0
Breakfast cereal wg	34.0	22.9	16.0	10.6	25.0	18.0	14.5	15.0
Muesli	4.2	7.8	6.2	3.4	6.7	7.0	5.5	4.5
Crumpet/muff wg	0.4	0.6	0.8	0.3	0.5	0.5	0.2	0.0
Pasta wholegrain	1.4	0.2	0.0	0.4	0.7	0.7	0.2	0.0
Rice brown	9.2	5.0	1.4	0.5	1.7	4.0	1.7	0.0
Crispbreads	0.5	0.5	0.3	0.1	0.9	0.8	0.6	0.3
Porridge	10.3	17.5	26.4	32.6	20.5	16	28	31
Oats	0.0	0.4	0.2	0.1	0.4	0.2	0.25	0.2
Refined or lower fibre cereals/grains								
Breads refined	43.7	42.0	44.7	49.2	61.8	38.3	47.9	54.0
Breakfast cereals refined*	1.6	2.0	2.2	9.4	0.8	1.4	2.0	2.7
Muffin refined	1.1	0.5	0.3	0.5	0.6	0.8	0.4	0.0
Crumpet refined	0.4	0.7	1.2	1.4	0.4	0.8	1.5	1.2
Pasta refined	25.2	23.6	24.5	12.9	15.3	23.8	13.0	12.5
Rice white	22.8	26.1	19.2	21.7	15.9	28.5	27.4	19.2
Noodles	1.1	1.4	0.7	1.1	3.4	1.8	1.9	2.4
Instant noodles	2.6	1.5	3.7	0.0	1.4	2.8	1.5	0.4
Other refined grains	0.2	0.4	1.0	0.9	0.0	1.0	1.2	2.0
Crispbread	1.4	1.8	2.5	3.0	0.4	0.9	3.1	5.6
Poultry, fish, seafood, eggs, legumes								
Poultry	61.0	44.4	39.5	43.5	57.6	45.9	43.6	42.4
Fish	13.4	21.3	28.0	22.8	17.4	22.1	29.5	28.4
Seafood	5.1	5.3	5.9	8.0	5.5	6.5	6.6	7.4
Egg	13.3	17.8	16.0	16.0	9.9	15.4	13.2	17.2
Legumes	7.2	11.3	10.6	9.6	9.7	10.2	7.1	4.7
Red meats								
Beef	69.8	71.7	65.6	65.3	71.9	66.5	62.1	59.8
Veal	0.6	2.2	2.6	1.4	2.5	2.5	3.1	3.9
Lamb	17.4	14.7	19.6	21.1	15.7	18.6	22.6	24.4
Kangaroo	0.3	0.4	0.2	0.2	0.0	0.3	0.0	0.1
Pork	11.9	11.1	12.1	12.0	9.9	12.2	12.2	11.9

continues…

continues…

Higher fat Dairy foods								
Milk, sheep	0.0	1.8	1.2	0.0	0.3	4.3	3.0	0.0
Cheeses regular	100.0	98.2	98.8	100.0	99.7	95.7	97.0	100.0
Medium fat Dairy foods								
Milk regular	93.7	90.7	86.7	84.6	89.2	85.7	81.4	78.9
Evaporated milk regular	0.0	0.1	0.2	0.3	0.1	0.0	0.1	0.6

**Included corn flakes, puffed rice and wheat and rice&oat flake items only from NNS95; all others placed in wholegrain or higher fibre category*

	Men				Women			
	19–30y	31–50y	51–70y	70+y	19–30y	31–50y	51–70y	70+y
Condensed milk regular	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.1
Yoghurt regular	3.1	2.9	1.3	1.9	3.6	6.6	6.0	5.0
Custard regular	0.9	2.4	6.2	10.7	3.4	2.1	6.0	9.0
Soy milk regular	1.4	2.4	3.1	1.4	1.3	3.1	3.8	1.7
Cheese reduced fat	0.9	1.5	2.4	1.0	2.3	2.4	2.6	4.7
Lower fat Dairy foods								
Milk reduced fat/skim	94.3	91.4	87.4	93.3	91.1	86.0	86.4	88.4
Evaporated milk reduced fat	0.0	0.1	0.1	0.0	0.0	0.1	0.3	0.2
Condensed milk reduced fat	0.4	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Yoghurt reduced fat	4.8	6.4	10.2	4.7	8.1	11.3	11.1	8.0
Custard reduced fat	0.0	0.0	0.3	0.6	0.0	0.0	0.1	0.8
Cheese very low fat	0.5	0.7	0.7	0.5	0.5	0.8	0.9	1.4
Soymilk reduced fat	0.0	1.5	1.3	0.7	0.3	1.7	1.3	1.1
Green and brassica								
Broccoflower	0.1	0.2	0.0	0.0	0.1	0.1	0.2	0.0
Broccoli	19.1	18.8	14.4	17.4	15.6	18.7	16.7	13.9
Brussels	0.9	1.5	2.1	2.2	2.3	1.2	1.8	4.0
Cabbage	10.4	8.9	10.9	15.4	6.9	7.6	12.6	10.9
Cauliflower	7.0	8.6	12.7	13.2	20.6	10.7	12.8	14.0
Kale	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Asparagus	0.3	1.9	1.8	1.5	1.9	2.0	1.6	1.5
Chives	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0
Lettuce	18.8	17.1	12.5	9.6	18.6	17.5	12.7	13.0
Silverbeet	0.7	1.1	2.7	2.1	0.3	1.2	2.7	6.2
Spinach/Rocket	1.4	2.2	2.6	0.8	2.8	3.2	2.3	2.4
Green bean	10.8	10.8	13.8	17.2	10.0	11.6	13.0	15.9
Green peas	22.9	19.2	19.3	16.7	15.6	16.2	15.5	13.5
Salad cabbage	6.2	7.3	5.1	3.4	3.0	7.9	5.9	4.4
Basil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Endive	0.0	0.3	0.6	0.1	0.1	0.1	0.5	0.0
Parsley/cress	0.2	0.1	0.3	0.3	0.1	0.3	0.1	0.2
Snowpea	1.3	1.7	1.1	0.3	2.2	1.6	1.7	0.2
Orange vegetables								
Orange sweet potato	1.8	3.0	3.8	5.4	1.3	3.5	4.3	5.3
Carrot	64.2	60.2	53.5	41.8	63.5	55.0	51.2	39.2
Pumpkin	34.0	36.8	42.7	52.8	35.1	41.5	44.5	55.5
Starchy vegetables								
Potato	94.5	94.2	95.3	96.0	92.8	92.9	94.2	95.2
Sweet potato	0.3	1.2	1.3	2.0	0.3	1.2	1.9	3.0
Sweet Corn	5.2	4.6	3.4	2.0	6.9	5.9	3.9	1.8
Cassava	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0

continues…

continued…

	Men				Women			
	19–30y	31–50y	51–70y	70+y	19–30y	31–50y	51–70y	70+y
Other vegetables								
Beetroot	2.7	3.5	3.0	4.9	2.6	3.1	3.4	3.3
Parsnip	0.5	0.7	2.0	1.6	0.3	0.6	1.8	1.9
Radish	0.0	0.1	0.2	0.1	0.0	0.0	0.3	0.2
Swede	0.1	0.4	1.1	1.1	0.4	0.7	0.8	1.9
Turnip	0.2	0.3	0.8	1.0	0.1	0.3	0.8	0.8
Alfalfa	0.3	0.4	0.3	0.2	0.4	0.6	0.3	0.1
Broad	0.3	0.6	0.9	1.8	0.2	0.1	1.3	1.4
Bean sprout	0.0	1.7	0.8	0.2	1.2	1.1	0.5	0.2
Celery	2.8	2.4	3.7	4.3	2.0	3.2	3.6	4.3
Fennel	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
Snowpea sprout	0.0	0.2	0.1	0.0	0.1	0.3	0.1	0.0
Tomato	43.1	45.9	45.1	48.3	40.7	44.9	44.8	47.8
Squash	0.5	1.4	0.3	0.4	1.4	1.0	0.3	0.0
Zucchini/marrow	4.1	3.8	4.0	2.5	6.0	5.1	4.1	3.0
Avocado	3.5	2.9	2.0	0.9	4.1	4.8	2.8	3.1
Capsicum	6.5	5.6	4.6	4.9	5.8	5.2	3.5	2.7
Choko	0.2	0.2	0.8	1.5	0.5	0.5	0.7	2.3
Cucumber	4.0	5.1	6.0	5.7	7.0	7.4	8.7	6.8
Eggplant	0.7	0.8	0.6	2.2	0.4	1.2	1.5	0.1
Butter bean	0.1	0.1	0.3	0.2	0.0	0.3	0.2	0.0
Artichoke	0.1	0.1	0.0	0.0	0.1	0.2	0.2	0.0
Mushroom	5.5	5.0	5.1	2.2	6.8	4.4	4.3	2.6
Garlic	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
Leek	0.0	0.2	0.1	0.3	0.3	0.2	0.2	0.3
Onion	11.9	8.7	10.1	11.2	7.6	7.0	6.8	7.9
Spring onion	0.6	0.4	0.1	0.5	0.3	0.4	0.6	0.1
Shallot	0.2	0.2	0.1	0.1	0.3	0.3	0.3	2.7
Mixed vegetables	11.8	9.3	7.8	4.4	11.2	7.2	7.9	6.4
Legumes								
Bean	64.6	48.0	62.4	90.9	47.9	60.0	72.7	78.1
Chickpea	9.9	10.9	22.1	1.1	23.1	5.2	3.4	7
Split pea	0.5	0.6	4.2	3.9	0.3	2.7	4.4	5.2
Lentil	24.2	29.0	8.3	4.1	16.4	17.4	17.2	9.7
Tofu	0.8	11.4	2.9	0.0	12.3	14.7	2.3	0
Fruit								
Apple	24.3	27.9	22.2	23.5	27.7	26.8	22.0	21.0
Pear/Quince	7.4	10.2	8.1	9.4	5.2	5.1	8.3	8.9
Berries	1.3	1.2	1.3	1.4	1.9	2.1	1.7	1.4
Orange mand	15.3	13.1	13.2	12.3	12.8	11.1	12.5	12.0
Other citrus	0.0	0.6	1.1	1.5	0.5	1.0	1.7	2.4
Stone fruit	5.9	10.4	14.0	17.0	9.7	12.2	14.7	13.9
Cheery	0.0	0.2	0.2	0.2	0.4	0.2	0.0	0.0
Banana	21.3	17.5	15.3	17.1	19.1	17.4	15.6	20.3

continues…

continued…

	Men				Women			
	19–30y	31–50y	51–70y	70+y	19–30y	31–50y	51–70y	70+y
Pineapple	0.7	1.5	1.6	2.3	2.5	1.3	1.5	1.8
Guava	0.0	0.0	0.1	0.3	0.0	0.0	0.2	0.0
Mango	2.8	1.5	2.1	1.3	0.7	1.9	1.6	1.1
Pawpawe	0.3	0.3	0.5	1.0	0.5	0.5	1.2	1.0
Rambutan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Date	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Feijoa	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Fig	0.0	0.2	0.4	0.0	0.0	0.1	0.3	0.0
Grape	5.1	5.3	6.0	3.2	4.4	5.7	5.2	4.5
Melon	4.4	2.6	3.2	4.6	2.3	3.8	4.7	3.6
Kiwi	0.9	0.9	0.6	0.4	1.2	1.2	1.4	1.0
Lychee	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.0
Passionfruit	0.2	0.2	0.1	0.1	0.0	0.1	0.2	0.1
Persimmon	0.0	0.1	0.4	0.0	0.4	0.0	0.0	0.0
Rhubarb	0.1	0.2	1.4	0.3	0.1	0.3	0.4	1.1
Watermelon	5.3	2.2	3.6	1.6	6.6	6.1	3.6	2.3
Mixed	0.6	0.4	0.2	0.4	0.3	0.1	0.2	0.2
Fruit salad	4.2	3.6	4.2	2.1	3.5	2.9	2.9	3.3
Nuts and seeds								
Pumpkin seed	0.0	0.8	2.5	3.7	0.0	0.9	1.5	0.3
Sunflower seed	0.0	0.7	0.0	1.3	3.9	1.7	4.0	1.5
Sesame seed	0.8	1.8	0.7	0.6	1.4	1.7	1.2	1.1
Mixed seed	0.0	0.1	1.0	0.0	0.0	0.6	0.2	0.5
Peanut	47.2	61.7	53.4	54.4	46.2	42.1	35.9	53.3
Almond	9.9	7.2	7.0	7.0	7.4	15.3	14.4	4.8
Brazil nut	0.6	1.7	0.0	0.0	0.0	0.2	0.7	0.0
Cashew	14.7	10.0	12.9	4.0	22.6	8.2	18.7	1.5
Hazelnut	0.0	0.7	0.6	0.0	0.2	0.4	0.0	0.0
Chestnut	3.0	0.0	2.8	0.0	0.0	0.0	5.5	0.0
Macadamia	1.7	0.1	0.3	2.8	4.6	1.0	0.5	3.8
Mixed nuts	10.9	10.4	14.6	22.7	8.3	19.3	14.3	20.0
Pecan	0.8	0.5	0.7	0.7	0.2	1.2	0.2	1.0
Pine nuts	0.0	1.0	0.0	1.2	0.4	0.8	0.9	0.0
Pistachio	10.4	2.2	2.4	0.2	2.9	3.5	0.3	0.0
Walnut	0.0	1.1	1.2	1.3	1.8	3.2	1.7	12.3

continues…

continued…

Boys					
	2–3y	4–8 y	9–13 y	14–16 y	17–18 y
	%	%	%	%	%
Wholegrain or higher fibre cereals/grains					
Wholemeal crispbread	1.5	1.5	1.2	1.3	1.0
Wholegrain bread	47.3	49.3	35.6	38.8	36.8
Rice, brown	1.0	2.4	2.4	6.7	2.8
Pasta wholemeal	1.5	4.4	2.6	1.5	0.0
Wholegrain breakfast cereal	25.9	29.9	32.1	40.3	43.5
Porridge, rolled oats	15.8	8.6	17.1	9.0	15.5
Oats dried	7.0	4.0	9.0	2.4	0.3
Refined or lower fibre cereals/grains					
Refined muffins, crispbreads, crumpets	7.2	6.0	5.1	4.0	2.5
Refined bread	32.0	37.4	32.6	36.2	37.3
Rice, white	14.8	13.4	18.9	18.5	17.0
Refined noodles	5.9	6.3	9.8	5.7	5.2
Refined pasta	34.2	29.2	24.7	27.9	31.3
Refined breakfast cereals all	5.1	6.7	7.4	6.7	6.4
Other refined cereals	0.8	0.9	1.4	1.0	0.2
Poultry, fish, seafood, eggs, legumes					
Poultry	48.8	52.2	62.0	69.1	65.4
Fish	21.2	16.8	15.5	10.7	11.4
Seafood	2.8	4.2	2.3	2.0	4.4
Egg	15.5	16.0	11.1	9.8	12.4
Legumes	11.7	10.8	9.1	8.4	6.4
Red meats					
Beef	74.4	79.8	72.9	76.1	87.9
Lamb	16.8	14.1	15.5	15.1	4.7
Veal	0.9	0.1	1.7	0.0	0.8
Venison	0.0	0.0	0.0	0.0	0.0
Kangaroo	0.0	0.0	0.2	0.0	2.0
Pork	7.9	5.9	9.7	8.9	4.6
Higher fat Dairy foods					
Milk, sheep	0.0	0.0	0.0	0.0	0.0
Yoghurt, full fat, Greek style	3.8	3.2	22.2	6.4	20.5
Custard, egg, vanilla, baked	1.2	0.0	5.0	0.0	0.0
Cheese, most regular cheeses	95.0	96.8	72.8	93.6	79.5
Medium fat Dairy foods					
Milk, regular fat	84.4	85.5	92.1	92.1	97.1
Milk, goat	0.4	0.0	0.0	0.0	0.0
Yoghurt, regular or extra creamy	8.8	8.4	3.6	3.8	1.1
Custard, regular fat	3.0	3.7	1.6	0.6	1.3
Milk, evaporated, regular	0.0	0.0	0.0	0.0	0.0
Milk, condensed, regular	0.0	0.0	0.0	0.0	0.0

continues…

continued…

Boys					
	2–3y	4–8 y	9–13 y	14–16 y	17–18 y
	%	%	%	%	%
Cheese, reduced fat	0.9	1.3	1.2	1.7	0.5
Soy milk regular	2.5	1.0	1.6	1.8	0.0
Soy yoghurt regular	0.1	0.1	0.0	0.0	0.0
Buttermilk, cultured, 2% fat	0.0	0.0	0.0	0.0	0.0
Lower fat Dairy foods					
Milk, cow, fluid, reduced fat (~1%)	60.1	70.5	78.2	74.6	54.8
Milk, cow, fluid, skim (~0.15% fat)	5.1	11.8	9.2	13.5	39.3
Yoghurt, reduced/ low fat	23.1	12.4	9.3	8.8	3.9
Cheese, very low fat	0.8	0.8	0.2	0.6	0.4
Custard, reduced fat	0.3	0.2	1.1	0.1	0.0
Milk, canned, evaporated, skim (<0.5% Fat)	0.0	0.4	0.0	0.1	0.0
Milk, canned, condensed, skim (~0.2% fat)	0.0	0.1	0.0	0.0	0.0
Soy milk reduced, low fat	8.8	3.8	1.9	2.3	1.6
Soy yoghurt, reduced fat	1.8	0.0	0.1	0.0	0.0
Nuts and seeds					
Almond nut	4.7	0.3	4.2	11.4	0.0
Brazil nut	0.0	1.2	0.3	0.0	0.0
Cashew nut	16.9	28.4	6.0	7.0	0.0
Chestnut	0.0	0.0	0.0	0.0	0.0
Hazelnut	0.0	0.0	0.0	0.0	0.0
Macadamia nut	1.0	0.0	0.0	1.8	0.0
Pecan nut	2.3	0.3	0.0	0.0	0.0
Pine nut	1.5	0.0	0.1	0.5	0.0
Pistachio nut	1.4	5.4	1.1	4.5	0.0
Walnut	1.8	1.6	0.0	2.8	0.0
Peanut	67.2	62.7	85.1	70.5	100.0
Nuts, mixed	0.0	0.0	0.0	0.0	0.0
Linseed or flaxseed	0.0	0.0	0.0	0.0	0.0
Mixed seeds	0.0	0.0	0.0	1.6	0.0
Poppy seeds	0.0	0.0	0.0	0.0	0.0
Pumpkin seeds	1.3	0.0	0.0	0.0	0.0
Sesame seeds	0.1	0.0	2.3	0.0	0.0
Sunflower seeds	1.7	0.0	1.0	0.0	0.0
Fruit					
Apple	32.0	38.8	37.3	40.4	32.4
Pear	4.7	4.3	4.4	4.7	4.8
Berries	3.7	3.6	1.8	1.9	0.4
Oranges/mandarins	11.8	13.9	13.7	16.9	26.3
Other citrus	0.1	0.0	0.0	0.4	0.0
Stone fruit	1.9	2.2	3.0	2.2	4.3

continues…

continued…

Boys					
	2–3y	4–8 y	9–13 y	14–16 y	17–18 y
	%	%	%	%	%
Grape	5.0	4.9	6.1	2.5	4.6
Melon	2.9	2.1	3.0	1.7	3.0
Cherry	0.0	0.5	0.0	0.0	0.0
Banana	20.7	18.1	15.1	18.3	11.7
Pineapple	0.5	1.5	2.7	2.3	2.1
Mango	0.4	0.0	0.6	0.6	0.0
Pawpaw (papaya)	0.0	0.0	0.1	0.0	0.0
Kiwifruit, hayward	0.3	0.3	0.7	0.4	0.0
Kiwifruit, other	0.2	0.0	0.2	0.1	2.7
Lychee	0.0	0.1	0.0	0.0	0.0
Rambutan	0.0	0.0	0.0	0.0	0.0
Feijoa	0.0	0.0	0.0	0.0	0.0
Fig	0.0	0.0	0.0	0.0	0.0
Passionfruit	0.5	0.0	0.3	0.2	0.1
Persimmon	0.2	0.2	0.0	0.0	0.0
Pomegranate	0.0	0.0	0.0	0.0	0.0
Watermelon	10.2	7.2	6.4	4.4	1.9
Guava	0.0	0.0	0.1	0.0	0.0
Rhubarb	0.1	0.0	0.1	0.0	1.2
Fruit salad	3.2	1.6	3.5	2.5	4.4
Mixed fruit	1.6	0.7	0.6	0.2	0.0
Legumes					
Beans	70.1	69.3	56.4	55.2	93.6
Chickpea	2.2	4.0	3.9	2.9	0.5
Lentil	16.3	20.4	25.2	16.6	0.0
Split Pea	3.7	0.0	10.1	3.7	0.0
Tofu	7.8	6.3	4.6	21.6	5.9
Green and brassica					
Spinach, water	0.0	0.0	0.0	0.0	0.0
Spinach	2.1	1.8	5.4	4.9	0.0
Chicory	0.0	0.0	0.0	0.0	0.0
Asparagus	0.5	0.0	0.5	0.3	0.2
Silverbeet	0.0	0.9	0.0	0.3	0.0
Chives, raw	0.0	0.0	0.0	0.0	0.0
Lettuce, cos, raw	0.0	0.0	0.0	0.0	0.0
Lettuce, mignonette	0.0	0.0	0.0	0.0	0.0
Green pea	25.8	19.3	19.8	19.6	22.7
Green beans	12.7	12.0	13.6	14.7	16.2
Cabbage, bok choy	1.4	0.4	3.1	2.9	0.0
Cabbage, savoy	0.0	0.0	0.0	0.0	0.0
White cabbage	2.8	2.1	4.8	9.3	7.4

continues…

continued…

Boys					
	2–3y	4–8 y	9–13 y	14–16 y	17–18 y
	%	%	%	%	%
Cauliflower	15.5	13.6	12.4	9.6	16.0
Kale	0.0	0.0	0.0	0.0	0.0
Ave broccoli	31.0	30.9	22.8	16.1	18.7
Ave broccoflower	0.0	0.7	0.0	0.0	0.0
Brussels sprout	0.3	0.2	0.6	0.2	0.0
Red cabbage	0.0	2.1	0.3	0.8	0.0
Lettuce, iceberg	0.0	0.0	0.0	0.0	0.0
Seaweed	0.0	0.0	0.0	0.2	0.0
Snowpea	1.6	2.0	1.3	1.3	0.5
Basil	0.2	0.1	0.1	0.4	0.0
Parsley/cress	0.2	0.2	0.2	0.5	0.0
Lettuce, raw, not further specified	2.9	13.6	15.0	18.9	18.2
Orange vegetables					
Carrot	65.2	72.1	59.7	61.8	58.1
Orange Sweet potato	13.8	7.6	10.5	18.5	2.6
Pumpkin	21.0	20.3	29.8	19.7	39.3
Other vegetables					
Beetroot	2.5	1.5	2.2	1.7	1.0
Celeriac	0.0	0.0	0.0	0.0	0.0
Parsnip	0.3	0.2	0.5	0.2	0.0
Radish	0.0	0.0	0.0	0.0	0.0
Swede	1.1	0.6	0.4	0.0	2.3
Turnip	0.2	0.1	0.3	0.4	2.1
Bamboo shoot	0.0	0.0	0.0	0.0	0.0
Celery	2.7	3.3	3.6	3.3	3.0
Sprout	0.0	0.6	0.0	0.9	0.6
Sprout, snowpea	0.0	0.1	0.0	0.0	0.0
Bean, broad	0.0	0.1	0.0	0.0	0.1
Bean, butter	0.0	0.0	0.0	0.5	0.0
Tomato	46.5	48.5	48.7	52.9	54.4
Squash	0.6	0.2	0.3	0.1	0.6
Zucchini	7.4	5.4	4.3	1.9	6.2
Avocado	6.9	5.8	6.2	5.7	3.6
Capsicum green	0.7	0.8	3.2	1.5	0.2
Capsicum red	5.3	3.6	4.8	2.3	1.1
Chilli	0.0	0.0	0.1	0.6	0.0
Choko	0.1	0.2	0.0	0.0	0.0
Cucumber	9.4	15.1	8.9	6.2	3.0
Cucumber, lebanese	0.0	0.0	0.0	0.0	0.0
Eggplant	0.9	0.3	1.1	0.3	0.0
Melon, bitter	0.0	0.0	0.0	0.0	0.0

continues…

continued…

Boys					
	2–3y	4–8 y	9–13 y	14–16 y	17–18 y
	%	%	%	%	%
Okra	0.0	0.5	0.0	0.5	0.0
Artichoke	0.0	0.0	0.0	0.0	0.0
Garlic	0.5	0.3	0.4	0.4	0.0
Leek	0.6	0.2	0.4	0.9	0.0
Onion	8.4	6.9	10.3	15.2	16.5
Spring onion	0.1	0.2	0.3	0.6	0.0
Shallot	0.2	0.0	0.2	0.3	0.6
Mushroom	5.4	5.5	3.7	3.2	4.5
Ginger	0.0	0.0	0.2	0.2	0.0
Fennel	0.0	0.0	0.0	0.0	0.3
Starchy vegetables					
Potato	82.1	90.7	91.3	91.3	98.9
Cassava	0.0	0.0	0.0	0.2	0.0
Orange Sweet potato	5.0	2.1	2.1	3.4	0.3
Sweet potato	0.0	0.0	0.0	0.0	0.0
Taro	0.0	0.0	0.0	0.1	0.0
Sweetcorn	12.9	7.2	6.6	5.0	0.8

Girls					
	2–3 y	4–8 y	9–13 y	14–16 y	17–18 y
	%	%	%	%	%
Wholegrain or higher fibre cereals					
Wholemeal crispbread	1.4	1.8	1.7	1.5	0.7
Wholegrain bread	46.9	47.9	47.7	48.8	65.5
Rice, brown	4.6	2.6	8.8	4.2	0.0
Pasta wholemeal	2.6	3.9	1.6	2.2	4.5
Wholegrain breakfast cereal	21.4	24.5	23.8	24.8	19.6
Porridge, rolled oats	18.9	16.1	10.1	10.3	9.7
Oats dried	4.1	3.2	6.3	8.2	0.1
Refined or lower fibre cereals					
Refined muffins, crispbreads, crumpets	7.6	6.9	5.9	5.8	3.7
Refined bread	29.1	36.2	34.7	32.8	38.0
Rice, white	15.1	14.3	15.7	19.2	19.7
Refined noodles	5.3	8.2	10.5	9.3	5.9
Refined pasta	33.4	27.3	27.5	27.8	27.6
Refined breakfast cereals all	6.1	6.0	4.5	3.4	4.3
Other refined cereals	3.4	1.1	1.1	1.7	0.7
Poultry, fish, seafood, eggs, legumes					
Poultry	47.4	51.5	64.0	59.2	58.3
Fish	21.1	20.5	16.4	15.5	19.3
Seafood	1.6	2.4	2.4	2.1	4.1
Egg	15.5	16.1	11.8	14.4	9.9
Legumes	14.4	9.5	5.4	8.7	8.4
Red meats					
Beef	80.8	69.8	75.3	68.5	70.6
Lamb	11.0	22.9	16.0	15.7	16.0
Veal	0.8	0.9	0.1	0.3	3.5
Venison	0.0	0.0	0.0	0.0	0.0
Kangaroo	0.0	0.0	0.4	0.0	0.0
Pork	7.4	6.3	8.3	15.4	9.9
Higher fat dairy foods					
Milk, sheep	0.0	0.0	0.0	0.0	0.0
Yoghurt, full fat, Greek style	5.1	9.7	6.3	3.3	12.1
Custard, egg, vanilla, baked	0.1	0.0	2.0	0.0	2.4
Cheese, most regular cheeses	94.8	90.3	91.7	96.7	85.6
Medium fat dairy foods					
Milk, regular fat	85.3	83.2	89.7	87.3	92.5
Milk, goat	0.5	1.1	0.4	0.0	0.0
Yoghurt, regular or extra creamy	8.2	8.3	4.8	6.2	5.0
Custard, regular fat	2.5	4.3	2.6	1.8	1.5
Milk, evaporated, regular	0.0	0.0	0.0	0.0	0.0
Milk, condensed, regular	0.0	0.0	0.0	0.0	0.0
Cheese, reduced fat	1.1	1.4	1.7	3.4	1.0

continues…

continued…

Girls					
	2–3 y	4–8 y	9–13 y	14–16 y	17–18 y
	%	%	%	%	%
Soy milk regular	2.3	1.5	0.8	1.1	0.0
Soy yoghurt regular	0.0	0.2	0.0	0.0	0.0
Buttermilk, cultured, 2% fat	0.0	0.0	0.0	0.1	0.0
Lower fat dairy foods					
Milk, cow, fluid, reduced fat (~1%)	58.7	63.4	71.1	60.9	59.3
Milk, cow, fluid, skim (~0.15% fat)	13.8	11.2	14.5	18.5	28.0
Yoghurt, reduced/ low fat	17.9	16.9	11.4	16.4	11.4
Cheese, very low fat	0.7	0.2	0.6	0.2	1.3
Custard, reduced fat	0.2	0.0	0.5	0.0	0.0
Milk, canned, evaporated skim	0	0	0	.21	0
Milk canned condensed skim	0	0	0	0	0
Soymilk beverages reduced low fat	8.17	7.84	1.74	3.74	0
Soy yoghurt, reduced fat	0.5	0.4	0.1	0.0	0.0
Nuts and seeds					
Almond nut	13.4	9.4	2.6	18.2	3.8
Brazil nut	0.0	0.0	0.0	0.0	0.0
Cashew nut	17.3	25.8	18.8	11.8	1.5
Chestnut	2.4	0.0	0.0	0.0	49.0
Hazelnut	0.0	0.0	0.0	0.4	0.0
Macadamia nut	0.4	0.8	0.0	0.0	0.0
Pecan nut	0.0	0.0	0.9	1.1	0.0
Pine nut	1.1	0.0	2.3	0.0	6.7
Pistachio nut	7.6	4.1	7.3	2.1	0.0
Walnut	0.0	0.0	2.0	0.0	0.0
Peanut	54.6	57.5	59.8	59.1	39.0
Nuts, mixed	0.0	0.0	0.0	0.0	0.0
Linseed or flaxseed	0.0	0.0	0.4	2.7	0.0
Mixed seeds	1.5	1.2	0.0	2.0	0.0
Poppy seeds	0.3	0.0	0.2	0.0	0.0
Pumpkin seeds	0.4	0.0	0.3	0.0	0.0
Sesame seeds	0.2	1.2	4.5	0.1	0.0
Sunflower seeds	0.8	0.0	1.0	2.4	0.0
Fruit					
Apple	32.9	35.6	42.0	37.7	29.4
Pear	4.9	2.9	4.8	4.4	4.2
Berries	5.2	2.2	2.3	1.6	0.4
Oranges/mandarins	11.2	14.0	14.6	20.9	8.9
Other citrus	0.0	0.3	0.0	0.3	0.0
Stone fruit	1.4	3.5	4.0	3.2	16.0
Grape	6.5	7.4	4.6	6.4	1.7

continues…

continued…

Girls					
	2–3 y	4–8 y	9–13 y	14–16 y	17–18 y
	%	%	%	%	%
Melon	1.7	3.0	1.7	1.0	2.3
Cherry	0.0	0.0	0.0	0.2	0.0
Banana	23.5	18.9	13.9	13.3	8.5
Pineapple	1.9	1.3	2.8	2.4	0.5
Mango	0.3	0.2	0.0	0.0	0.0
Pawpaw (papaya)	0.1	0.0	0.0	0.0	0.0
Kiwifruit, hayward	1.1	0.9	0.9	1.0	2.7
Kiwifruit, other	0.0	0.0	0.1	0.2	0.0
Lychee	0.0	0.0	0.0	0.0	0.0
Rambutan	0.0	0.0	0.1	0.0	0.0
Feijoa	0.0	0.0	0.0	0.0	0.0
Fig	0.1	0.0	0.0	0.0	0.0
Passionfruit	0.1	0.0	0.1	0.1	0.0
Persimmon	0.1	0.0	0.0	0.1	0.0
Pomegranate	0.0	0.0	0.1	0.0	0.0
Watermelon	5.3	7.6	6.1	5.4	21.2
Guava	0.0	0.1	0.0	0.0	0.0
Rhubarb	0.0	0.1	0.0	0.0	0.0
Fruit salad	1.8	1.5	1.6	1.6	4.2
Mixed fruit	1.8	0.4	0.2	0.2	0.0
Legumes					
Beans	54.8	59.0	47.9	56.3	54.6
Chickpea	10.3	14.0	16.0	12.2	40.6
Lentil	27.0	23.5	13.2	19.5	4.8
Split Pea	3.6	0	9	3.2	0
Tofu	4.3	3.6	13.9	8.9	0
Green and brassica					
Spinach, water	0.0	0.0	0.0	0.0	0.0
Spinach	6.3	3.7	3.7	5.8	1.7
Chicory	0.0	0.0	0.0	0.0	0.0
Asparagus	0.4	1.2	0.2	0.3	0.0
Silverbeet	0.4	0.0	0.3	0.3	3.0
Chives, raw	0.0	0.0	0.0	0.1	0.0
Lettuce, cos, raw	0.0	0.0	0.0	0.0	0.0
Lettuce, mignonette	0.0	0.0	0.0	0.0	0.0
Green pea	21.0	21.2	15.1	16.0	16.6
Green beans	12.6	13.6	14.0	15.4	11.7
Cabbage, bok choy	0.2	2.2	1.1	2.6	0.0
Cabbage, savoy	0.0	0.0	0.0	0.0	0.0
White cabbage	3.1	3.5	2.1	6.6	8.0
Cauliflower	21.8	13.7	11.5	11.4	12.0

continues…

continued…

Girls					
	2–3 y	4–8 y	9–13 y	14–16 y	17–18 y
	%	%	%	%	%
Kale	0.2	0.0	0.0	0.0	0.0
Ave broccoli	26.3	27.7	18.2	20.1	28.5
Ave broccoflower	0.0	0.3	0.3	0.0	0.4
Brussels sprout	0.0	0.1	0.5	0.9	0.0
Red cabbage	0.0	0.1	0.0	0.0	0.7
Lettuce, iceberg	0.0	0.0	0.0	0.0	0.0
Seaweed	0.0	0.0	0.0	0.0	0.0
Snowpea	1.1	2.2	0.7	1.3	1.8
Basil	0.2	0.4	0.0	0.1	0.0
Parsley/cress	0.2	0.1	0.1	0.2	0.0
Lettuce, raw, not further specified	6.3	10.0	16.1	18.8	15.4
Orange vegetables					
Carrot	48.9	69.9	57.1	54.2	55.5
Orange Sweet potato	17.3	6.4	8.3	7.7	11.2
Pumpkin	33.7	23.7	34.6	38.1	33.3
Other vegetables					
Beetroot	1.8	2.5	3.4	0.6	1.3
Celeriac	0.0	0.1	0.0	0.5	0.0
Parsnip	0.1	0.2	0.3	0.1	0.0
Radish	0.0	0.0	0.0	0.0	0.0
Swede	0.0	0.8	0.0	0.6	0.0
Turnip	0.1	0.2	0.0	0.1	0.0
Bamboo shoot	0.1	0.0	0.1	0.1	0.0
Celery	4.4	2.1	2.3	3.0	2.6
Sprout	0.7	0.0	1.5	0.9	1.9
Sprout, snowpea	0.0	0.0	0.0	0.0	0.6
Bean, broad	0.0	0.0	0.0	0.0	0.0
Bean, butter	0.2	0.6	0.0	0.6	0.0
Tomato	46.1	48.5	50.5	45.2	51.8
Squash	0.0	0.3	0.1	0.6	1.0
Zucchini	4.6	4.0	5.2	2.9	6.0
Avocado	10.3	5.5	4.2	8.3	9.7
Capsicum green	1.4	0.2	1.4	1.6	0.3
Capsicum red	2.4	5.3	4.6	3.5	0.2
Chilli	0.0	0.0	0.2	0.1	0.0
Choko	0.0	0.0	0.3	0.0	0.0
Cucumber	12.2	18.3	12.1	10.2	6.5
Cucumber Lebanese	0	0	0	0	0
Eggplant	0.1	0.2	0.7	1.6	3.1
Melon, bitter	0.0	0.0	0.3	0.0	0.0
Okra	0.0	0.0	0.0	0.0	0.0

continues…

continued…

Girls					
	2–3 y	4–8 y	9–13 y	14–16 y	17–18 y
	%	%	%	%	%
Artichoke	0.0	0.0	0.0	0.7	0.1
Garlic	0.3	0.3	0.3	0.8	0.0
Leek	2.2	0.2	0.4	0.3	0.0
Onion	7.5	7.2	8.2	10.8	9.9
Spring onion	0.1	0.0	0.5	1.5	0.2
Shallot	0.1	0.2	0.1	0.2	0.0
Mushroom	5.6	3.2	3.2	5.2	4.8
Ginger	0.0	0.0	0.1	0.2	0.0
Fennel	0.0	0.0	0.0	0.0	0.0
Starchy vegetables					
Potato	80.8	88.8	91.1	93.3	90.2
Cassava	0.0	0.0	0.0	0.0	0.0
Orange Sweet potato	6.5	1.9	2.1	2.0	2.5
Sweet potato	0.0	0.0	0.0	0.0	0.0
Taro	0.0	0.0	0.0	0.0	0.0
Sweet corn	12.7	9.3	6.8	4.6	7.3

Appendix 7: Food groups and equivalents within groups

The food groupings, serve sizes and equivalents used in the AGTHE98 were used as the basis for the revision but some changes were made to make the system more flexible and highlight issues that may need to be addressed in a future guide for specific subgroups.

Variation from the AGTHE98 approach included subdividing several groups such as vegetables, meats and alternatives and dairy foods, relocation of nuts and seeds and changing serve sizes of cereals and meats as discussed in the body of the report.

A7.1 Key or 'distinguishing' nutrients for food groups

The nutrients listed below were considered key or distinguishing nutrients for each of the major food groups based on their nutrient density. The figures in brackets are the % contribution from these food groups to the nutrient from the NNS95 survey (note data not available for all nutrients or food groups).

Some nutrients such as protein are not listed as they are available from several food groups and there is no evidence of deficiency or borderline intakes in the Australian population.

Cereals: fibre (44%), iron (40% but relatively low bioavailablility compared to haem sources), thiamin (40%), magnesium (32%), niacin (18%), folic acid (26% before fortification)

Fruit: vitamin C (19% + 26% for juice), folic acid (45%), fibre (12%), vitamin B6 (not assessed in NNS95)

Vegetables including legumes: vitamin C (40%), vitamin A (particularly orange, 37%), folic acid (particularly dark green/brassica; 28%), fibre (26%), potassium (25%), carbohydrate (starchy veg).

Red meats, poultry, eggs, fish, legumes: zinc (39% high bioavailability), iron (22% high bioavailability), vitamin B12 (not assessed in NNS), LCn3 (not assessed in NNS)

Milks, yoghurts, cheese: calcium (52%), vitamin B12 (not assessed in NNS95), riboflavin (30%), potassium (15%), vitamin A (13%), zinc (13%)

Unsaturated fats: linoleic acid, alpha-linolenic acids, vitamin D, vitamin A, vitamin E (none assessed in NNS95)

Nuts and seeds: magnesium, potassium, linoleic acid (not specified as group in NNS), some for vitamin E.

Table A.7.1 shows a comparison of the energy content of one serve of each of the composite food groups.

Table A7.1: Average energy content of one serve of the various composite food group

	Serve Size (g)	Ave. kJ per serve	Rounded energy/serve kJ	
Eggs, legumes, nuts/seeds (lacto diet only)	210	1627	1600	
Nuts/seeds	30	730	750	
Medium fat dairy foods	250g milk equivalent	703	700	
Pasta (for Med diets)	120	711	700	
Meat and alts minus red	65g red meat equivalent	604	600	
Higher fat dairy foods	250g milk equivalent	613	600	
Rice refined (for Asia diets)	120	584	600	
Refined or lower fibre cereals/grains	40g bread equivalent	526	550	
Red meats (beef, lamb, veal, pork)	65	562	550	
Low fat dairy foods	250g milk equivalent	524	550	
Wholegrain or higher fibre cereals/grains	40g bread equivalent	442	450	
Legumes	75	334	350	
Fruit	150	355	350	
Starchy vegetables	75	263	250	
Orange vegetables	75	135	150	
Green & brassica vegetables	75	105	100	
Other vegetables	75	100	100	
Additional categories				
Discretionary choices	- (variable weights)	600		
Unsaturated fats and oils	10, 7	268	250	600

A7.2 Equivalents across foods within food groups based on nutrient and energy composition

A7.2.1 Vegetables

The vegetables group contains foods with a wide variety of nutrient composition ranging from higher energy-dense forms such as potatoes or corn or the legumes through to low energy-dense forms such as green leafy vegetables or tomatoes or cucumbers. In the CFG94 analysis that formed the basis of the AGTHE98, potatoes were the dominant component of the composite vegetable category contributing more than 50% to the composite. Although guides such as AGTHE98 recommend variety, the dominance of potatoes in the modelling necessarily leads to higher requirements for the group as a whole. Some health authorities from overseas countries (such as the WCRF) also specifically exclude starchy vegetables from their 'vegetable' recommendations.

To help overcome the variability in high energy per unit weight and nutrient composition within the vegetable group, food modelling was undertaken using subgroups which were devised based on nutrient composition. The groups were the starchy vegetables, the green and brassica vegetables (generally high in folic acid), the high pro-vitamin A orange vegetables, the legumes with higher protein, iron and zinc and the 'other' vegetables which still provide a range of nutrients but are not specifically high in any one.

For continuity with the AGTHE98 and national health promotion programs, and to encourage variety, the serve size of 75g (half a cup for most vegetables, one cup for leafy vegetables), used by the AGTHE98 was retained for composite food modelling of *Foundation Diets.*

The AGTHE98 stated that the energy range within the vegetable category as a whole was from 75–250kJ. When the vegetables group was divided into subgroups for this revision, the energy content of the resulting composite for dark green vegetables and 'other' vegetables was about 100–110 kJ per serve each; for orange vegetables, 130–140 kJ/serve; for starchy vegetables, 250–270 kJ/serve and for legumes, 330–350kJserve (see Table A7.1).

Vegetable juices were not included in the modelling exercise but this does not preclude their inclusion as a choice within this group in future food guides.

A7.2.2 Fruit

The main distinguishing nutritional features of fruits are dietary fibre, folic acid and vitamin C. For continuity, the AGTHE98 overall serve size of 150g was retained. The AGTHE98 stated that the fruit category serve size supplied about 300kJ. The composite serve of fruit derived from data from population surveys had about 340–360kJ/serve.

For modelling purposes, only fresh fruit was used; dried fruits and fruit juice were not included. This does not necessarily mean that fruit juice and/or dried fruits will not be considered for inclusion as a choice within the food group in a future food guide.

A comparison of the energy, dietary fibre, folic acid and vitamin C composition of whole fruits, dried fruits and juices is shown in Table A7.2 and A.7.3 and is discussed below.

Table A7.2. Fruit equivalents

	Energy kJ/ serve	Fibre g/ serve	DFE ug/ serve	Vit C mg / serve
Fresh				
Apple	325.5	3.3	75	7.5
Pear/quince	346.5	4.2	0	4.5
Berry	280.5	6	45	39
Orange	273	3.6	42	73.5
Other citrus	211.5	7.05	18	99
Stone	267	3.3	4.5	15
Grape	454.5	4.5	0	7.5
Melon	354	1.65	28.5	46.5
Cherry	375	2.25	7.5	28.5
Banana	526.5	3.45	46.5	15
Pineapple	267	2.7	7.5	25.5
Mango	345	2.25	96	39
Pawpaw	213	3.45	57	90
Kiwi	328.5	5.7	39	106.5
Kiwifruit, unpeeled, raw	282	2.4	0	139.5
Lychee	444	1.95	21	73.5
Rambutan	468	4.2	12	105
Feijoa	270	5.4	73.5	45
Fig	292.5	4.95	9	4.5
Passionfruit	456	20.85	12	27
Persimmon	447	3.9	12	21
Pomegranate	493.5	9.6	9	21
Watermelon	190.5	0.9	0	12
Guava	216	8.1	73.5	364.5
Rhubarb stalk stewed	151.5	3.6	6	9
Salad	352.5	2.025	5.55	6.675
Mixed fruit	361.5	3.15	1.5	4.5
Average 150g fresh serve	**333**	**4.605**	**25.95**	**52.95**
Dried (not modelled, for comparison)				
Currant, dried	350.1	1.8	0	0
Sultana, dried	393.3	1.32	0.9	0
Blueberry, dried	292.5	2.4	3.3	3.6
Cranberry, dried, sweetened	341.1	1.71	0	0
Berries, mixed (strawberry, raspberry, blueberry, blackberry), dried	361.5	7.59	36.9	12.6
Apricot, dried	277.5	2.52	0	0.3
Apricot, dried, stewed	98.7	0.9	0	0
Date, dried	363.6	2.91	3	1.5
Prune (dried plum)	252.3	2.34	1.2	0.6
Apple, dried	373.2	5.01	0	2.7
Fig, dried	324.6	4.29	3	0
Mango, dried	345.3	2.22	48	7.8
Pawpaw (papaya) dried, sweetened	345	2.49	20.4	12.9
Pineapple, dried, sugar sweetened	384	2.01	2.7	3.6

continues…

continued…

	Energy kJ/ serve	Fibre g/ serve	DFE ug/ serve	Vit C mg / serve
Mixed fruit, dried	350.1	1.68	0.9	0
Dried fruit mix (raisin or sultana), milk chocolate-coated	506.1	0.9	1.5	0
Average dried 30 g serve	**353.4**	**2.61**	**7.41**	**2.79**
Juice (not modelled for comparison)				
Juice, apple, home squeezed	288	0.2	64	4
Juice, 94% apple & 6% blackcurrant	324	0	8	104
Juice, 80% apple, 15% mango & 5% banana	342	0.8	64	18
Juice, 94% apple, 5% passionfruit & 1% banana	308	1.6	60	40
Juice, 75% apple, 15% pineapple, 7% guava & 3% coconut, added vitamin C	296	1	56	34
Juice, from concentrate, non-citrus (apple, pear, berries), diluted weaker than 1:3	250	0	10	4
Juice, berry, home squeezed	166	0.4	148	80
Juice, blackcurrant	290	0	8	342
Juice, crushed cranberry & raspberry, with apple, banana & orange	484	5.2	72	32
Juice, goji	288	0.2	64	18
Juice, grape	442	0	4	48
Juice, grapefruit	240	0	10	122
Juice, lemon	186	0.2	26	114
Juice, lemon, home squeezed, added water & sugar	420	0.2	14	62
Juice, lime	182	0.4	16	90
Juice, mangosteen	288	0.2	64	18
Juice, crushed mango & passionfruit, with apple, banana & orange	476	6.4	96	36
Juice, tropical (pineapple, orange, apple, pear & passionfruit juices)	342	0.8	32	28
Juice, tropical (pineapple, orange, apple, pear & passionfruit juices), sweetened	394	0.6	32	30
Juice, orange, sweetened	296	0.2	80	52
Juice, orange, home squeezed	278	0.4	44	70
Juice, 73% orange & 27% apple, pineapple & grape juices	280	0	14	84
Juice, 95% orange & 5% mango juices	304	0.6	40	132
Juice, 95% orange & 5% mango juices, sweetened	332	0.6	40	132
Juice, 92% orange & 5% passionfruit juices, sweetened	344	1.8	70	114
Juice, orange, apple & berry, home squeezed	248	0.4	82	50
Juice, orange, apple & berry, home squeezed, added water	148	0.2	50	30
Juice, pear	422	0	4	10
Juice, pineapple, home squeezed, added water	220	0	10	14
Juice, crushed pineapple, orange & mango	380	3.8	64	62
Juice, prune	440	5.6	0	8
Juice, crushed strawberry & banana, with apple & orange	430	4	104	38
Average juice 200 g serve	**316**	**1.118**	**45.3**	**63.12**

The role of fruit juice and dried fruit

Table A7.3 shows the nutrient content per serve for an energy equivalent serve of dried fruits and juice compared to fresh fruit. The US undertook an extended analysis of the value of fruit juice compared to whole fruit when developing *My Pyramid* and concluded it had a place in this category. They stated that although it did not provide as much fibre, it was a good source of the key nutrient vitamin C and, for orange juice, folic acid and was also widely consumed in the community. The data from AUSNUT07, for an energy equivalent serve of 200g (non-fortified) fruit juice, confirms that there is a higher average content of both vitamin C and folic acid compared to the average for fresh fruit but that fibre is lower although the range for both forms is wide. They US recommended a 200ml serve as equivalent to a piece of fruit but because of the lower fibre level they still recommended that most serves should be whole fruit. This limitation regarding substitution of fruit with fruit juice has also been recommended in past Australian and other current international dietary guidance.

Table A7.3: Comparison of fresh fruit, fruit juice and dried fruit for key nutrients

Comparison /serve	Energy/ serve	Fibre/ serve	Folic Acid/ serve	Vit C/ serve
Average 150g fresh fruit serve	333	4.6	26	53
Average 200 g fruit juice serve	316	1.1	45	63
Average 30 g dried fruit serve	353	2.6	7.5	3

In contrast, dried fruit was still quite a good source of fibre but was low in vitamin C and folic acid and there may be some issues re the sticky, sugary nature of this form of fruit contributing to dental caries.

A7.2.3 Cereals

As a food category largely composed of processed foods, the cereal category is quite disparate in its nutrient composition and energy density. It ranges from the highly nutrient dense, wholegrain breads and cereals through to less nutrient dense rice, pasta or noodles. Serve sizes in the group are traditionally highly variable as they are based on nutrient equivalents. Table A7.4 shows the weights of the various cereal foods that would be equated to a bread serve of 40g using various key nutrients as the basis of equivalent. The data in the 'iron' column most closely mirror those of the AGTHE98 suggesting this was primarily used (it is not explicitly explained how equivalent was determined in CFG94 or AGTHE98 documents). Conveniently, according to the AGTHE98, this set of equivalents also leads to near equivalent in energy (600kJ/serve). From the data in Table A7.3 this seems to hold true for most foods in the category but not very well for rice, noodles and pastas. Breakfast cereals in this table are an anomaly regarding iron probably due to fortification practices.

There has been some concern expressed amongst users of the AGTHE98 about the use of 2 slices of bread (60g) as the basic serve size unit for this group, especially as increasing cereal serves was one of the main mechanisms promoted for increasing energy needs. The CFG94 had used a 30g serve in its recommendations. In recent years, the weight of bread slices has also increased somewhat such that bread slices can be as much as 42g and many are 37–38g. For these reasons, composite food modelling for this revision was done with a 40g serve for breads, using the same relative equivalents as AGTHE98 for items such as rice and pasta.

For the composite wholegrain or higher fibre cereal group developed for this revision, the energy content was about 450kJ/serve and for refined or lower fibre cereals, about 550kJ.

Equivalents across the group were established on the basis of the key nutrients iron, zinc and fibre as well as protein, starch and energy with reference to the relative serve equivalents used in the AGTHE98. Rice, pasta and noodles although differing somewhat in nutrient composition were classed together as in the AGTHE98.

Table A7.4: Equivalents in the cereals groups

Food name	Serve used	Rounded	Serve size on mean EPSFIZ*	Energy equiv	Protein equiv	Starch equiv	Fibre equiv	Iron equiv	Zinc equiv
Breads									
Wholemeal bread/roll	40	40	40	40	40	40	40	40	40
Mixed grain/brown bread/roll	40	40	41	39	46	36	47	34	43
Bread, from rye flour, dark	40	40	41	37	54	36	34	35	49
Light rye bread	40	45	44	36	49	32	46	50	49
Bread, flat (pita or Lebanese style), wholemeal	40	40	39	42	51	31	37	30	40
Bread, from spelt flour	40	40	41	43	40	44	39	44	38
Chapatti	40	45	47	61	55	36	32	41	54
White bread/roll	40	40	40	40	40	40	40	40	40
Pita or Lebanese refined	40	40	40	42	46	36	41	33	41
Bagel	40	45	44	45	40	39	40	56	41
Damper	40	65	66	44	58	43	59	108	85
Foccacia or Turkish refined	40	50	50	38	43	42	48	64	65
Naan, Indian	40	60	58	46	48	56	43	112	41
French stick/baguette	40	35	35	42	30	35	38	33	30
Italian style e.g. ciabatta, pane di casa	40	40	38	40	34	39	43	37	33
Sour dough	40	35	36	36	33	38	40	35	32
Cornbread	40	60	60	41	56	55	78	71	58
Fruit bread	40	50	50	95	47	51	46	27	33
Rice, pasta, noodles (refined more common)									
Rice, brown, boiled without added salt	120	110	108	74	152	44	160	166	54
Pasta wholemeal	120	65	66	25	110	61	47	69	84
Rice, white, boiled without added salt (use)	120	160	159	111	202	68	310	200	63

Table A7.3: Cereal equivalents

Food name	Serve used	Rounded	Serve size on mean EPSFIZ*	Energy equiv	Protein equiv	Starch equiv	Fibre equiv	Iron equiv	Zinc equiv
Refined Pasta	120	85	84	76	77	63	62	127	96
Noodle	120	110	112	68	148	88	113	133	120
Instant noodle	120	85	85	78	98	70	35	90	137
Wholegrain or higher fibre breakfast cereal unfortified	30	30	28	26	51	29	29	13	20
Wholegrain or higher fibrebreakfast cereal fortified	30	25	24	23	46	29	19	11	17
Unfortified refined or lower fibre breakfast cereals	30	55	53	30	53	24	74	88	51
Fortified refined or lower fibrebreakfast cereals	30	25	26	30	35	28	46	6	10
Muesli unfortified	30	30	28	24	41	45	22	17	19
Muesli fortified	30	35	37	74	39	37	22	22	27
Crispbread wheat wholemeal	35	35	33	47	35	23	28	31	33
Crispbreads wheat, rye refined	35	30	31	55	36	27	21	26	20
Toasted crumpet, wholemeal	60	60	57	39	79	37	62	46	81
Toasted crumpet, refined	60	60	59	41	78	44	48	56	85
Muffin, English-style refined	35	35	35	28	56	43	34	24	24
Other cereals (semolina, barley, cornmeal, quinoa etc)	75	75	73	121	87	73	57	48	50
Porridge, rolled oats	120	115	113	29	77	270	113	140	47
Oats dried	25	25	23	30	35	30	13	16	15

**EPSFIZ - E= energy, P= protein, S= starch, F= fibre, I= iron, Z= zinc*

A7.2.5 Milks, yoghurts and cheese

The dominance of this food group as a source of calcium in the diet means that, although the group provides other nutrients, equivalence based on calcium is the only sensible option. See Table 7.4. The serve sizes used for the AGTHE98 which use calcium as the basis, were retained.

In order to refine the modelling process, three categories of this food group were initially established based on fat content per serve. The kilojoule content per serve for the composite low fat milks category (mainly reduced fat milks, calcium-fortified soy milks and yoghurts) was about 530kJ. This compared to about 700 kJ/serve for mid fat dairy foods as it was deemed sensible to keep the same serve size for full fat and reduced fat milks. The higher fat category which was primarily cheese had an energy level of about 600kJ mid way between the low fat and full fat milks.

Table A7.5: Sentinel food reduced fat milk at 250g serve

Food	Serve used	Serve on energy	Serve on protein	Serve on calcium
Milk regular	250	221	272	268
Milk skim	250	440	257	224
Goats milk	250	302	298	239
Sheep's milk	250	139	154	136
Soy beverages regular*	250	242	385	257
Soy beverages reduced fat*	250	314	264	208
Buttermilk	250	258	220	184
Yoghurt regular fat	200	142	197	165
Yoghurt reduced fat	200	176	175	167
High fat yoghurt	200	109	190	198
Soy yoghurt, low, regular fat*	200	176	280	213
Soy yoghurt*	200	170	274	303
Cheese regular	40	42	41	40
Cheese reduced fat	40	55	48	58
Cheese low fat	40	103	54	59
Custard regular	200	154	257	219
Custard reduced fat	200	165	231	212
Custard, egg, vanilla, baked	200	58	175	324
Evaporated milk	120	106	122	103
Condensed milk	60	46	111	98

**Soy products only included if calcium fortified*

A7.2.6 Meats and alternatives

The 'meats and alternatives' food group was the most diverse food group in the AGTHE98 both nutritionally and biologically. Traditionally it has been seen as the 'protein' group although it is arguably more important for iron, zinc, vitamin B12 and LCn3 fats. Some fish are particularly rich in LCn3 but, in Australia, grass-fed beef, other red meats and poultry also provides substantial amounts in the diet (43% for meats, poultry and game; of which 28% was for beef and lamb, 10% poultry and 4% pork from NNS95)[1]. Iron and zinc are also found, albeit at lower levels, in the milks category, and in cereals and legumes although the latter sources are less bioavailable. The foods in the dairy food group have some vitamin B12, but plant-based alternatives to the meats, fish and eggs have no vitamin B12 or LCn3 fats.

The composite red meat group had about 550kJ per serve and the poultry, fish, seafood, eggs and legumes, 600kJ/serve.

Red meats

For modelling purposes in this revision, red meats (beef, lamb, pork, veal, venison, kangaroo) was formed into one group and poultry, fish, seafood, eggs, legumes into another to reflect the evidence base available in the epidemiological literature about chronic disease outcomes and in recognition of the particularly high bioavailable iron and zinc content of the red meats.

Fish and seafood

Fish and seafood was modelled as one group that included high, medium and low LCn3 fatty acid fish and seafood. The NHMRC suggested that for modelling purposes, a minimum of at least one serve per week of fish was to be included in the modelling and a daily level of 20 and 40g/day of fish and seafood (1.4–2.8 serves a week) was modelled in the *Foundation Diets*. The lower end of the range equated to amounts consumed by adults in the NNS95 where 25.7g/day was the average intake for adults over 19 years for the whole of the fish and seafood products and dishes category. Of this 6.4g/day was finfish, 2.7g/day was crustacean and molluscs and 3.3g/day was canned or bottled fish and seafood. There were a further 7g/day of fish and seafood products (including the weight of the batter or crumbing component) as well as 6.3g of dishes (including the weight of other rice, vegetable and sauce components of the mornays, kedgeree, casseroles or paella). The upper end of the modelled range was about twice the intakes in the NNS95. The actual amounts modelled for different age/gender groups are presented in Table A.7.6

Table A7.6: Serves a week of fish and seafood actually included when modelling* *Foundation Diets* for adults by age and gender (100g serve)

Age group	19–30y	31–50y	51–70y	70+y
Fish and seafood				
Men	1.29	1.86	2.37	2.50
Women	1.6	2.0	2.50	2.50
Fish only				
Men	0.93	1.49	1.96	1.90
Women	1.2	1.54	2.06	1.98

**modelled within their food group in proportion to NNS95 consumption patterns in relation to other components of group–for all adult categories 7 serves a week were recommended for this food group*

Legumes, nuts and seeds

In the AGTHE98, legumes and nuts and seeds were part of the meats and alternatives group (legumes also appearing with vegetables). Whilst the nutrient composition of legumes appears to fit reasonably well in this group, nuts and seeds were more energy dense compared to other items in the meats and alternatives group, and have different culinary applications. Neither legumes nor nuts and seeds were actually used in the modelling for either the CFG94 or the AGTHE98 but appeared as alternatives in the guide. Given their very different nutritional composition, modelling with nuts and seeds as a separate group was undertaken in the development of both the *Foundation* and *Total Diets*.

Nuts and seeds were not included in the modelled diets of children aged 2 and under because of concerns with choking. The potential role of nut pastes for this group will be considered in the *Australian Guide to Healthy Eating* and *Dietary Guidelines*.

Whilst the *Foundation Diets* for 4–8 year olds had no nuts and seeds this was because of the limitations of available energy (especially for the girls) but at the higher energy levels of *Total Diets* nuts and seeds could be included. The inclusion of nuts and seeds in the diets of these groups will be considered in the revised *Australian Guide to Healthy Eating* and *Dietary Guidelines*.

Reference

1. Howe P, Meyer B, Record S, Baghurst KI. Dietary intake of long chain omega-3 polyunsaturated fatty acids: contribution of meat sorces. *Nutrition* 2006; 22 (1);47–53

Table A.7.7 shows the equivalents for key nutrients across the Meat and alternatives group. The serve equivalent was done using beef as the sentinel food on the basis of protein and energy equivalent with consideration given to iron and zinc as well as the relative serve sizes used in the AGTHE98 (*E = energy; P = protein)

Table A7.7

	Energy (kJ)	Energy equiv	Protein (g)	Prot equiv	LC n 3 (mg)	LCn3 equiv	Iron (mg)	Iron equiv	Zinc (mg)	Zinc equiv
	per 100g	g serve	per 100g	g serve	100g	g serve	per 100g	g serve	per 100g	g serve
Red meat aver/100g	784	65	27.3	65	95.5	65	2.35	65	5.09	65
Poultry	707	79.3	28.0	71.4	19.0	336.8	0.8	213.3	1.6	216.6
High omega3 fish	960	58.4	25.4	78.7	1897.0	3.4	0.9	188.2	0.6	560.3
Mid medium omega3 fish	620	90.5	23.2	86.2	674.0	9.5	0.8	205.1	1.0	353.0
Low omega3 fish	467	120.1	23.8	84.0	156.0	41.0	0.6	271.2	0.5	657.4
Seafood Low omega3	360	155.8	19.5	102.6	147.0	43.5	0.9	175.8	3.2	109.6
Seafood Mid omega3	434	129.3	19.2	104.2	599.0	10.7	4.5	36.0	21.0	16.8
Egg	593	94.6	12.7	157.5	91.0	70.3	1.7	94.1	1.2	304.3
Legumes	450	124.7	8.9	225.7	0.0		1.9	82.5	1.1	324.2

	Energy equiv (E)	Prot equiv (P)	Iron equiv	Zinc equiv	Ave all 4		Final serves on E/P*
Red meat average	65	65	65	65	65	"Red meat"	65
Poultry	79	71	213	217	145	Poultry	80
High omega3 fish	58	79	188	560	221	Hi O fish	100
Mid omega3 fish	90	86	205	353	184	Mid O fish	100
Low omega3 fish	120	84	271	657	283	Fish Lo O	100
Seafood Low omega3	156	103	176	110	136	Seafood Lo O	100
Seafood Mid omega 3	129	104	36	17	72	Seafood Mid O	100
Egg	95	157	94	304	163	Egg	120
Legumes	125	226	82	324	189	Legumes	170

A7.2.7 Unsaturated oils and spreads

The approach to fats, oils and spreads, such as margarines in Australian food modelling systems has varied over time. A 'fat' group, comprised solely of butter, was included in the 'protective' or 'foundation' foods in Commonwealth Government information booklets of the 1940s (ARCS, 1948). It was included primarily as a source of vitamin A and a daily intake of 30g was recommended. In 1954, this was expanded to become a 'fats' group in a meal planning guide accompanying the NHMRC Recommended Dietary Allowances. An intake of 15–30g was recommended with extra intake from cooking fat as required. In the early 1970s the Five Food Groups developed by the Commonwealth Department of Health included a butter/table margarine group with a suggested intake of one tablespoon.

When the CFG94 was developed, inclusion of a 'fats' group was considered but excluded on the basis that 'its low nutrient contribution could not be sustained in terms of core foods'. When the CFG94 was used as the basis to develop the AGTHE98, the authors of the AGTHE98 stated that all modelling included the addition of 2 teaspoons (10g) of polyunsaturated margarine for 60% of all cereal serves (e.g. from about 40–80g/day men and 25–45g/day for women for line A). The reasons were not given. Elsewhere in the documentation, it was stated that "one teaspoon of margarine or oil was allowed for 60% of all bread, cereal, rice, pasta, noodles sample serves" and that this was additional to the margarine and oil which could be eaten as part of the extra food allowance. Unsaturated margarines and oils, alongside other fats such as butter and cream, also formed part of the 'extras' group.

The role of fats, margarines and oils in dietary modelling continues to be a controversial area. In the development of the *Foundation* and *Total Diets*, initial modelling was undertaken without added fats and oils. However, to ensure models were realistic and practical, a small allowance of unsaturated oils and spreads was included in the draft models to reflect current culinary behaviour and ensure that the energy these foods provided was within energy constraints Unsaturated oils and spreads were chosen rather than saturated fats based on the evidence of their health benefits outlined in the evidence-based reviews[1].

Polyunsaturated margarine was included as a proxy for unsaturated oils and spreads in the models for *Foundation Diets* as a concentrated source of essential fatty acids in these energy-constrained diets. Unlike other foods, the inclusion of oils and spreads in the models was not weighted for levels of consumption of each age/gender group as relevant data are not available. When using individual foods to test the *7-day Total Diets*, poly-unsaturated margarine was also used to represent unsaturated oils and spreads but nutrient equivalent amounts of unsaturated oils or seeds or nuts could be modelled instead. To keep the balance between saturated and unsaturated fatty acids in the diet, when moving from *Foundation* to *Total Diets*, inclusion of increasing but limited additional amounts of unsaturated oils or spreads, were modeled in proportion to overall energy intake (see Figure 2, page 35). Again, other foods such as nuts, seeds and/or legumes may be modelled as an alternative source of essential fatty acids, however these mostly come at a higher energy expense (see Figure 2, page 35).

At very low energy intakes such as the Foundation diets, a concentrated source of essential fattuy acids such as poly-unsaturated oils or spreads or seeds or nuts may need to be included. Issues such as the P:S ratio and the requirement for essential fatty acids will be considered when the models are translated into the revised Australian Guide to Healthy Eating and the revised Australian Dietary Guidelines.

Appendix 8: Details of foods used to develop weight estimates and nutrient composition for the composite food groups

Table A8.1: Inclusion criteria used to determine which foods were included in composite food groups for total weight only and which for both total weight and nutrient composition.

Inclusion criteria for foods used to develop the composite food group nutrient composition	
Included for nutrient composition and weight	Included for weight only
Wholemeal muffins, crispbreads and crumpets	Wholemeal muffins, crispbreads and crumpets
• described as wholemeal or grain based products, or • contains >10g/100g dietary fibre	• products contain >1000mg/100g sodium
Wholemeal and grain breads	Wholemeal and grain breads
• described as wholemeal or grain based products, or • contains ≥5g/100g dietary fibre	• toasted products (118% weight included for weight) • fortified products (other than iodine and folate) • filled or topped bread and rolls (50% and 90% weight included for weight respectively) • filled wraps (30% weight included for weight respectively) • gluten free products • products with added (fruit, nuts, oats, etc.) or removed items • products not further specified
Brown rice	Brown rice
• described as brown rice • cooked products • no added fat • no added salt	• uncooked products (300% weight included for weight) • products with a comparable fibre content to brown rice (wild rice)
Wholemeal pasta	Wholemeal pasta
• described as wholemeal based or contains equivalent dietary fibre/100g as wholemeal product • cooked products • no added fat • no added salt	• none
Wholegrain breakfast cereals	Wholegrain breakfast cereals
• described as "whole grain" (i.e. whole wheat), or • contains ≥5g dietary fibre and <30g sugar (<35g if contains fruit) per 100g	• products contain ≥30g sugar (or ≥35g if contains fruit) per 100g
Porridge	Porridge
• prepared with reduced fat milk	• sweetened products • contains added salt • prepared with water • prepared with non reduced fat milk or milk/water combination • products not further specified
Dried Oats	Dried Oats
• products contain the whole oat grain	• sweetened products • products that only contain the bran component

continues…

continued…

Inclusion criteria for foods used to develop the composite food group nutrient composition	
Included for nutrient composition and weight	**Included for weight only**
Refined muffins, crispbreads and crumpets	**Refined crispbreads and crumpets**
• described as white wheat flour based, or • contains <10g/100g dietary fibre and <15g/100g total fat	• salted products • flavoured products • non-wheat based products • products with added items (fruit, vegetables, etc.) • contains ≥15g/100g total fat
Refined Breads	**Refined Breads**
• described as white flour based	• toasted products (118% weight included for weight) • fortified products (other than iodine and folate) • filled or topped bread and rolls (50% and 90% weight included for weight respectively) • filled wraps (30% weight included for weight respectively) • gluten free products • products contain chocolate • products not further specified
Refined rice	**Refined rice**
• cooked products • no added fat • no added salt	• uncooked products (300% weight included for weight) • contains added fat • contains added salt • part of a mixed dish
Refined pasta	**Refined pasta**
• cooked products • no added fat • no added salt	• uncooked products (300% weight included for weight) • contains added fat • contains added salt • part of a mixed dish
Noodles	**Noodles**
• cooked products • no added fat • no added salt	• uncooked products (400% weight included for weight) • contains added fat • contains added salt • part of a mixed dish
Other Cereals	**Other Cereals**
• cooked products • contains ≥10g/100g total fat	• uncooked products (600% weight included for weight) • contains ≥10g/100g total fat
Refined Breakfast Cereals	**Refined Breakfast Cereals**
• contains <5g dietary fibre and <30g sugar (<35g if contains fruit) per 100g • Note:for adults NNS95 volume estimates, this category included cornflakes, puffed corn and rice and rice & oat flakes; all others modelled in relevant wholegrain, higher fibre group	• contains ≥30g sugar (or ≥35g if contains fruit) per 100g • Note:for adults NNS95 volume estimates, this category included cornflakes, puffed corn and rice and rice & oat flakes; all others modelled in relevant wholegrain, higher fibre group

continues…

continued…

Inclusion criteria for foods used to develop the composite food group nutrient composition	
Included for nutrient composition and weight	**Included for weight only**
Seafood	**Seafood**
• cooked products • fresh, frozen or canned without added salt and fat products • no added fat • no added salt	• uncooked products • canned products with added salt/ fat • contains added fat • part of a mixed dish
Fish	**Fish**
• cooked products • products canned in water • no added fat • no added salt	• uncooked products • products canned in oil or brine • contains added fat • part of a mixed dish
Poultry	**Poultry**
• cooked • lean and semi-trimmed • no added fat	• uncooked products • fully trimmed or totally untrimmed • contains added fat • part of a mixed dish • sausages (50% weight included for weight)
Red Meat	**Red Meat**
• cooked • lean and semi-trimmed • no added fat	• uncooked products • fully trimmed or totally untrimmed • contains added fat • part of a mixed dish • sausages (50% weight included for weight)
Egg	**Egg**
• cooked • no added fat	• uncooked products • contains added fat • part of a mixed dish
Legumes	**Legumes**
• cooked (excluding tofu) • no added fat	• uncooked products • products canned in brine • contains added fat • part of a mixed dish • baked beans (50% weight included for weight) • dried beans (700% weight included for weight)

continues…

continued…

Inclusion criteria for foods used to develop the composite food group nutrient composition	
Included for nutrient composition and weight	**Included for weight only**
Low fat dairy foods	**Low fat dairy foods**
• contains <4g total fat/ serve* • soy beverages fortified with calcium	• fortified dairy products • fortified soy products (other than calcium) • oat and rice based dairy alternatives • unfortified soy beverages • part of a mixed dish • products not further specified • tea and coffee made with low/reduced fat milk (70% weight for milk weight for latte and cappuccino, 8% weight for milk weight for other coffee/tea) • skim and whey milk powders (900% weight for milk weight) • skim/reduced fat milk based smoothies (25% weight for yoghurt weight) • skim/low fat milk and beverage base (90% weight for milk weight)
Medium fat dairy foods	**Medium fat dairy foods**
• contains 4–10g total fat/ serve* • soy beverages fortified with calcium	• fortified dairy foods • fortified soy products (other than calcium) • oat and rice based dairy food alternatives • unfortified soy beverages • part of a mixed dish • products not further specified • tea and coffee made with full fat milk (70% weight for milk weight for latte and cappuccino, 8% weight for milk weight for other coffee/tea) • café style iced coffee/chocolate (60% weight for milk weight) • full fat milk and beverage base (90% weight for milk weight) • full fat milk powders (900% weight for milk weight) • skim/reduced fat milk based smoothies (25% weight for yoghurt weight) • ice confection drinks (85% weight for milk weight) • rice pudding (70% weight for milk weight)
High fat dairy foods	**High fat dairy foods**
• contains >10g total fat/ serve* • soy beverages fortified with calcium	• none
Nuts and Seeds	**Nuts and Seeds**
• uncooked products (where possible) • no added fat • no added salt	• contains added fat • contains added salt • sweetened products • roasted products • products that form a paste/pulp • butter/jam mix (50% weight for peanut weight)

continues…

continued…

Inclusion criteria for foods used to develop the composite food group nutrient composition	
Included for nutrient composition and weight	**Included for weight only**
Fruit	**Fruit**
• uncooked products or poached in water • unsweetened products • no added fat • *canned for fruit salad and mixed fruit only*	• products canned in juice or syrup, *except fruit salad and mixed fruit* (undrained fruit 60% weight for weight) • sugar or intensely sweetened products • contains added fat • pureed or baked products • products not further specified
Green and Brassica Vegetables	**Green and Brassica Vegetables**
• cruciferous or green vegetables • commonly consumed forms • no added fat • no added salt	• uncooked products (that are not commonly consumed uncooked) • products canned in brine • products not further specified
Orange Vegetables	**Orange Vegetables**
• commonly consumed forms • no added fat • no added salt	• uncooked products (that are not commonly consumed uncooked) • products canned in brine • contains added fat • products not further specified
Starchy Vegetables	**Starchy Vegetables**
• commonly consumed forms • no added fat • no added salt	• uncooked products (that are not commonly consumed uncooked) • products canned in brine • products reconstituted from dry powder • contains added fat • part of a mixed dish • products not further specified • fried chips or fries (150% weight included for weight)
Other Vegetables	**Other Vegetables**
• commonly consumed forms • products canned in water • no added fat • no added salt	• uncooked products (that are not commonly consumed uncooked) • products canned in juice • products in paste form • contains added fat • part of a mixed dish • products not further specified
Additional category	**Additional category**
• Unsaturated oils and spreads • reduced salt products • full fat products	• Unsaturated fats and oils • high sodium products • supplemented (other than vitamin D) products • high saturated fat content • reduced fat products • products not further specified

**1 Dairy foods serve= 250g milk, 60g condensed milk, 40g cheese, 200g yoghurt or 120g evaporated milk*

Table A8.2: Details of individual items included or excluded for nutrient profiling or total weight estimates

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
Unsaturated oils and spreads	
Reduced salt varieties	*Products are high in salt, supplemented (other than vitamin D), high in saturated fats, were reduced fat and/or nfs*
Polyunsaturated margarines	Polyunsaturated margarines
Margarine spread, polyunsaturated (75% fat), reduced salt	Edible oil spread, polyunsaturated, reduced fat (50% fat) & salt (380mg/100g)
Margarine spread, polyunsaturated (70% fat), reduced salt	Margarine spread, polyunsaturated (70% fat)
Margarine spread, polyunsaturated (70% fat), sodium = 380 mg/100 g	Margarine spread, polyunsaturated (70% fat), sodium = 600 mg/100 g
Monounsaturated margarines	Margarine spread, polyunsaturated (65% fat), 780 mg sodium /100 g
Margarine spread, monounsaturated (70% fat), reduced salt	
Margarine spread, monounsaturated (70% fat), sodium = 380 mg/100g	Margarine spread, polyunsaturated, reduced fat (60% fat)
Margarine spread, monounsaturated (65% fat), sodium = 380 mg/100g	Margarine spread, polyunsaturated, not further specified
Margarine spread, monounsaturated (60% fat), 300 mg sodium/100 g, dairy food free	Margarine spread, polyunsaturated (70% fat), sodium = 360 mg/100 g, added vitamin E
Olive oil spreads	Margarine spread, polyunsaturated, reduced fat (50% fat), & salt (380mg/100g), added vitamin E
Margarine spread, olive oil blend (75% fat), 380 mg sodium/100g	
Margarine spread, olive oil blend (70% fat), 380 mg sodium/100g	Margarine spread, polyunsaturated, reduced fat (60% fat), unsalted
Margarine spread, olive oil blend (70% fat), no added salt	Margarine spread, polyunsaturated, reduced fat (31% fat) & salt (380 mg/100g), added vitamin E
Polyunsaturated oils	
Oil, blended, polyunsaturated vegetable oils	Margarine spread, polyunsaturated, reduced fat (25% fat) & salt (380 mg/100g)
Oil, grapeseed	Margarine spread, polyunsaturated (70% fat), added phytosterols
Oil, linseed or flaxseed	Edible oil spread, polyunsaturated, reduced fat (48% fat), added phytosterols
Oil, maize	Edible oil spread, polyunsaturated, reduced fat (40% fat), no added salt or milk
Oil, sesame	Margarine spread, polyunsaturated, reduced fat (30% fat) & salt (380 mg/100g), added phytosterols
Oil, sunflower	
Oil, soybean	Monounsaturated margarines
Oil, peanut	Margarine spread, monounsaturated (70% fat)
Monounsaturated oils	Margarine spread, monounsaturated (65% fat), 750 mg sodium/100 g
Oil, canola	Margarine spread, monounsaturated (60% fat), 700 mg sodium/100 g
Oil, olive, pure	Margarine spread, monounsaturated, reduced fat (~55% fat)
Oil, macadamia	Margarine spread, monounsaturated, 65–75% fat, not further specified

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Margarine spread, monounsaturated, 50–60% fat, not further specified
	Margarine spread, monounsaturated, not further specified
	Margarine spread, monounsaturated (60% fat), 230 mg sodium/100 g, added vitamin E
	Margarine spread, monounsaturated (~70% fat), sodium = 380 mg/100g, added phytosterols
	Margarine spread, monounsaturated, reduced fat (~55% fat) & salt, added phytosterols & vitamin E
	Margarine spread, monounsaturated, reduced fat (~40% fat), reduced salt, added phytosterols
	Margarine spread, monounsaturated, reduced fat (~55% fat) & salt
	Margarine spread, monounsaturated, reduced fat (~55% fat), unsalted
	Margarine spread, monounsaturated, extra light style (31% fat), reduced salt (380 mg na)
	Margarine spread, monounsaturated, extra light style (31% fat), unsalted
	Olive oil spreads
	Margarine spread, olive oil blend (40% fat), 380 mg sodium/100 g
	Margarine spread, olive oil blend (55% fat), 380 mg sodium/100 g
	Margarine spread, rice bran oil based
	Polyunsaturated oil
	Oil, polyunsaturated, not further specified
	Monounsaturated oil
	Oil, monounsaturated, not further specified
	Oil, cod liver

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
Wholegrain Breads and Cereals	
Wholemeal muffins, crispbreads and crumpets	***Wholemeal muffins, crispbreads and crumpets–high salt–cut off?***
Described as wholemeal or grain based OR relatively high in fibre (>10g/100g)	*Product is relatively high in sodium (>1000mg/100g)*
Wholemeal crispbreads	Wholemeal crispbreads
Biscuit, savoury crispbread, wholemeal wheat flour	Biscuit, savoury, wholemeal wheat flour
Biscuit, savoury crispbread, wholemeal wheat, puffed	Wholemeal crumpets (none)
Biscuit, savoury crispbread, white & wholemeal wheat flour with grains & seeds	Wholemeal muffins (none)
Biscuit, savoury, wholemeal wheat flour with sesame	
Biscuit, savoury, wholemeal wheat flour with soy & linseed	
Biscuit, savoury crispbread, rye	
Biscuit, savoury crispbread, rye with oats & dried fruit	
Wholemeal crumpets (no non-toasted available in AUSNUT07)	
Crumpet, from wholemeal flour, toasted	
Wholemeal muffins (none)	
Wholemeal and grain breads	***Wholemeal and grain breads–toasted, fortified or fillings, nfs, addition of other items (fruit, nuts, oats, etc), GF***
Described as wholemeal or grain based OR relatively high in fibre(>5g/100g)	*Products are either toasted, fortified (other than iodine and folate), filled or topped, gluten free, have other items added or removed (fruit, nuts, oats, etc) and/or nfs*
Mixed grain and brown bread/rolls	Mixed grain and brown bread/rolls
Bread, mixed grain	Bread, mixed grain, added folate
Bread, mixed grain, homemade from bread mix	Bread, mixed grain, added iron
Bread roll, mixed grain	Bread, mixed grain, seeds & oats, added folate
Bread, brown, from white & wholemeal flour	Bread roll, mixed grain, added folate
Wholemeal bread/rolls	Bread, from white or wholemeal flour, soy & linseed, added folate
Bread, from wholemeal flour	Bread, mixed grain, toasted
Bread, from wholemeal flour, homemade from bread mix	Bread, mixed grain, toasted, not further specified
Bread roll, from wholemeal flour	Bread roll, mixed grain, toasted
Bread, flat (pita or lebanese style), wholemeal	Bread, mixed grain, added folate, toasted

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
Bread, from spelt flour	Bread, mixed grain, added iron, toasted
Chapatti	Bread, from white or wholemeal flour, soy & linseed, toasted
Bread, from rye flour, dark	Bread, mixed grain, seeds & oats, added folate, toasted
Light rye bread	Bread, from white or wholemeal flour, soy & linseed, added folate, toasted
	Bread, brown, from white & wholemeal flour, toasted
	Bread, mixed grain, fresh, not further specified
	Bread, mixed grain, not further specified
	Bread roll, mixed grain, not further specified
	Bread, from white or wholemeal flour, soy & linseed
	Bread, gluten free, mixed grain
	Sandwich, multigrain bread, tablespread, lettuce, tomato, beetroot & carrot
	Wholemeal bread/rolls
	Bread, from wholemeal flour, added folate
	Bread, from wholemeal flour, added folate, toasted
	Bread, from wholemeal flour, added iron
	Bread, from wholemeal flour, added iron, toasted
	Bread, from wholemeal flour, added omega-3 polyunsaturates
	Bread, from wholemeal flour, added omega-3 polyunsaturates, toasted
	Bread, from wholemeal flour, seeds, added folate
	Bread, from wholemeal flour, seeds, added folate, toasted
	Bread roll, from wholemeal flour, added folate
	Bread, from wholemeal flour, added fibre
	Bread, from wholemeal flour, toasted
	Bread, from wholemeal flour, grain & seeds, toasted
	Bread, from wholemeal flour, seeds, toasted
	Bread, from wholemeal flour, seeds & oats, toasted
	Bread, from wholemeal flour, dried fruit & seeds, toasted
	Bread, from wholemeal flour, fresh, not further specified
	Bread, from wholemeal flour, toasted, not further specified

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Bread, from wholemeal flour, not further specified
	Bread roll, from wholemeal flour, not further specified
	Bread, from wholemeal flour, grain & seeds
	Bread, from wholemeal flour, seeds
	Bread, from wholemeal flour, seeds & oats
	Bread, from wholemeal flour, dried fruit & seeds
	Bread, from wholemeal flour, dried fruit, nuts & seeds, added folate
	Sandwich, wholemeal bread, tablespread & cheese
	Sandwich, wholemeal bread, tablespread & cheese, toasted
	Sandwich, wholemeal bread, tablespread, cheese & tomato, toasted
	Sandwich, wholemeal bread, tablespread, cheese, lettuce & tomato
	Sandwich, wholemeal bread, tablespread & chicken roll
	Sandwich, wholemeal bread, tablespread, chicken roll & lettuce
	Sandwich, wholemeal bread, tablespread, chicken roll & tomato
	Sandwich, wholemeal bread, tablespread, egg & lettuce
	Sandwich, wholemeal bread, tablespread & ham
	Sandwich, wholemeal bread, tablespread, ham & cheese
	Sandwich, wholemeal bread, tablespread, ham & cheese, toasted
	Sandwich, wholemeal bread, tablespread, ham, cheese & lettuce
	Sandwich, wholemeal bread, tablespread, ham, cheese & tomato
	Sandwich, wholemeal bread, tablespread, ham, cheese, tomato & lettuce
	Sandwich, wholemeal bread, tablespread & peanut butter
	Sandwich, wholemeal bread, tablespread & vegemite
	Sandwich, wholemeal, not further specified
	Bread, from rye flour, dark
	Bread, from rye flour, dark, toasted
	Bread, from rye flour, toasted, not further specified
	Bread, from rye flour, dark, added folate
	Bread, from rye flour, fresh, not further specified

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Sandwich, rye bread, tablespread & peanut butter
	Sandwich, rye bread, tablespread & vegemite
	Light rye bread
	Bread, from rye flour, light, added folate
	Bread, from rye flour, light, added vitamins B1, B2, B3, E & folate, Fe & Zn
	Bread, from rye flour, light, added folate, toasted
	Bread, from rye flour, light, added vitamins B1, B2, B3, E & folate, Fe & Zn, toasted
Brown rice	***Brown rice***
Cooked form with no added fat or salt	*Products are uncooked or have comparable fibre content*
Rice, brown, boiled without added salt	Rice, wild, boiled without added salt
Wholemeal pasta	Rice, brown, raw
Pasta, wholemeal wheat flour based, boiled from dry, without added salt	***Wholemeal pasta***
Pasta or noodles, buckwheat flour, boiled without added salt	None
Pasta, non-wheat cereal based, boiled without added salt	
Wholegrain breakfast cereals	***Wholegrain breakfast cereals***
Described as "whole grain" (i.e. whole wheat) OR contain >5g fibre and <30g sugar (<35g if contains fruit) per 100g	*Products contain >30g sugar (or >35g if contains fruit) per 100g*
Unfortified wholegrain cereal	Unfortified wholegrain cereal
Breakfast cereal, mixed cereal (oat, corn, rice, barley), extruded, unfortified	Breakfast cereal, puffed or popped rice, cocoa coating, unfortified
Breakfast cereal, whole wheat, puffed, honey, unfortified	Fortified wholegrain breakfast cereal
Breakfast cereal, oat bran, unfortified	Breakfast cereal, whole wheat, puffed, honey, added vitamins B1, B2, B3, E & folate
Breakfast cereal, oats, fruit juice, dried apples & blueberries, unfortified	Breakfast cereal, mixed grain (wheat, oat, corn & rice), dried fruit & nuts, added vitamins & minerals
Breakfast cereal, oats, fruit juice, dried apples & cinnamon, unfortified	Breakfast cereal, wheat, extruded, chocolate coating, added vitamins B1, B2, B3, C & folate, Ca, Fe & Zn
Breakfast cereal, whole wheat, biscuit, organic, unfortified	Breakfast cereal, flakes of corn, honey, nuts, added vitamins B1, B2, B3, E & folate
Breakfast cereal, mixed grain (wheat, corn, oat, rice), flakes, tropical fruit, unfortified	Breakfast cereal, puffed rice, cocoa coating (cocoa rocks), added vitamins B1, B2, B3, C & folate, Ca, Fe & Zn
Unfortified muesli	
Muesli, commercial, untoasted or natural style, unfortified	
Muesli, commercial, toasted, unfortified	
Muesli, homemade, untoasted, added nuts, seeds & dried fruit	

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
Muesli, homemade, toasted, added nuts, seeds & dried fruit	
Muesli, homemade, untoasted, no added nuts & dried fruit	
Fortified wholegrain breakfast cereal	
Breakfast cereal, whole wheat, biscuit, small, fruit, added vitamins B1, B2, B3 & folate, Ca & Fe	
Breakfast cereal, whole wheat, biscuit, small, fruit paste, added vitamins B1, B2, B3 & C & Fe	
Breakfast cereal, wheat bran & oats, flakes, dried fruit, added vitamins B1, B2, B3 & folate & Fe	
Breakfast cereal, wheat bran, flakes, honey & almond, added vitamins B1, B2, B3 & folate, Fe & Zn	
Breakfast cereal, flakes of corn, nuts, added vitamins B1, B2, B3, C & folate & Fe & Zn	
Breakfast cereal, wheat bran, flakes, sultanas, almonds, apple, added vitamins B1, B2, B3 & folate, Ca & Fe	
Breakfast cereal, mixed grain (wheat, corn, rice), flakes, fruit, added vitamins B1, B2, B3 & folate & Fe	
Breakfast cereal, mixed grain (wheat, corn, oat), clusters, fruit, added vitamins B1, B2 & folate & Fe	
Breakfast cereal, wheat bran, flakes, sultanas, added vitamins B1, B2, B3 & folate, Fe & Zn	
Breakfast cereal, mixed grain (wheat, corn, rice), flakes, sultanas, apricot, & apple, added vitamins B1, B2, B3 & folate, Ca & Fe	
Breakfast cereal, mixed grain (wheat, corn, rice, oat), flakes, fruit & nuts, added vitamins B1, B2 & B3 & Fe	
Breakfast cereal, wheat bran, pellets, added vitamins B1, B2, B3, E & folate & Ca	
Breakfast cereal, whole wheat, biscuit, small, honey, added vitamins B1, B2, B3 & folate, Fe & Zn	
Breakfast cereal, mixed grain (wheat, corn, rice) flakes, added vitamins B1, B2, B3 & folate & Fe	
Breakfast cereal, mixed grain (wheat, corn, oat, rice), flakes, fruit, added vitamins B1, B2, B3 & folate, Ca & Fe	

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
Breakfast cereal, mixed grain (wheat, corn, oat, rice), flakes, tropical fruit, added vitamins B1, B2, B3 & folate & Fe	
Breakfast cereal, mixed grain (wheat, corn, oat), clusters, fruit or nut, added vitamins B1, B2 & folate & Fe	
Breakfast cereal, mixed grain (wheat, corn, rice), flakes, apple & berries, added vitamins B1, B2, B3 & folate & Fe	
Breakfast cereal, mixed grain (wheat, oat, corn, rice) extruded, added vitamins B1, B2, B3, C, E & folate, Ca, Fe & Zn	
Breakfast cereal, whole wheat, flakes, fruit, added vitamins B1, B2 & B3, Ca & Fe	
Breakfast cereal, whole wheat, flakes, nuts, added vitamins B1, B2 & B3, Ca & Fe	
Breakfast cereal, mixed grain (wheat, corn, oat), clusters, nuts, added vitamins B1, B2 & folate & Fe	
Breakfast cereal, mixed grain (wheat, corn, rice, oat), flakes, fruit & nuts, added vitamins B1, B2, B3, C & folate & Fe	
Breakfast cereal, whole wheat, biscuit, small, fruit or fruit paste, added vitamins B1, B2, B3 & folate	
Breakfast cereal, wheat bran, flakes, sweetened, added vitamins B1, B2, B3 & folate, Fe & Zn	
Breakfast cereal, wheat bran, pellets, added vitamins B1, B2, B3 & folate, Ca & Fe	
Breakfast cereal, wheat bran, pellets, added vitamins B1, B2 & B3	
Breakfast cereal, wheat bran, pellets, added vitamins B1, B2 & folate, Fe, Mg & Zn	
Breakfast cereal, wheat bran, pellets, linseed, added vitamins E & folate, Ca & Zn	
Breakfast cereal, oat flakes, rice & wheat, added vitamins B1, B2, B3 & D & Fe	
Breakfast cereal, wheat, flakes, sweetened, psyllium, added vitamins B1, B2, B3, C & folate, Fe & Zn	
Breakfast cereal, mixed grain (wheat, rice, oats), biscuit, added vitamins B1, B2, B3 & Fe	
Breakfast cereal, whole wheat, biscuit, bran, added B1,B2, B3 & folate & Fe	
Breakfast cereal, whole wheat, flakes, added vitamins B1 & B3	
Breakfast cereal, whole wheat, biscuit, childrens product, added vitamins B1, B2 & B3, Ca, Fe & Zn	
Breakfast cereal, whole wheat, biscuit, added vitamins B1, B2 & B3	
Breakfast cereal, whole wheat, biscuit, added vitamins B1,B2, B3 & folate, Fe & Zn	
Breakfast cereal, whole wheat, biscuit, organic, added vitamins B1, B2 & B3	
Breakfast cereal, whole wheat, biscuit, small, added vitamins B1, B2, B3 & folate	

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
Breakfast cereal, whole wheat, puffed, added vitamins B1, B2, B3 & Fe	
Breakfast cereal, wheat bran, flakes, sultanas, added vitamins B1, B2, B3 & folate & Fe	
Fortified muesli	
Muesli, commercial, rye, toasted, added vitamins E & folate	
Muesli, commercial, toasted, dried fruit, nuts & seeds, added vitamins E & folate	
Muesli, homemade or commercial, bircher	
Porridge	***Porridge***
Prepared with reduced fat milk	*Products are sweetened, salted, have milk, water or milk/water other than reduced fat added and/or are nfs*
Porridge, rolled oats, prepared with reduced fat milk	Porridge, rolled oats, prepared with full fat milk & water
	Porridge, rolled oats, prepared with reduced fat milk & water
	Porridge, rolled oats, prepared with skim milk
	Porridge, rolled oats, prepared with skim milk & water
	Porridge, rolled oats, prepared with water, added salt
	Porridge, rolled oats, prepared with unspecified milk
	Porridge, rolled oats, prepared with unspecified milk & water
	Porridge, rolled oats, not further specified
	Porridge, rolled oats, prepared with full fat milk
	Porridge, sugar sweetened oats, dried fruit, prepared with full fat milk
	Porridge, sugar sweetened oats, dried fruit, prepared with full fat milk & water
	Porridge, sugar sweetened oats, dried fruit, prepared with reduced fat milk
	Porridge, sugar sweetened oats, dried fruit, prepared with skim milk
	Porridge, sugar sweetened oats, dried fruit, prepared with water
	Porridge, sugar sweetened oats, dried fruit, not further specified
	Rice porridge (congee), cooked
	Porridge, flavoured & sugar sweetened oats, prepared with full fat milk
	Porridge, flavoured & sugar sweetened oats, prepared with full fat milk & water
	Porridge, flavoured & sugar sweetened oats, prepared with reduced fat milk
	Porridge, flavoured & sugar sweetened oats, prepared with skim milk
	Porridge, flavoured & sugar sweetened oats, prepared with water

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Porridge, flavoured & sugar sweetened oats, prepared with unspecified milk & water
	Oats, rolled, boiled without added salt
Dried Oats	***Dried Oats***
Contains the whole oat grain	*Products are sweetened or only the bran component*
Oats, rolled, raw	Oats, rolled, mixed with sugar & flavours
Oats, puffed	Oats, rolled, mixed with sugar, flavours & dried fruit
	Oats, bran, unprocessed
Refined Breads and Cereals	
Refined muffins, crispbreads and crumpets	***Refined crispbreads and crumpets***
Described as white wheat flour based OR relatively low in fibre(<10g/100g) and relatively low in fat (<15g/100g)	*Product is salted, flavoured, non-wheat based, have items added (fruit, vegetables, etc) and/or are relatively high in fat (>15g/100g)*
Refined crispbreads	Refined wheat/rye crispbreads
Biscuit, savoury, white wheat flour, low fat	Biscuit, savoury cake, corn with grains or seeds, salted
Biscuit, savoury, white wheat flour with added grains, low fat	Biscuit, savoury cake, rice & corn, salted
Biscuit, savoury, lavosh, unflavoured	Biscuit, savoury cake, with corn & seeds, salted
Biscuit, savoury, water cracker style	Biscuit, savoury cake, rice, salted
Biscuit, savoury, white wheat flour, salted (includes Salada brand)	Biscuit, savoury cake, rice with other grains, salted
Biscuit, savoury, white wheat flour, flaky style (includes SAO brand)	Biscuit, savoury cake, rice with corn & sesame, unsalted
Biscuit, savoury, melba toast	Biscuit, savoury cake, rice, unflavoured
Biscuit, savoury crispbread, white wheat flour, puffed & toasted	Biscuit, savoury cracker, rice
Refined crumpets	Biscuit, savoury cracker, rice with seaweed
Crumpet, from white flour, toasted	Biscuit, savoury cracker, rice with sesame seeds
Refined muffins	Biscuit, savoury cracker or cake, rice & corn, flavoured
Muffin, English-style, from white flour, plain	Biscuit, savoury, white wheat flour, plain snack style (includes Jatz brand)
	Biscuit, savoury, cheese-flavoured
	Biscuit, savoury cracker, puffed, flavoured
	Biscuit, savoury, pita or bagel crisps, flavoured
	Biscuit, savoury, pita or bagel crisps, flavoured, no added fat
	Biscuit, savoury, pastry twist, cheese flavoured

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Biscuit, savoury, white wheat flour, flavoured
	Refined crumpets (none)
	Refined muffins
	Muffin, savoury, with cheese & ham, homemade
	Muffin, savoury, with cheese, zucchini & tomato, homemade
	Muffin, savoury, with cheese, ham, zucchini & tomato, homemade
	Muffin, English-style, dried fruit, toasted
	Muffin, English-style, from white flour, toasted
	Pancake, with vegetables (potato), homemade
	Pancake, rice & legume based, (idli or thosai), fried with ghee
Refined Breads	***Refined Breads–topped, filled, fortified, GF, toasted***
Described as white flour based	*Products are either toasted, fortified (other than iodine and folate), filled or topped, gluten free, have added chocolate and/or nfs*
Refined Breads	Refined Breads
Bread, from white flour	Bread or bread roll, from white flour, topped with cheddar cheese
Bread, from white flour, homemade from bread mix	Bread or bread roll, from white flour, topped with cheese & bacon
Bread, from white flour, homemade from basic ingredients	Bread or bread roll, from white flour, topped with cheddar cheese & vegemite
Bread roll, from white flour	Bread or bread roll, from white flour, topped with herb & garlic
Flat (pita or lebanese) bread	Bread or bread roll, from white flour, topped with meat & vegetables
Bread, flat (pita or lebanese), white, reduced salt	Bread or bread roll, from white flour, topped with vegetables only
Bread, flat (pita or lebanese), white	Bread or bread roll, from white flour, mixed with ham & pickles
Bagel, from white flour	Bread or bread roll, from white flour, topped with cheddar cheese, added folate
Bread, damper, with added salt	Bread or bread roll, from white flour, topped with cheese & bacon, added folate
Bread, foccacia or turkish style bread, plain	Bread or bread roll, from white flour, topped with cheddar cheese & vegemite, added folate
Bread, naan, Indian restaurant style	Bread or bread roll, from white flour, topped with meat & vegetables, added folate
Bread, pizza base, commercial	Bread or bread roll, from white flour, mixed with cheese & pesto, added folate
Bread, from white flour, crusty, e.g. french stick/baguette	Bread or bread roll, from white flour, mixed with cheese & tomato, added folate
Bread, from white flour, italian style e.g. ciabatta, pane di casa	Bread or bread roll, from white flour, mixed with potato, pumpkin & sunflower seeds, added folate

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
Bread, from white flour, sour dough	Bread or bread roll, from white flour, mixed with cheese & sundried tomato, added folate
Bread, corn, homemade	Bread roll, from wholemeal flour, potato, pumpkin & sunflower seeds, added folate
Refined fruit bread	Sandwich, white bread, with cheese
Bread, from white flour, dried fruit	Sandwich, white bread, with cheese & tomato, toasted
	Sandwich, white bread, tablespread & berry jam
	Sandwich, white bread, tablespread & cheese, toasted
	Sandwich, white bread, tablespread & chicken roll
	Sandwich, white bread, tablespread & chicken roll, toasted
	Sandwich, white bread, tablespread, chicken roll & cheese, toasted
	Sandwich, white bread, tablespread, chicken roll, cheese & lettuce
	Sandwich, white bread, tablespread, chicken roll, cheese & tomato
	Sandwich, white bread, tablespread, chicken roll & lettuce
	Sandwich, white bread, tablespread & egg
	Sandwich, white bread, tablespread, egg & bacon, toasted
	Sandwich, white bread, tablespread, egg & lettuce
	Sandwich, white bread, tablespread, fried egg & bacon
	Sandwich, white bread, tablespread & ham
	Sandwich, white bread, tablespread, ham & cheese
	Sandwich, white bread, tablespread, ham & cheese, toasted
	Sandwich, white bread, tablespread, ham, cheese & tomato
	Sandwich, white bread, tablespread, ham & chicken
	Sandwich, white bread, tablespread, ham & lettuce
	Sandwich, white bread, tablespread, ham, lettuce, tomato & cheese
	Sandwich, white bread, tablespread, ham & tomato
	Sandwich, white bread, tablespread, lettuce, tomato & cheese
	Sandwich, white bread, tablespread, lettuce, tomato, beetroot & carrot
	Sandwich, white bread, tablespread & peanut butter
	Sandwich, white bread, tablespread & tomato
	Sandwich, white bread, tablespread & vegemite

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Sandwich, white bread, not further specified
	Sandwich roll, white roll, bacon, egg, cheese & bbq sauce, fast food style
	Sandwich roll, white roll, beef steak with cheese & salad (lettuce, tomato, carrot, onion, capsicum), fast food
	Sandwich roll, white roll, caesar filling (crumbed chicken, bacon, lettuce, parmesan, cream dressing), fast food style
	Sandwich roll, white roll, crumbed chicken fillet with cheese & salad (lettuce, tomato, carrot, onion, capsicum), fast food
	Sandwich roll, white roll, ham with salad (lettuce, tomato, carrot, onion, capsicum), fast food
	Sandwich roll, white roll, marinated chicken breast with salad (lettuce, tomato, carrot, onion, capsicum), fast food
	Sandwich roll, white roll, meatball with cheese & salad (lettuce, tomato, carrot, onion, capsicum), fast food
	Sandwich roll, white roll, pepperoni, salami & ham with cheese & salad (lettuce, tomato, carrot, onion, capsicum), fast food
	Sandwich roll, white roll, reduced fat chicken roll with salad (lettuce, tomato, carrot, onion, capsicum), fast food
	Sandwich roll, white roll, salad (lettuce, tomato, carrot, cucumber, onion, capsicum, olive), fast food
	Sandwich roll, white roll, seafood, cheese & salad (lettuce, tomato, carrot, onion, capsicum), fast food
	Sandwich roll, white roll, tuna with cheese & salad (lettuce, tomato, carrot, onion, capsicum), fast food
	Sandwich roll, white roll, turkey, ham & bacon with cheese & salad (lettuce, tomato, carrot, onion, capsicum), fast food, toasted
	Sandwich roll, white roll, turkey with salad (lettuce, tomato, carrot, onion, capsicum), fast food
	Sandwich roll, white roll, fast food style, not further specified
	Bread, garlic, made with butter
	Bread, garlic & cheese, made with butter
	Bread, herb, made with butter
	Bread, from white flour, added fibre

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Bread, from white flour, added fibre, toasted
	Bread, from white flour, added fibre & calcium
	Bread, from white flour, added fibre & calcium, toasted
	Bread, from white flour, added fibre & folate
	Bread, from white flour, added fibre & folate, toasted
	Bread, from white flour, added fibre & iron
	Bread, from white flour, added fibre & iron, toasted
	Bread, from white flour, added fibre & omega-3 polyunsaturates
	Bread, from white flour, added fibre & omega-3 polyunsaturates, toasted
	Bread, from white flour, added fibre, folate, Fe, Zn, Vit E, B1, B3 & B6
	Bread, from white flour, added fibre, folate, Fe, Zn, Vit E, B1, B3 & B6, toasted
	Bread roll, from white flour, added fibre & folate
	Bread, from white flour, added calcium
	Bread, from white flour, added calcium, toasted
	Bread, from white flour, added folate
	Bread, from white flour, added folate, toasted
	Bread, from white flour, added iron
	Bread, from white flour, added iron, toasted
	Bread, from white flour, added omega-3 polyunsaturates
	Bread, from white flour, added omega-3 polyunsaturates, toasted
	Bread, from white flour, seeds, added folate
	Bread roll, from white flour, added folate
	French toast, plain
	Bread, herb, made with butter, toasted
	Bread, from white flour, toasted
	Bread, from white flour, toasted, not further specified
	Bread roll, from white flour, toasted
	Bread, gluten free, commercial, toasted

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Flat (pita or lebanese) bread
	Doner kebab, beef in flat white bread with lettuce, tomato, onion & sauce
	Doner kebab, chicken in flat white bread with lettuce, tomato, onion & sauce
	Doner kebab, lamb in flat white bread with lettuce, tomato, onion & sauce
	Doner kebab, vegetarian, in flat white bread with lettuce, tomato, onion & sauce
	Wrap, flat white bread with crumbed fried chicken, salad & mayonnaise, fast food style
	Wrap, flat white bread with sausage, bacon, egg & cheese, fast food style
	Bread, foccacia or turkish style bread, plain
	Bread, foccacia or turkish style bread, savoury, with cheese
	Bread, foccacia or turkish style bread, savoury, with cheese, toasted
	Bread, from white flour, crusty, e.g. french stick/baguette
	Bread, from white flour, crusty, e.g. french stick/baguette, added folate
	Bread, from white flour, italian style e.g. ciabatta, pane di casa
	Bread, from white flour, italian style e.g. ciabatta, pane di casa, added folate
	Refined fruit bread
	Bread, from white flour, dried fruit & chocolate
	Bread, from white flour, dried fruit & chocolate, toasted
	Bread, from white flour, dutch style fruit loaf, extra dried fruit
	Bread, from white flour, dutch style fruit loaf, extra dried fruit, toasted
	Bread, gluten free, fruit or raisin
	Bread, gluten free, fruit or raisin, toasted
	Bread, from white flour, dried fruit, added folate
	Bread, from white flour, dried fruit, added folate, toasted
	Bread, from white flour, dates, added folate
Refined rice	***Refined rice***
Cooked form with no added fat or salt	*Products are uncooked, have added fat, added salt or are part of a mixed dish*
Rice, white, boiled without added salt	Rice, white, raw
	Rice, white, boiled with added salt
	Rice, purchased as parboiled (Gold Rice), boiled with added salt
	Rice, flavoured, prepared from dry mix

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Rice, fried, with egg, vegetables & sauce (egg foo young), Chinese restaurant style
	Rice, fried, with meat, seafood, egg & vegetables, Chinese restaurant style
	Rice, fried, with mixed vegetables, unspecified oil
	Rice, fried, with mixed vegetables & chicken, unspecified oil
	Rice, paella style, with chicken, prawns & mixed vegetables
	Rice paper rolls, Asian style, with prawn
	Risotto, bacon, with parmesan cheese
	Risotto, chicken, with parmesan cheese
	Risotto, chicken & pumpkin, with parmesan cheese
	Risotto, mushroom & pumpkin, with parmesan cheese
	Risotto, seafood
	Salad, rice, with vegetables, with dressing, homemade
	Salad, rice, with vegetables, without dressing, homemade
	Sushi, California roll, restaurant style
	Sushi, chicken
	Sushi, meat (beef, pork, lamb)
	Sushi, vegetarian
Refined pasta	***Refined pasta***
Cooked form with no added fat or salt	*Products are uncooked, have added fat, added salt or are part of a mixed dish*
Pasta, white wheat flour based, boiled from dry, without added salt	Pasta, white wheat flour-based, dry (regular pasta)
Pasta, white wheat flour with egg, boiled from dry, without added salt	Pasta, white wheat flour with egg, dry
	Pasta, white wheat flour with egg, boiled from dry, with added salt
	Pasta, white wheat flour & other coloured ingredients, boiled from dry, without added salt
	Pasta, white wheat flour based, boiled from dry, with added salt
	Cannelloni, beef, frozen, baked
	Cannelloni, spinach & ricotta
	Lasagne, beef, frozen, baked
	Lasagne, chicken, homemade
	Lasagne, vegetarian, homemade
	Macaroni cheese, homemade from basic ingredients

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Macaroni cheese, with bacon
	Macaroni cheese, with chicken
	Pasta bolognese, Italian restaurant style
	Pasta in cream based sauce, dry mix
	Pasta, beef or vegetable filled, boiled, with tomato-based sauce
	Pasta, vegetable filled, boiled, with tomato-based sauce
	Pasta, salad, with vegetables
	Pasta, salad, with vegetables & bacon
	Pasta, salad, with vegetables & cheese
	Pasta, salad, with vegetables, cheese & bacon
	Pasta, salad, with vegetables & mayonnaise
	Ravioli, beef, with tomato based sauce, frozen, boiled
	Spaghetti in cheese sauce, canned
	Spaghetti in cheese & tomato sauce, canned
	Spaghetti in meat sauce, canned
	Spaghetti in tomato sauce, salt reduced, canned
	Pasta bake, beef in cream sauce, cheese-topped
	Pasta bake, beef mince, with tomato sauce
	Pasta bake, beef mince, with tomato sauce, cheese-topped
	Pasta bake, beef mince & vegetables, with tomato sauce, cheese-topped
	Pasta bake, beef mince & vegetables, with tomato sauce, cheese & breadcrumb topped
	Pasta bake, cheese sauce, cheese-topped
	Pasta bake, chicken & vegetables, with tomato sauce, cheese-topped
	Pasta bake, fish, with cream sauce, cheese-topped
	Pasta bake, fish, with tomato sauce, cheese-topped
	Pasta bake, fish & vegetables, cream sauce, cheese-topped
	Pasta bake, mixed vegetables, with tomato sauce, cheese-topped
	Pasta bake, with tomato sauce, cheese-topped
	Pasta in cream-based sauce, reconstituted from dry mix with milk & butter

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Pasta in cream-based sauce, reconstituted from dry mix with milk & spread
	Pasta in cream-based sauce, reconstituted from dry mix with water & butter
	Pasta in cream-based sauce, reconstituted from dry mix with water
	Pasta in cream-based sauce, reconstituted from dry mix with water & milk
	Pasta in cream-based sauce, reconstituted from dry mix with water, milk & butter
	Pasta in cream-based sauce, reconstituted from dry mix with water, milk & margarine
	Pasta in cream-based sauce, reconstituted from dry mix with water & table spread
	Pasta, white wheat flour & spinach, boiled without added salt
	Pasta, white wheat flour & soy protein, reduced carbohydrate, dry
	Pasta, white wheat flour & soy protein, reduced carbohydrate, boiled from dry, without added salt
	Pasta, white wheat flour & soy flour, boiled from dry, without added salt
	Pasta, cheese & vegetable filled, without sauce, fast food style
	Pasta, meat filled, boiled, without sauce
	Pasta, vegetable filled, boiled, without sauce
Noodles	***Noodles***
Cooked, with no added fat or salt	*Products are uncooked, have added fat, added salt or are part of a mixed dish*
Noodles	Noodles
Noodle, bean starch or cellophane, boiled	Noodles, rice, with prawns & vegetables (pad Thai), Thai restaurant style
Noodle, rice, boiled without added salt	Noodle, bean starch or cellophane, fried in unspecified oil
Noodle, wheat, Asian style	Noodle, rice, fried in unspecified oil
Noodle, wheat, Asian style, boiled without added salt	Noodle, wheat, Asian style, fried in unspecified oil
Instant noodles	Noodle, boiled, not further specified
Noodle, wheat, instant, low fat, boiled with flavour sachet, drained	Instant noodles
Noodle, wheat, instant, boiled with flavour sachet, drained	Noodle, wheat, instant, boiled without flavour sachet, undrained
	Noodle, wheat, instant, boiled with flavour sachet, undrained
	Noodle, wheat, instant, boiled with flavour sachet, drained and then fried in unspecified oil
	Noodle, wheat, instant, low fat, boiled with flavour sachet, undrained
	Noodle, wheat, instant, uncooked, without flavour sachet
	Noodle, wheat, instant, uncooked, with flavour sachet

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
Other Cereals	***Other Cereals***
Cooked and relatively low in fat (>10g/100g)	*Products are uncooked or are relatively high in fat (>10g/100g)*
Semolina, prepared with water	Barley, pearl, raw
Semolina, prepared with unspecified milk	Barley, wholegrain, raw
Barley, pearl, boiled without added salt or fat	Buckwheat groats, raw
Cornmeal (polenta), cooked in unsalted water without fat	Cornmeal (polenta), raw
Quinoa, cooked in water	Millet, raw
Quinoa, prepared with unspecified milk	Millet, puffed
Tapioca, pearl or seed style, boiled	Quinoa, wholegrain or flour
Couscous, boiled without added salt	Tapioca, pearl or seed style, raw
Tortilla, from wheat flour	Wheat bran, unprocessed
Tortilla, from corn flour	Wheat germ
	Semolina, raw
	Couscous, raw
	Taco shell, from corn flour, plain
Refined Breakfast Cereals	***Refined Breakfast Cereals***
Contain <5g fibre and <30g sugar (<35g if contains fruit) per 100g	*Products contain >30g sugar (or >35g if contains fruit) per 100g*
Unfortified refined cereal	Unfortified refined cereal (none)
Breakfast cereal, flakes of corn, honey, unfortified	Fortified cereal
Breakfast cereal, flakes of corn, unfortified	Breakfast cereal, puffed or popped rice, cocoa coating, added vitamins B1, B2, B3 & folate & Fe
Breakfast cereal, puffed corn, unfortified	Breakfast cereal, mixed grain (wheat & oat), extruded, honey, added vitamins B1, B2, B3 & folate, Fe & Zn
Breakfast cereal, flakes of rice, unfortified	
Breakfast cereal, puffed or popped rice, unfortified	Breakfast cereal, mixed grain (wheat, corn & oat), extruded, fruit flavoured, sweetened, added vitamins B1, B2, B3, C & folate, Fe & Zn
Fortified cereal	
Breakfast cereal, mixed grain (wheat, oat, corn), extruded, added vitamins B1, B2, B3, C & folate, Ca & Fe	Breakfast cereal, mixed grain, extruded, fruit flavoured, sweetened, added vitamins B1, B2, B3 & folate & Fe
Breakfast cereal, mixed grain (wheat, corn, bran), flakes, sultanas & apple, added vitamins B1, B2, B3, & folate, Ca & Fe	Breakfast cereal, frosted flakes of corn, added vitamins B1, B2, B3, C, E & folate, Fe & Zn

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
Breakfast cereal, flakes of rice & wheat, sweetened, berries, added vitamins B1, B2, B3 & folate, Ca, Fe & Zn	Breakfast cereal, puffed or popped rice, cocoa coating, added vitamins B1, B2, B3, C & folate, Ca, Fe & Zn
Breakfast cereal, mixed grain (wheat, corn, rice), flakes, sultanas, almonds & date, added vitamins B1, B2, B3 & folate, Ca & Fe	Breakfast cereal, wheat, extruded, chocolate malt coating, added vitamins B1, B2, B3, C & folate, Ca, Fe & Zn
Breakfast cereal, crispy corn pillows, honey, added vitamins B1, B2, B3 & folate	
Breakfast cereal, crispy corn pillows, cocoa coating, added vitamins B1, B2, B3 & folate	
Breakfast cereal, flakes of rice & wheat, sweetened, peach & apricot, added vitamins B1, B2, B3 & folate, Ca, Fe & Zn	
Breakfast cereal, flakes of rice & wheat, sweetened, added vitamins B1, B2, B3 & folate, Ca, Fe & Zn	
Breakfast cereal, puffed or popped rice, added vitamins B1, B2, B3 & Fe	
Breakfast cereal, flakes of corn, added vitamins B1, B2, B3 & folate & Fe	
Breakfast cereal, puffed or popped rice, honey, added vitamins B1, B2, B3, C & folate, Fe & Zn	
Breakfast cereal, puffed or popped rice, added vitamins B1, B2, B3 & folate & Fe	
Breakfast cereal, flakes of corn, strawberry, added vitamins B1, B2, B3, C & folate, Fe & Zn	
Breakfast cereal, puffed or popped rice, added vitamins B1, B2, B3, C & folate, Fe & Zn	
Breakfast cereal, flakes of corn, choc-malt, added vitamins B1, B2, B3, C & folate, Fe & Zn	
Breakfast cereal, flakes of corn, added vitamins B1, B2, B3, C & folate, Fe & Zn	
Meats and Alternatives	
Seafood	***Seafood***
Cooked, fresh, frozen, canned with no added fat or salt	*Products are uncooked, canned, have added fat or are part of a mixed dish*
Crab, various types, fresh only, boiled or steamed	**Crab**
Lobster, purchased steamed or boiled	Crabmeat, canned in brine, drained
Prawn	Crabmeat, canned in brine, undrained
Prawn, king (large size), flesh only, purchased cooked	**Prawn**
Prawn, king (large size), baked or grilled	Prawn, king (large size), raw (green)
Prawn, school, flesh only, purchased cooked	Prawn, king (large size), fried, unspecified oil
Clam, boiled in unsalted water	Prawn, king (large size), cooked, not further specified
Mussel, green, steamed or boiled	Prawn, curry, tandoori style

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
Oyster	Prawn, garlic, king, home prepared
Oyster, raw	Prawn, stir fry, soy based sauce, asparagus
Oyster, baked or grilled	Prawn toast, Chinese restaurant style
Scallop, boiled, unsalted water	Prawn, king (large size), crumbed, baked
Calamari	Prawn, king (large size), battered, deep fried, canola oil, home prepared
Squid or calamari, baked/grilled	Prawn, crumbed, fried, Chinese restaurant style
Squid or calamari, poached	**Scallop**
	Scallop, raw
	Scallop, fried
	Scallop, crumbed, fried
	Calamari
	Squid or calamari, raw
	Squid or calamari, fried, peanut oil
	Squid or calamari, crumbed, fried, restaurants & take away outlets
	Squid or calamari, crumbed, frozen, baked
	Included for total seafood category only not individual types
	Seafood, mixed, poached, with creamy dressing & lettuce
	Seafood extender or sticks, battered, deep fried, unspecified oil
	Seafood or fish stick or extender (surimi), frozen, raw
Fish	***Fish***
Cooked, canned in water, no added fat or salt	*Products are uncooked, canned in oil or brine, have added fat or are part of a mixed dish*
Fish with high omega-3 content (>1400mg LCN3/100g)	**Fish with high omega-3 content (>1400mg LCN3/100g)**
Salmon, Atlantic, fillet, steamed or poached	Salmon, Australian, canned in brine, drained
Salmon, Atlantic, fillet, grilled	Salmon, Australian, canned in brine
Trout, rainbow, aquacultured, baked or grilled	Salmon, Atlantic, fillet, fried, unspecified butter
Trout, rainbow, aquacultured, steamed or poached	Salmon, Atlantic, fillet, fried, olive oil
Silver perch, aquacultured, baked or grilled	Salmon, Atlantic, fillet, fried, sunflower oil
Silver perch, aquacultured, steamed or poached	Salmon, red, canned in brine, drained

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
Fish with medium omega-3 content (400–1399mg LCN3/100g)	Salmon, Atlantic, fillet, raw
Gemfish, flesh, steamed	Salmon, canned, drained, not further specified
Sardine, canned in tomato sauce, undrained	Salmon, red, canned in brine
Bream, flesh, baked in foil	Salmon, pink, canned in brine, drained
Bream, flesh, steamed	Salmon, canned, undrained, not further specified
Anchovy, canned in oil, drained	Trout, rainbow, aquacultured, raw
Mullet, yelloweye, baked or grilled	Salmon, pink, canned in brine
Milkfish, aquacultured, steamed or poached	Salmon, Atlantic, crumbed, baked or grilled
Mullet, yelloweye, steamed	Trout, rainbow, crumbed, fried in olive oil
Morwong, flesh only, steamed	Fish cake, contains salmon, crumbed, frozen, baked
Tuna, canned in water, drained	Trout, rainbow, battered, deep fried, unspecified oil
Snapper, flesh, steamed	Silver perch, aquacultured, crumbed, fried, olive oil
Tuna, flavoured, canned in water, drained	Silver perch, aquacultured, crumbed, fried, polyunsaturated blended oil
Fish with low omega-3 content (<400mg LCN3/100g)	**Fish with medium omega-3 content (400–1399mg LCN3/100g)**
Blue grenadier (hoki), steamed or poached	Silver perch, aquacultured, raw
Barramundi, aquacultured fillets, baked or grilled	Silver perch, aquacultured, fried, olive oil
Blue grenadier (hoki), baked	Silver perch, aquacultured, fried, unspecified oil
Flathead, flesh only, baked or grilled	Gemfish, raw
Trevally, dory, ling, cod, flounder or sole, baked or grilled	Bream, flesh, fried, canola oil
Barramundi, aquacultured fillets, steamed or poached	Fish, finfish, baked or grilled, not further specified
Flathead, flesh only, steamed	Fish, finfish, fried, canola oil, not further specified
Trevally, dory, ling, cod, flounder or sole, steamed or poached	Fish, finfish, fried, olive oil, not further specified
Whiting, king george, flesh only, steamed	Fish, finfish, fried, polyunsaturated blended oil, not further specified
Tilapia, steamed or poached	Fish, finfish, fried, sunflower oil, not further specified
Bassa (basa), baked or grilled	Fish, finfish, fried, unspecified butter, not further specified
Bassa (basa), steamed or poached	Fish, finfish, fried, unspecified oil, not further specified
Shark (flake), skinless fillet, steamed	Bream, flesh, raw
Shark (flake), skinless fillet, baked or grilled	Fish, finfish, poached, not further specified
Orange roughy, baked or grilled	Bream, flesh, battered, deep fried, tallow based frying fat
Cod, smoked, steamed or poached	Fish, curry, tandoori style

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Bream, flesh, crumbed, fried, olive oil
	Fish, battered, deep fried, purchased ready to eat, not further specified
	Fish, finfish, crumbed, baked or grilled, not further specified
	Mullet, yelloweye, battered, deep fried
	Fish, finfish, crumbed, fried, unspecified butter, not further specified
	Fish, finfish, crumbed, fried, canola oil, not further specified
	Fish, finfish, crumbed, fried, olive oil, not further specified
	Fish, finfish, crumbed, fried, polyunsaturated blended oil, not further specified
	Fish, finfish, crumbed, fried, sunflower oil, not further specified
	Fish, finfish, crumbed, fried, unspecified frying fat or oil, not further specified
	Mullet, yelloweye, crumbed, fried, unspecified butter
	Flathead, flesh only, battered, deep fried in solid frying fat
	Fish, finfish, battered, fried, canola oil, not further specified
	Fish, finfish, battered, fried, olive oil, not further specified
	Fish, finfish, battered, fried, polyunsaturated blended oil, not further specified
	Fish, curry, creamy sauce, home prepared
	Fish, curry, prepared with curry powder
	Fish cake, crumbed, frozen, baked
	Fish, pasta bake, tuna mornay with cheese & breadcrumbs
	Snapper, battered, deep fried, tallow based frying fat
	Fish, stew or casserole, simmer sauce, with onion
	Fish with low omega-3 content (<400mg LCN3/100g)
	Snapper, flesh, fried, butter
	Snapper, flesh, fried, canola oil
	Snapper, flesh, fried, olive oil
	Mulloway, fried, unspecified butter
	Morwong, raw
	Marinara mix, with fish & shellfish, fresh, poached or steamed
	Fish, finfish, raw, not further specified

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Tuna, canned in brine, drained
	Milkfish, aquacultured, raw
	Mullet, yelloweye, raw
	Marinara mix, with fish & shellfish, fresh, raw
	Salmon, smoked, sliced
	Tuna, canned in vegetable oil
	Tuna, canned, not further specified
	Tuna, yellowfin steaks, grilled or barbecued with olive oil
	Snapper, flesh, raw
	Tuna, flavoured, canned in oil, drained
	Blue grenadier (hoki), fried, canola oil
	Blue grenadier (hoki), fried, olive oil
	Tuna, yellowfin, fresh, raw
	Flathead, flesh only, fried, butter
	Flathead, flesh only, fried, canola oil
	Flathead, flesh only, fried, olive oil
	Flathead, flesh only, fried, polyunsaturated blended oil
	Blue grenadier (hoki), raw
	Barramundi, aquacultured fillets, fried, olive oil
	Barramundi, aquacultured fillets, fried, polyunsaturated blended oil
	Barramundi, aquacultured fillets, fried, sunflower oil
	Trevally, dory, ling, cod, flounder or sole, fried, corn oil
	Trevally, dory, ling, cod, flounder or sole, fried, olive oil
	Trevally, dory, ling, cod, flounder or sole, fried, unspecified oil
	Barramundi, aquacultured fillets, raw
	Tuna, canned, with mayonnaise
	Fish cake, deep fried, from take away food shop
	Flathead, flesh only, raw
	Trevally, dory, ling, cod, flounder or sole, raw
	Whiting, king george, flesh only, floured, fried, peanut oil

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Tuna, canned in brine
	Mulloway, flesh only, raw
	Tuna, canned in vegetable oil, drained
	Whiting, king george, flesh only, fried, unspecified butter
	Whiting, king george, flesh only, fried, canola oil
	Whiting, king george, flesh only, fried, corn oil
	Whiting, king george, flesh only, fried, olive oil
	Whiting, king george, flesh only, fried, polyunsaturated blended oil
	Whiting, king george, flesh only, fried, sunflower oil
	Whiting, king george, flesh only, raw
	Tilapia, raw
	Bassa (basa), fried, olive oil
	Bassa (basa), raw
	Shark (flake), skinless fillet, fried, olive oil
	Shark (flake), skinless fillet, fried, polyunsaturated blended oil
	Shark (flake), skinless fillet, raw
	Orange roughy, flesh, raw
	Fish, fillet, frozen, glazed & flavoured, baked
	Fish, battered, frozen, baked, not further specified
	Fish, patty or burger, tuna, potato & other vegetables, grilled, baked or fried
	Snapper, flesh, crumbed, baked or grilled
	Fish, stew or casserole, simmer sauce, with vegetables including beans
	Fish cake, with vegetables, crumbed, frozen, baked, not further specified
	Snapper, crumbed, fried, polyunsaturated blended oil
	Snapper, crumbed, fried, polyunsaturated margarine spread
	Fish, fillet, frozen, reduced energy sauce, microwaved
	Blue grenadier (hoki), crumbed/floured, baked or roasted
	Trevally, dory, ling, cod, flounder or sole, crumbed, baked or grilled
	Fish cake, purchased frozen, shallow fried, peanut oil

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Fish finger, crumbed, frozen, baked or roasted
	Fish, crumbed, frozen, baked, not further specified
	Blue grenadier (hoki), battered, fried, blended polyunsaturated oil
	Flathead, crumbed/floured, fried, unspecified butter
	Fish, crumbed, reduced fat, frozen, baked, not further specified
	Fish finger, crumbed, frozen, fried, unspecified butter
	Fish finger, crumbed, frozen, grilled
	Shark (flake), skinless fillet, battered, deep fried, solid fat
	Fish ball, Asian style, raw
	Flathead, crumbed/floured, fried, canola oil
	Flathead, crumbed/floured, fried, olive oil
	Fish finger, crumbed, frozen, fried, blended polyunsaturated oil
	Fish finger, crumbed, frozen, fried, canola oil
	Fish finger, crumbed, frozen, fried, olive oil
	Fish finger, crumbed, frozen, fried, unspecified oil
	Trevally, dory, ling, cod, flounder or sole, crumbed, fried, canola oil
	Trevally, dory, ling, cod, flounder or sole, crumbed, fried, olive oil
	Trevally, dory, ling, cod, flounder or sole, crumbed, fried, polyunsaturated blended oil
	Trevally, dory, ling, cod, flounder or sole, crumbed, fried, unspecified oil
	Fish, crumbed, frozen, fried, olive oil, not further specified
	Fish, crumbed, frozen, fried, polyunsaturated blended oil, not further specified
	Fish finger, crumbed, frozen, raw
	Trevally, dory, ling, cod, flounder or sole, battered, deep fried, unspecified fat or oil
	Fish, cocktail size, battered, deep fried, purchased ready to eat, not further specified
	Whiting, king george, flesh only, crumbed/floured, fried, unspecified butter
	Whiting, king george, flesh only, crumbed/floured, fried, olive oil
	Whiting, king george, flesh only, crumbed/floured, fried, polyunsaturated blended oil
	Whiting, king george, flesh only, crumbed/floured, fried, unspecified oil
	Seafood or fish stick (surimi), frozen, fried, peanut oil
	Bassa (basa), crumbed, baked or grilled

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Bassa (basa), crumbed/floured, fried, olive oil
	Shark (flake), skinless fillet, crumbed/floured, fried, canola oil
	Orange roughy, crumbed, baked or grilled
	Orange roughy, battered, deep fried, unspecified fat or oil
Poultry	***Poultry***
Cooked, lean and semi-trimmed, prepared without added fat	*Products are uncooked, fully trimmed or totally untrimmed, have added fat or are part of a mixed dish*
Chicken	Chicken
Chicken, breast, lean, baked	Chicken, wing, lean, marinated, baked or roasted
Chicken, breast, lean, casseroled	Chicken, wing, lean, marinated, grilled or BBQ
Chicken, breast, lean, grilled or BBQ	Chicken, wing, lean, marinated, stewed
Chicken, breast, lean, stir-fried	Chicken, wing, lean, skin & fat, marinated, baked or roasted
Chicken, drumstick, lean, baked	Chicken, wing, lean, skin & fat, marinated, fried, canola oil
Chicken, drumstick, lean, casseroled	Chicken, wing, lean, skin & fat, marinated, fried, corn oil
Chicken, kebab, grilled or BBQ	Chicken, wing, lean, skin & fat, marinated, fried, olive oil
Chicken, mince, boiled or simmered	Chicken, wing, lean, skin & fat, marinated, fried, polyunsaturated blended oil
Chicken, mince, dry fried	Chicken, liver, fried, butter
Chicken, thigh, lean, baked	Chicken, breast, lean, raw
Chicken, thigh, lean, casseroled	Chicken, breast, lean, fried, canola oil
Chicken, thigh, lean, stir-fried	Chicken, breast, lean, fried, olive oil
Chicken, wing, lean, baked	Chicken, breast, lean, fried, polyunsaturated blended oil
Chicken, wing, lean, casseroled	Chicken, breast, lean, fried, polyunsaturated margarine
Chicken, wing, lean, grilled or bbq	Chicken, breast, lean, fried, sunflower oil
Chicken, whole, lean, baked or roasted	Chicken, breast, lean, fried, unspecified butter
Chicken, whole, lean, grilled or BBQ	Chicken, breast, lean, fried, unspecified oil
Chicken, whole, lean, stewed or braised	Chicken, breast, lean, smoked
Chicken, maryland, lean, baked	Chicken, breast, lean, skin & fat, raw
Chicken, maryland, lean, stewed or braised	Chicken, breast, lean, skin & fat, baked

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
Duck, lean, stewed or casseroled	Chicken, breast, lean, skin & fat, casseroled
Turkey	Chicken, breast, lean, skin & fat, fried, canola oil
Turkey, breast, lean, baked	Chicken, breast, lean, skin & fat, fried, olive oil
Turkey, breast, lean, stewed or braised	Chicken, breast, lean, skin & fat, fried, unspecified oil
Turkey, hindquarter, lean, baked	Chicken, breast, lean, skin & fat, grilled or BBQ
Quail, flesh & skin, baked	Chicken, breast, lean, skin & fat, stir-fried
	Chicken, breast, lean, skin & fat, smoked
	Chicken, drumstick, lean, raw
	Chicken, drumstick, lean, fried, canola oil
	Chicken, drumstick, lean, fried, olive oil
	Chicken, drumstick, lean, fried, unspecified polyunsaturated margarine
	Chicken, drumstick, lean, fried, unspecified oil
	Chicken, drumstick, lean, skin & fat, raw
	Chicken, drumstick, lean, skin & fat, baked
	Chicken, drumstick, lean, skin & fat, casseroled
	Chicken, drumstick, lean, skin & fat, fried, canola oil
	Chicken, drumstick, lean, skin & fat, fried, corn oil
	Chicken, drumstick, lean, skin & fat, fried, olive oil
	Chicken, kebab, raw
	Chicken, maryland, lean, raw
	Chicken, maryland, lean, fried, olive oil
	Chicken, maryland, lean, fried, polyunsaturated blended oil
	Chicken, maryland, lean, skin & fat, baked
	Chicken, maryland, lean, skin & fat, fried, canola oil
	Chicken, maryland, lean, skin & fat, fried, polyunsaturated blended oil
	Chicken, maryland, lean, skin & fat, stewed or braised
	Chicken, mince, raw
	Chicken, mince, fried, canola oil
	Chicken, mince, fried, olive oil

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Chicken, mince, fried, peanut oil
	Chicken, mince, fried, polyunsaturated blended oil
	Chicken, mince, fried, unspecified butter
	Chicken, mince, fried, unspecified oil
	Chicken, mince, cooked, not further specified
	Chicken, thigh, lean, raw
	Chicken, thigh, lean, fried, canola oil
	Chicken, thigh, lean, fried, olive oil
	Chicken, thigh, lean, fried, polyunsaturated blended oil
	Chicken, thigh, lean, fried, sunflower oil
	Chicken, thigh, lean, fried, unspecified butter
	Chicken, thigh, lean, fried, unspecified oil
	Chicken, thigh, lean, skin & fat, raw
	Chicken, thigh, lean, skin & fat, baked
	Chicken, thigh, lean, skin & fat, casseroled
	Chicken, thigh, lean, skin & fat, fried, olive oil
	Chicken, thigh fillets (flesh & some fat), raw
	Chicken, wing, lean, raw
	Chicken, wing, lean, fried, olive oil
	Chicken, wing, lean, fried, unspecified butter
	Chicken, wing, lean, skin & fat, raw
	Chicken, wing, lean, skin & fat, baked
	Chicken, wing, lean, skin & fat, casseroled
	Chicken, wing, lean, skin & fat, fried, canola oil
	Chicken, wing, lean, skin & fat, fried, corn oil
	Chicken, wing, lean, skin & fat, fried, olive oil
	Chicken, wing, lean, skin & fat, fried, unspecified oil
	Chicken, wing, lean, skin & fat, marinated, fried, unspecified butter
	Chicken, raw, not further specified

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Chicken, baked or roasted, not further specified
	Chicken, fried, unspecified oil, not further specified
	Chicken, grilled or BBQ, not further specified
	Chicken, stewed or braised, not further specified
	Chicken, cooked, not further specified
	Chicken, whole, lean, raw
	Chicken, whole, lean, fried, canola oil
	Chicken, whole, lean, fried, olive oil
	Chicken, whole, lean, skin & fat, raw
	Chicken, whole, lean, skin & fat, fried, olive oil
	Chicken, whole, lean, skin & fat, fried, unspecified oil
	Chicken, whole, lean, skin & fat, stewed or braised
	Chicken, whole, lean, skin & fat, grilled or bbq
	Chicken, skin only, raw
	Chicken, skin only, baked
	Chicken, skin only, casseroled
	Chicken, fat only, raw
	Chicken, fat only, baked
	Chicken, fat only, casseroled
	Chicken patty or meatball, plain, fried, unspecified oil
	Sausage, chicken, raw
	Sausage, chicken, baked or microwaved
	Sausage, chicken, boiled or casseroled
	Sausage, chicken, fried without oil
	Sausage, chicken, grilled or BBQ
	Chicken, kebab, marinated, fried, unspecified oil
	Chicken, kebab, marinated, grilled or BBQ
	Chicken, kebab, marinated, satay sauce, grilled or BBQ
	Chicken, kebab, marinated, yoghurt based sauce, grilled or BBQ

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Chicken, curry, butter, Indian restaurant style
	Chicken, curry, green, Thai restaurant style
	Chicken, curry, korma, home prepared with purchased sauce
	Chicken, curry, prepared with coconut milk, commercial paste & other ingredients
	Chicken, curry, prepared with curry powder, onions & stock
	Chicken, curry, prepared with indian style simmer sauce & extra chilli
	Chicken, curry, prepared with tomatoes, commercial paste & other ingredients
	Chicken, curry, rogan josh, prepared from commercial sauce
	Chicken, curry, tandoori, Indian restaurant style
	Chicken, curry, tikka, Indian restaurant style
	Chicken, salad (lettuce, tomato, cabbage, carrot), with dressing, fast food style
	Chicken, stew or casserole, black bean sauce
	Chicken, stew or casserole, gravy
	Chicken, stew or casserole, gravy, capsicum, onion & potato
	Chicken, stew or casserole, plum sauce, vegetables
	Chicken, stew or casserole, simmer sauce, vegetables including beans
	Chicken, stew or casserole, simmer sauce, onion
	Chicken, stew or casserole, tomato sauce, vegetables including potato
	Chicken, stir fry, black bean sauce
	Chicken, stir fry, capsicum, carrot & onion
	Chicken, stir fry, chop suey (chicken & vegetables), Chinese restaurant style
	Chicken, stir fry, with almonds, Chinese restaurant style
	Chicken, stir fry, plum & oyster sauce
	Chicken, stir fry, plum & oyster sauce, mixed vegetables
	Chicken, stir fry, satay sauce
	Chicken, stir fry, soy based sauce, mixed vegetables
	Chicken, stir fry, sweet & sour sauce, capsicum, carrot & onion
	Chicken patty or meatball, plain, crumbed, fried, unspecified oil
	Chicken patty or meatball, with onion & bread crumbs, fried, unspecified oil

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Chicken patty or meatball, with onion & bread crumbs, crumbed, fried, unspecified oil
	Chicken patty or meatball, with vegetables, crumbed, fried, unspecified oil
	Chicken, stew or casserole, simmer sauce, pasta & vegetables
	Chicken, stir fry, chow mein (chicken & noodles), Chinese restaurant style
	Chicken, stir fry, hokkien noodle, capsicum, carrot & onion
	Chicken, stir fry, plum & oyster sauce, hokkien noodles & mixed vegetables
	Chicken, stir fry, satay sauce, hokkien noodle, capsicum, carrot & onion
	Chicken, stir fry, soy based sauce, hokkien noodle & mixed vegetables
	Chicken, stir fry, sweet & sour sauce, hokkien noodle & mixed vegetables
	Chicken, breast, lean, crumbed, baked without oil
	Chicken, breast, lean, crumbed, fried, canola oil
	Chicken, breast, lean, crumbed, fried, olive oil
	Chicken, breast, lean, crumbed, fried, polyunsaturated blended oil
	Chicken, breast, lean, crumbed, fried, sunflower oil
	Chicken, breast, lean, crumbed, fried, unspecified butter
	Chicken, breast, lean, crumbed, fried, unspecified oil
	Chicken, breast, lean, crumbed, fried, unspecified polyunsaturated table spread
	Chicken, breast, lean, skin & fat, crumbed, baked without oil
	Chicken, breast, lean, skin & fat, crumbed, fried, canola oil
	Chicken, breast, lean, skin & fat, crumbed, fried, corn oil
	Chicken, breast, lean, skin & fat, crumbed, fried, olive oil
	Chicken, breast, lean, skin & fat, crumbed, fried, unspecified oil
	Chicken, breast, lean, crumbed, filled with butter & herbs, baked with oil
	Chicken, breast, lean, crumbed, topped with cheese & ham, baked with oil
	Chicken, drumstick, lean, crumbed, baked with oil
	Chicken, drumstick, lean, crumbed, fried, canola oil
	Chicken, drumstick, lean, crumbed, fried, corn oil
	Chicken, drumstick, lean, crumbed, fried, olive oil
	Chicken, drumstick, lean, crumbed, fried, unspecified oil
	Chicken, drumstick, lean, skin & fat, crumbed, baked with oil

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Chicken, drumstick, lean, skin & fat, crumbed, fried, canola oil
	Chicken, drumstick, lean, skin & fat, crumbed, fried, olive oil
	Chicken, drumstick, lean, skin & fat, crumbed, fried, polyunsaturated blended oil
	Chicken, drumstick, lean, skin & fat, crumbed, fried, sunflower oil
	Chicken, drumstick, lean, skin & fat, crumbed, fried, unspecified oil
	Chicken, maryland, lean, crumbed, fried, polyunsaturated blended oil
	Chicken, maryland, lean, skin & fat, crumbed, baked with oil
	Chicken, maryland, lean, skin & fat, crumbed, fried, canola oil
	Chicken, maryland, lean, skin & fat, crumbed, fried, unspecified oil
	Chicken, nugget, frozen, baked without oil
	Chicken, nugget, frozen, fried, canola oil
	Chicken, nugget, McDonalds, fried, canola oil
	Chicken, nugget, McDonalds, fried, canola oil, with tomato sauce
	Chicken, nugget, frozen, fried, ghee
	Chicken, nugget, frozen, fried, olive oil
	Chicken, nugget, frozen, fried, polyunsaturated blended oil
	Chicken, nugget, frozen, fried, polyunsaturated tablespread
	Chicken, nugget, frozen, fried, sunflower oil
	Chicken, nugget, frozen, fried, unspecified oil
	Chicken, nugget, frozen, cooked, not further specified
	Chicken, nugget, lite, frozen, baked without oil
	Chicken, strip/portion, fried, canola oil, fast food
	Chicken patty or meatball, crumbed, frozen, baked without oil
	Chicken, thigh, lean, crumbed, baked with oil
	Chicken, thigh, lean, crumbed, fried, canola oil
	Chicken, thigh, lean, crumbed, fried, olive oil
	Chicken, thigh, lean, crumbed, fried, polyunsaturated blended oil
	Chicken, thigh, lean, crumbed, fried, unspecified oil
	Chicken, thigh, lean, crumbed, stir-fried

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Chicken, thigh, lean, skin & fat, crumbed, baked with oil
	Chicken, thigh, lean, skin & fat, crumbed, fried, olive oil
	Chicken, wing, lean, crumbed, baked without oil
	Chicken, wing, lean, crumbed, fried, unspecified oil
	Chicken, wing, lean, skin & fat, crumbed, baked with oil
	Chicken, wing, lean, skin & fat, crumbed, fried, canola oil
	Chicken, wing, lean, skin & fat, crumbed, fried, polyunsaturated blended oil
	Chicken, wing, lean, skin & fat, crumbed, fried, unspecified butter
	Chicken, wing, lean, skin & fat, crumbed, fried, unspecified oil
	Chicken, wrapped in puff pastry, baked
	Chicken, various pieces, coated, deep-fried, Kentucky Fried Chicken
	Chicken, battered, with lemon or honey sauce, Chinese restaurant style
	Burger patty or rissole, chicken, commercial, grilled or fried without oil or fat
	Chicken patty or meatball, with onion, fried, unspecified oil
	Chicken, baked with tomato, eggplant & cheese, parmigiana style
	Duck
	Duck, lean, raw
	Duck, lean, skin & fat, baked or roasted
	Duck, battered, with sweet & sour sauce, Chinese restaurant style
	Turkey
	Turkey, breast, lean, raw
	Turkey, breast, lean, fried, unspecified oil
	Turkey, breast, lean, smoked
	Turkey, breast, lean, skin & fat, baked
	Turkey, hindquarter, lean, skin & fat, baked
	Turkey, wing, flesh, skin & fat, casseroled
	Turkey, breast, lean, crumbed, fried, unspecified oil

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
Red Meat	***Red Meat***
Cooked, lean and semi-trimmed, prepared without added fat	*Products are uncooked, fully trimmed or totally untrimmed, have added fat or are part of a mixed dish*
Beef	Beef
Beef, blade steak, lean, grilled	Beef, blade steak, semi-trimmed, fried, polyunsaturated blended oil
Beef, blade steak, semi-trimmed, baked or roasted	Beef, blade steak, semi-trimmed, fried, unspecified monounsaturated margarine
Beef, blade steak, semi-trimmed, grilled	Beef, blade steak, semi-trimmed, fried, unspecified oil
Beef, blade steak, semi-trimmed, stewed or braised	Beef, blade steak, untrimmed, raw
Beef, chuck steak, trimmed, casseroled	Beef, blade steak, untrimmed, baked or roasted
Beef, fillet, lean, grilled	Beef, blade steak, untrimmed, fried, canola oil
Beef, fillet, lean, stewed or braised	Beef, blade steak, untrimmed, grilled
Beef, fillet, semi-trimmed, grilled	Beef, blade steak, untrimmed, stewed/braised
Beef, fillet, semi-trimmed, stewed or braised	Beef, chuck steak, lean, raw
Beef, fillet, scotch, lean, grilled	Beef, chuck steak, seperable lean, raw
Beef, fillet, scotch, lean, stewed or braised	Beef, chuck steak, trimmed, fried, canola oil
Beef, fillet, scotch, semi-trimmed, grilled	Beef, chuck steak, trimmed, fried, olive oil
Beef, fillet, scotch, semi-trimmed, stewed or braised	Beef, chuck steak, untrimmed, raw
Beef, kebab, grilled or BBQ	Beef, chuck steak, untrimmed, casseroled
Beef, mince, hamburger, boiled or simmered	Beef, chuck steak, untrimmed, grilled or bbq
Beef, mince, hamburger, dry fried	Beef, fillet, lean, raw
Beef, mince, premium, boiled or simmered	Beef, fillet, lean, fried, olive oil
Beef, mince, premium, dry fried	Beef, fillet, lean, fried, polyunsaturated margarine
Beef, mince, low fat, boiled or simmered	Beef, fillet, lean, fried, polyunsaturated blended oil
Beef, mince, low fat, dry fried	Beef, fillet, lean, fried, sunflower oil
Beef, round steak, lean, grilled	Beef, fillet, semi-trimmed, fried, sunflower oil
Beef, round steak, lean, stewed or braised	Beef, fillet, semi-trimmed, fried, unspecified oil
Beef, round steak, semi-trimmed, grilled	Beef, fillet, untrimmed, raw
Beef, round steak, semi-trimmed, stewed or braised	Beef, fillet, untrimmed, fried, canola oil
Beef, rump steak, lean, baked or roasted	Beef, fillet, untrimmed, fried, unspecified butter

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
Beef, rump steak, lean, grilled	Beef, fillet, untrimmed, grilled
Beef, rump steak, lean, stewed or braised	Beef, fillet, scotch, lean, raw
Beef, rump steak, semi-trimmed, grilled	Beef, fillet, scotch, lean, fried, olive oil
Beef, rump steak, semi-trimmed, stewed or braised	Beef, fillet, scotch, lean, fried, sunflower oil
Beef, sirloin steak, lean, grilled	Beef, fillet, scotch, lean, fried, unspecified butter
Beef, sirloin steak, semi-trimmed, grilled	Beef, fillet, scotch, semi-trimmed, raw
Beef, sirloin steak, semi-trimmed, stewed or braised	Beef, fillet, scotch, semi-trimmed, fried, canola oil
Beef, t-bone steak, lean, grilled	Beef, fillet, scotch, semi-trimmed, fried, olive oil
Beef, t-bone steak, lean, stewed or braised	Beef, fillet, scotch, semi-trimmed, fried, polyunsaturated blended oil
Beef, t-bone steak, semi-trimmed, grilled	Beef, fillet, scotch, semi-trimmed, fried, sunflower oil
Beef, topside roast, lean, baked or roasted	Beef, fillet, scotch, untrimmed, raw
Beef, topside roast, semi-trimmed, baked or roasted	Beef, fillet, scotch, untrimmed, fried, canola oil
Beef, topside steak, lean, grilled or BBQ	Beef, fillet, scotch, untrimmed, fried, unspecified butter
Beef, topside steak, lean, stewed or braised	Beef, fillet, scotch, untrimmed, fried, unspecified oil
Beef, topside steak, semi-trimmed, stewed or braised	Beef, fillet, scotch, untrimmed, grilled
Beef, topside steak, semi-trimmed, grilled or BBQ	Beef, mince, hamburger, raw
Lamb	Beef, mince, hamburger, fried, canola oil
Lamb, chump chop, lean, grilled	Beef, mince, hamburger, fried, olive oil
Lamb, chump chop, lean, stewed or casseroled	Beef, mince, hamburger, fried, polyunsaturated blended oil
Lamb, chump chop, semi-trimmed, grilled	Beef, mince, hamburger, fried, sunflower oil
Lamb, easy carve shoulder, lean, baked or roasted	Beef, mince, hamburger, fried, unspecified oil
Lamb, easy carve shoulder, semi-trimmed, baked or roasted	Beef, mince, regular, raw
Lamb, forequarter chop, lean, grilled	Beef, mince, regular, baked or microwaved
Lamb, forequarter chop, lean, stewed or casseroled	Beef, mince, regular, boiled or simmered
Lamb, forequarter chop, semi-trimmed, grilled	Beef, mince, regular, dry fried
Lamb, forequarter chop, semi-trimmed, stewed	Beef, mince, regular, fried, canola oil
Lamb, frenched cutlet/rack, lean, stewed or casseroled	Beef, mince, regular, fried, olive oil
Lamb, frenched cutlet/rack, lean, grilled	Beef, mince, regular, fried, polyunsaturated blended oil
Lamb, frenched cutlet/rack, semi-trimmed, grilled	Beef, mince, regular, fried, sunflower oil

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
Lamb, frenched cutlet/rack, semi-trimmed, stewed or casseroled	Beef, mince, regular, fried, unspecified monounsaturated margarine
Lamb, leg roast, lean, baked or roasted	Beef, mince, regular, fried, unspecified polyunsaturated margarine
Lamb, leg roast, semi-trimmed, baked or roasted	Beef, mince, regular, fried, unspecified oil
Lamb, loin chop, lean, grilled	Beef, mince, premium, raw
Lamb, loin chop, lean, stewed or casseroled	Beef, mince, premium, fried, canola oil
Lamb, loin chop, semi-trimmed, grilled	Beef, mince, premium, fried, olive oil
Lamb, mince, dry fried	Beef, mince, premium, fried, polyunsaturated blended oil
Lamb, trim lamb, mini roast, lean, baked or roasted	Beef, mince, premium, fried, soybean oil
Lamb, trim lamb, mini roast, semi-trimmed, baked or roasted	Beef, mince, premium, fried, sunflower oil
Lamb, trim lamb, steaks, lean, grilled	Beef, mince, premium, fried, unspecified oil
Lamb, trim lamb, steaks, lean, stewed or casseroled	Beef, mince, low fat, raw
Lamb, trim lamb, steaks, semi-trimmed, baked or roasted	Beef, mince, low fat, fried, canola oil
Lamb, trim lamb, stir-fry strips, lean, stewed or casseroled	Beef, mince, low fat, fried, olive oil
Lamb, trim lamb, stir-fry strips, lean, stir fried	Beef, mince, low fat, fried, polyunsaturated blended oil
Veal	Beef, mince, low fat, fried, sunflower oil
Veal, leg steak, lean, grilled	Beef, mince, low fat, fried, unspecified polyunsaturated margarine
Veal, loin chop, lean, grilled	Beef, mince, low fat, fried, unspecified oil
Venison, grilled or BBQ	Beef, mince, raw, not further specified
Kangaroo	Beef, mince, baked or microwaved, not further specified
Kangaroo, rump, baked	Beef, mince, boiled or simmered, not further specified
Kangaroo, loin fillet, grilled	Beef, mince, dry fried, not further specified
Pork	Beef, mince, fried, canola oil, not further specified
Pork, butterfly steak, lean, grilled	Beef, mince, fried, olive oil, not further specified
Pork, forequarter chop, lean, grilled or BBQ	Beef, mince, fried, polyunsaturated blended oil, not further specified
Pork, forequarter shoulder roast, lean, BBQ	Beef, mince, fried, unspecified oil, not further specified
Pork, forequarter shoulder, roast, trimmed, BBQ	Beef, mince, grilled, not further specified
Pork, leg, diced, lean, boiled or simmered	Beef, mince, cooked, not further specified
Pork, leg, diced, trimmed, boiled or simmered	Beef, round steak, lean, raw
Pork, leg, diced, trimmed, grilled	Beef, round steak, lean, fried, olive oil

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
Pork, leg, diced, trimmed, stewed or casseroled	Beef, round steak, semi-trimmed, raw
Pork, leg roast, lean, baked or roasted	Beef, round steak, semi-trimmed, fried, canola oil
Pork, leg roast, trimmed, roasted	Beef, round steak, semi-trimmed, fried, olive oil
Pork, leg schnitzel, lean, dry fried	Beef, rump steak, lean, raw
Pork, leg schnitzel, trimmed, dry fried	Beef, rump steak, lean, fried, canola oil
Pork, leg steak, lean, grilled	Beef, rump steak, lean, fried, olive oil
Pork, leg steak, lean, stewed or casseroled	Beef, rump steak, lean, fried, polyunsaturated blended oil
Pork, leg strips, lean, stir-fried	Beef, rump steak, lean, fried, unspecified oil
Pork, leg strips, trimmed, stir fried	Beef, rump steak, semi-trimmed, raw
Pork, loin chop, lean, grilled	Beef, rump steak, semi-trimmed, fried, canola oil
Pork, loin chop, trimmed of fat, grilled	Beef, rump steak, semi-trimmed, fried, olive oil
Pork, medallion steak, lean, grilled	Beef, rump steak, semi-trimmed, fried, polyunsaturated blended oil
Pork, mince, stir-fried without oil	Beef, rump steak, semi-trimmed, fried, sunflower oil
	Beef, rump steak, semi-trimmed, fried, unspecified butter
	Beef, rump steak, semi-trimmed, fried, unspecified oil
	Beef, rump steak, untrimmed, raw
	Beef, rump steak, untrimmed, fried, olive oil
	Beef, rump steak, untrimmed, fried, polyunsaturated blended oil
	Beef, rump steak, untrimmed, fried, unspecified butter
	Beef, rump steak, untrimmed, fried, unspecified oil
	Beef, rump steak, untrimmed, grilled
	Beef, rump steak, untrimmed, stewed or braised
	Beef, silverside, corned, lean & fat, boiled
	Beef, silverside roast, untrimmed, baked or roasted
	Beef, sirloin steak, semi-trimmed, raw
	Beef, sirloin steak, semi-trimmed, fried, canola oil
	Beef, sirloin steak, semi-trimmed, fried, olive oil
	Beef, sirloin steak, semi-trimmed, fried, unspecified butter
	Beef, sirloin steak, semi-trimmed, fried, unspecified oil

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Beef, sirloin steak, untrimmed, raw
	Beef, sirloin steak, untrimmed, fried, olive oil
	Beef, sirloin steak, untrimmed, fried, unspecified oil
	Beef, sirloin steak, untrimmed, grilled
	Beef, stir-fry strips, lean, raw
	Beef, stir-fry strips, lean, fried, olive oil
	Beef, stir-fry strips, lean, fried, unspecified oil
	Beef, stir-fry strips, lean, stewed or braised
	Beef, stir-fry strips, lean, stir fried
	Beef, stir-fry strips, untrimmed, raw
	Beef, stir-fry strips, untrimmed, stir fried
	Beef, t-bone steak, lean, raw
	Beef, t-bone steak, semi-trimmed, raw
	Beef, t-bone steak, semi-trimmed, fried, canola oil
	Beef, t-bone steak, semi-trimmed, fried, olive oil
	Beef, t-bone steak, semi-trimmed, fried, polyunsaturated blended oil
	Beef, t-bone steak, semi-trimmed, fried, unspecified butter
	Beef, t-bone steak, semi-trimmed, fried, unspecified oil
	Beef, t-bone steak, untrimmed, raw
	Beef, t-bone steak, untrimmed, fried, canola oil
	Beef, t-bone steak, untrimmed, fried, olive oil
	Beef, t-bone steak, untrimmed, fried, unspecified oil
	Beef, t-bone steak, untrimmed, fried, unspecified butter
	Beef, t-bone steak, untrimmed, grilled
	Beef, topside roast, lean, raw
	Beef, topside roast, untrimmed, baked or roasted
	Beef, topside steak, lean, raw
	Beef, topside steak, lean, fried, olive oil
	Beef, topside steak, lean, fried, unspecified butter

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Beef, topside steak, lean, fried, unspecified oil
	Beef, topside steak, semi-trimmed, raw
	Beef, topside steak, semi-trimmed, fried, olive oil
	Beef, topside steak, semi-trimmed, fried, polyunsaturated blended oil
	Beef, topside steak, semi-trimmed, fried, unspecified oil
	Beef, topside steak, untrimmed, raw
	Beef, topside steak, untrimmed, fried, canola oil
	Beef, topside steak, untrimmed, grilled or BBQ
	Beef, raw, not further specified
	Beef, baked, not further specified
	Beef, fried, canola oil, not further specified
	Beef, fried, olive oil, not further specified
	Beef, fried, polyunsaturated blended oil, not further specified
	Beef, fried, unspecified butter, not further specified
	Beef, fried, unspecified oil, not further specified
	Beef, grilled or BBQ, not further specified
	Beef, stewed, not further specified
	Beef, cooked, not further specified
	Beef, blade steak, semi-trimmed, crumbed, fried, olive oil
	Beef, blade steak, semi-trimmed, crumbed, fried, unspecified oil
	Beef, kebab, marinated, satay sauce, grilled or BBQ
	Beef, kebab, marinated, soy sauce, grilled or BBQ
	Beef, bolognaise pasta sauce, mince, tomato & olive oil, homemade
	Beef, curry, coconut cream, Vietnamese restaurant style
	Beef, curry, korma, home prepared with purchased sauce
	Beef, curry, prepared with curry powder, onions & stock
	Beef, curry, tandoori, home prepared
	Beef, curry, vindaloo, Indian restaurant style
	Beef, stew with kidney beans, chilli con carne

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Beef, stew or casserole, gravy
	Beef, stew or casserole, gravy, capsicum, onion & potato
	Beef, stew or casserole, red wine & pepper sauce, onion, garlic & potato
	Beef, stew or casserole, simmer sauce & vegetables including beans
	Beef, stew or casserole, tomato sauce & vegetables including potato
	Beef, stroganoff (steak, mushroom & sour cream casserole)
	Beef, stir fry, black bean sauce, bok choy & onion
	Beef, stir fry, mixed vegetables
	Beef, stir fry, plum & oyster sauces, mixed vegetables
	Beef, stir fry, satay sauce, capsicum, carrot & onion
	Beef, stir fry, soy based sauce, mixed vegetables
	Beef, stir fry, sweet & sour sauce, mixed vegetables
	Meatballs, beef, lean, served with home prepared gravy
	Meatballs, beef, lean, served with reduced fat cream-based sauce
	Meatballs, beef, lean, served with tomato-based prepared sauce
	Beef, stew or casserole, gravy & pasta
	Beef, stew or casserole, tomato sauce & pasta
	Beef, stir fry, black bean sauce & hokkien noodles
	Beef, stir fry, black bean sauce, noodles, bok choy & onion
	Beef, stir fry, chow mein (beef & noodles), Chinese restaurant style
	Beef, stir fry, hokkien noodles & mixed vegetables
	Beef, stir fry, plum & oyster sauces, hokkien noodles & mixed vegetables
	Beef, stir fry, satay sauce, hokkien noodles, capsicum, carrot & onion
	Beef, stir fry, soy based sauce, hokkien noodle & mixed vegetables
	Beef, stir fry, sweet & sour sauce, hokkien noodle & mixed vegetables
	Beef, blade steak, semi-trimmed, crumbed, fried, canola oil
	Beef, blade steak, semi-trimmed, crumbed, fried, polyunsaturated blended oil
	Meatloaf, beef, with breadcrumbs & vegetables
	Sausage, beef, raw

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Sausage, beef, baked or microwaved without oil
	Sausage, beef, boiled or casseroled
	Sausage, beef, fried without oil
	Sausage, beef, grilled
	Sausage, beef, cooked, not further specified
	Sausage, raw, not further specified
	Sausage, baked or microwaved, not further specified
	Sausage, boiled or casseroled, not further specified
	Sausage, fried without oil, not further specified
	Sausage, grilled or BBQ, not further specified
	Sausage, cooked, not further specified
	Hamburger patty, frozen, fried, polyunsaturated or peanut oil
	Hamburger patty, frozen, grilled
	Burger patty or rissole, beef & vegetables, commercial, grilled or fried without oil or fat
	Sausage, curry, prepared with curry powder
	Sausage, stew or casserole, gravy, capsicum, onion & potato
	Sausage, stew or casserole, gravy & onion
	Meatloaf, sausage, meat, with breadcrumbs & vegetables
	Lamb
	Lamb, chump chop, lean, raw
	Lamb, chump chop, lean, fried, canola oil
	Lamb, chump chop, semi-trimmed, raw
	Lamb, chump chop, semi-trimmed, fried, canola oil
	Lamb, chump chop, semi-trimmed, fried, corn oil
	Lamb, chump chop, semi-trimmed, fried, olive oil
	Lamb, chump chop, semi-trimmed, fried, polyunsaturated blended oil
	Lamb, chump chop, semi-trimmed, fried, unspecified oil
	Lamb, chump chop, untrimmed, raw
	Lamb, chump chop, untrimmed, grilled

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Lamb, chump chop, untrimmed, stewed or casseroled
	Lamb, forequarter chop, lean, raw
	Lamb, forequarter chop, semi-trimmed, raw
	Lamb, forequarter chop, semi-trimmed, fried, canola oil
	Lamb, forequarter chop, semi-trimmed, fried, olive oil
	Lamb, forequarter chop, semi-trimmed, fried, unspecified oil
	Lamb, forequarter chop, untrimmed, raw
	Lamb, forequarter chop, untrimmed, fried, canola oil
	Lamb, forequarter chop, untrimmed, fried, olive oil
	Lamb, forequarter chop, untrimmed, fried, unspecified oil
	Lamb, forequarter chop, untrimmed, grilled
	Lamb, forequarter chop, untrimmed, stewed or casseroled
	Lamb, frenched cutlet/rack, lean, raw
	Lamb, frenched cutlet/rack, lean, fried, olive oil
	Lamb, frenched cutlet/rack, lean, fried, unspecified oil
	Lamb, frenched cutlet/rack, semi-trimmed, raw
	Lamb, frenched cutlet/rack, semi-trimmed, fried, olive oil
	Lamb, frenched cutlet/rack, semi-trimmed, fried, unspecified oil
	Lamb, frenched cutlet/rack, untrimmed, raw
	Lamb, frenched cutlet/rack, untrimmed, fried, canola oil
	Lamb, frenched cutlet/rack, untrimmed, fried, olive oil
	Lamb, frenched cutlet/rack, untrimmed, grilled
	Lamb, frenched cutlet/rack, untrimmed, stewed or casseroled
	Lamb, kebab, grilled or BBQ
	Lamb, leg roast, semi-trimmed, raw
	Lamb, leg roast, untrimmed, baked or roasted
	Lamb, loin chop, lean, raw
	Lamb, loin chop, lean, fried, olive oil
	Lamb, loin chop, semi-trimmed, raw

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Lamb, loin chop, semi-trimmed, fried, canola oil
	Lamb, loin chop, semi-trimmed, fried, olive oil
	Lamb, loin chop, semi-trimmed, fried, sunflower oil
	Lamb, loin chop, semi-trimmed, fried, unspecified butter
	Lamb, loin chop, semi-trimmed, fried, unspecified oil
	Lamb, loin chop, untrimmed, raw
	Lamb, loin chop, untrimmed, fried, canola oil
	Lamb, loin chop, untrimmed, fried, olive oil
	Lamb, loin chop, untrimmed, fried, unspecified butter
	Lamb, loin chop, untrimmed, grilled
	Lamb, loin chop, untrimmed, stewed or casseroled
	Lamb, mince, raw
	Lamb, trim lamb, mini roast, untrimmed, baked or roasted
	Lamb, trim lamb, steaks, lean, raw
	Lamb, trim lamb, steaks, lean, fried, olive oil
	Lamb, trim lamb, steaks, lean, fried, sunflower oil
	Lamb, trim lamb, steaks, semi-trimmed, raw
	Lamb, trim lamb, steaks, semi-trimmed, fried, canola oil
	Lamb, trim lamb, steaks, semi-trimmed, fried, polyunsaturated blended oil
	Lamb, trim lamb, steaks, semi-trimmed, fried, unspecified oil
	Lamb, trim lamb, steaks, untrimmed, raw
	Lamb, trim lamb, steaks, untrimmed, baked or roasted
	Lamb, trim lamb, steaks, untrimmed, fried, polyunsaturated blended oil
	Lamb, trim lamb, steaks, untrimmed, fried, unspecified oil
	Lamb, trim lamb, stir-fry strips, lean, raw
	Lamb, trim lamb, stir-fry strips, untrimmed, stir fried
	Lamb, raw, not further specified
	Lamb, baked, not further specified
	Lamb, fried, canola oil, not further specified
	Lamb, fried, olive oil, not further specified

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Lamb, fried, polyunsaturated blended oil, not further specified
	Lamb, fried, unspecified oil, not further specified
	Lamb, grilled or BBQ, not further specified
	Lamb, stewed or casseroled, not further specified
	Lamb, cooked, not further specified
	Burger patty or rissole, lamb, commercial, grilled or fried without oil or fat
	Meatballs, lamb, grilled or dry fried, not further specified
	Lamb, kebab, marinated, satay sauce, grilled or BBQ
	Lamb, curry, korma, Indian restaurant style
	Lamb, curry, prepared with curry powder, onions & stock
	Lamb, curry, prepared with indian style simmer sauce & extra chilli
	Lamb, curry, rogan josh, prepared from commercial sauce
	Lamb, curry, tikka marsala, prepared from commercial paste & other ingredients
	Lamb, mince & eggplant, with white sauce (moussaka), Greek restaurant style
	Lamb, sausage (kafta or kofta), with herbs, Lebanese restaurant style
	Lamb, stew or casserole, gravy, beans & other vegetables
	Lamb, stew or casserole, gravy & onion
	Lamb, stew or casserole, tomato sauce, vegetables including potato
	Lamb, stir fry, black bean sauce, bok choy & onion
	Lamb, stir fry, satay sauce, bok choy & onion
	Lamb, stir fry, plum & oyster sauces, mixed vegetables
	Meatballs, lamb, served with tomato-based prepared sauce
	Veal
	Veal, leg steak, lean, raw
	Veal, leg steak, lean, fried, canola oil
	Veal, leg steak, lean, fried, olive oil
	Veal, leg steak, lean, fried, polyunsaturated blended oil
	Veal, leg steak, lean, fried, unspecified butter
	Veal, leg steak, lean, fried, unspecified oil

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Veal, leg steak, untrimmed, raw
	Veal, leg steak, untrimmed, stewed or casseroled
	Veal, loin chop, lean, raw
	Veal, loin chop, lean, fried, unspecified oil
	Veal, loin chop, untrimmed, raw
	Veal, loin chop, untrimmed, stewed or casseroled
	Veal, stir-fry strips, untrimmed, stir-fried
	Veal, raw, not further specified
	Veal, cooked, not further specified
	Veal, leg steak, crumbed, fried, canola oil
	Veal, leg steak, crumbed, fried, unspecified oil
	Veal, leg steak, crumbed, grilled
	Veal, leg steak, crumbed, fried, olive oil
	Kangaroo
	Kangaroo, rump, raw
	Kangaroo, loin fillet, raw
	Kangaroo, raw, not further specified
	Kangaroo, stewed or casseroled, not further specified
	Pork
	Pork, liver, fried, unspecified oil
	Pork, butterfly steak, lean, raw
	Pork, butterfly steak, lean, fried, olive oil
	Pork, fillets, lean, raw
	Pork, fillets, lean, fried, canola oil
	Pork, fillets, lean, fried, olive oil
	Pork, fillets, trimmed, raw
	Pork, fillets, trimmed, fried, canola oil
	Pork, fillets, trimmed, fried, olive oil
	Pork, forequarter chop, lean, raw

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Pork, forequarter chop, lean, fried, canola oil
	Pork, forequarter chop, lean, fried, olive oil
	Pork, forequarter chop, lean, fried, polyunsaturated blended oil
	Pork, forequarter chop, lean, fried, unspecified oil
	Pork, forequarter chop, untrimmed, raw
	Pork, forequarter chop, untrimmed, fried, canola oil
	Pork, forequarter chop, untrimmed, grilled or BBQ
	Pork, forequarter shoulder roast, untrimmed, BBQ
	Pork, forequarter, seperable fat only, raw
	Pork, forequarter, separable fat only, cooked
	Pork, leg, diced, lean, raw
	Pork, leg, diced, trimmed, raw
	Pork, leg roast, lean, raw
	Pork, leg roast, untrimmed, baked or roasted
	Pork, leg steak, lean, raw
	Pork, leg steak, trimmed, raw
	Pork, leg strips, trimmed, fried, canola oil
	Pork, leg strips, trimmed, fried, olive oil
	Pork, leg strips, trimmed, fried, polyunsaturated blended oil
	Pork, leg strips, trimmed, fried, unspecified oil
	Pork, leg, seperable fat only, raw
	Pork, leg, separable fat only, cooked
	Pork, loin chop, lean, raw
	Pork, loin chop, lean, fried, canola oil
	Pork, loin chop, lean, fried, olive oil
	Pork, loin chop, lean, fried, polyunsaturated blended oil
	Pork, loin chop, lean, fried, unspecified butter
	Pork, loin chop, lean, fried, unspecified oil
	Pork, loin chop, untrimmed, raw

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Pork, loin chop, untrimmed, fried, canola oil
	Pork, loin chop, untrimmed, fried, olive oil
	Pork, loin chop, untrimmed, fried, unspecified butter
	Pork, loin chop, untrimmed, fried, unspecified oil
	Pork, loin chop, untrimmed, grilled
	Pork, loin, separable fat only, raw
	Pork, loin, separable fat only, cooked
	Pork, medallion steak, lean, raw
	Pork, medallion steak, lean, fried, canola oil
	Pork, medallion steak, lean, fried, olive oil
	Pork, mince, raw
	Pork, spare ribs, lean & fat, grilled or BBQ
	Pork, spare ribs, lean & fat, stewed or casseroled
	Pork, raw, not further specified
	Pork, baked, not further specified
	Pork, fried, olive oil, not further specified
	Pork, fried, polyunsaturated blended oil, not further specified
	Pork, fried, unspecified oil, not further specified
	Pork, grilled or BBQ, not further specified
	Pork, stewed or casseroled, not further specified
	Pork, cooked, not further specified
	Pork, pickled, not further specified
	Pork, kebab, marinated, satay sauce, grilled or BBQ
	Pork, stew or casserole, sweet & sour sauce, mixed vegetables
	Pork, stir fry, plum & oyster sauce, mixed vegetables
	Pork, stir fry, sweet & sour sauce
	Pork, stir fry, sweet & sour sauce, Chinese restaurant style
	Pork, stir fry, plum & oyster sauce, hokkien noodles
	Pork, stir fry, plum & oyster sauce, hokkien noodles & mixed vegetables

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
	Pork, stir fry, soy sauce & hokkien noodles
	Pork, stir fry, soy sauce, hokkien noodle & vegetables
	Pork, stir fry, sweet & sour sauce, hokkien noodle & mixed vegetables
	Pork, leg steak, trimmed, crumbed, fried, canola oil
	Pork, leg steak, trimmed, crumbed, fried, olive oil
	Pork, leg steak, trimmed, crumbed, fried, polyunsaturated blended oil
	Pork, leg steak, trimmed, crumbed, fried, sunflower oil
	Pork, leg steak, trimmed, crumbed, fried, unspecified oil
	Pork, leg steak, trimmed, crumbed, grilled
	Patty or meatball, pork, plain, fried, unspecified oil
	Sausage, pork, raw
	Sausage, pork, baked or microwaved
	Sausage, pork, boiled or casseroled
	Sausage, pork, fried, without oil
	Sausage, pork, grilled
	Sausage, pork, cooked, not further specified
Egg	***Egg***
Cooked, prepared without added fat	*Products are uncooked, have added fat or are part of a mixed dish*
Egg	**Egg**
Egg, chicken, whole, hard-boiled	Egg, chicken, whole, raw
Egg, chicken, whole, poached	Egg, chicken, whole, fried In peanut oil
Egg, chicken, whole, baked without added fat or oil	Egg, chicken, whole, cooked, not further specified
	Egg, chicken, white (albumen) only, raw
	Egg, chicken, white (albumen) only, hard boiled
	Egg, chicken, yolk, raw
	Egg, chicken, yolk, hard boiled
	Egg, chicken, scrambled, cooked without fat
	Egg, chicken, scrambled, cooked with fat
	Egg, chicken, scrambled, added bacon, cooked with fat

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Egg, chicken, scrambled, added bacon & cheese, cooked with fat
	Egg, chicken, scrambled, added cheese, cooked with fat
	Omelette, chicken egg, cooked with fat
	Omelette, chicken egg, added bacon, cooked with fat
	Omelette, chicken egg, added bacon & cheese, cooked with fat
	Omelette, chicken egg, added cheese, cooked with fat
	Omelette, chicken egg, added tomato, cooked with fat
	Omelette, with prawn & vegetables, Chinese restaurant style
Legumes	***Legumes***
Cooked (excluding tofu), prepared without added fat	*Products are uncooked, canned in brine, have added fat or are part of a mixed dish*
Beans	**Beans**
Bean, black, boiled, drained	Bean, cannellini, canned in brine, drained
Bean, lima, dried, boiled, drained	Bean, mixed, canned in brine, drained
Bean, soya, dried, soaked, boiled, drained	Bean, red kidney, canned in brine, drained
Chickpea, dried, boiled, drained	Salad, bean, commercial
Lentil, dried, soaked, boiled, drained	Baked beans, with sausages, canned In tomato sauce
Pea, split, dried, soaked, boiled, drained	Dip, bean & tomato, nacho style
Tofu	Sausage, vegetarian style, uncooked
Tofu (soy bean curd), firm, as purchased	Sausage, vegetarian style, fried, unspecified oil
Tofu (soy bean curd), firm, baked without oil	Sausage, vegetarian style, boiled or casseroled
Tofu (soy bean curd), firm, stir-fried, without oil	Bean, soya, dried
Tofu (soy bean curd), silken or soft, as purchased	Lecithin, soy, granules
Tofu (soy bean curd), silken or soft, stir-fried, without oil	Textured vegetable protein
	Baked beans, canned in ham sauce
	Baked beans, canned in tomato sauce
	Baked beans, canned in tomato & cheese sauce
	Beans, refried, canned

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
	Miso, soyabean paste
	Chickpeas
	Chickpea, canned in brine, drained
	Chickpea, canned in brine, drained, boiled, drained
	Dip, hommus (hoummous/hummous), Lebanese style
	Falafel, chickpea patty, fried
	Lentils
	Curry, legume (dhal), Indian restaurant style
	Curry, lentil, prepared with curry paste or powder
	Curry, lentil, prepared with curry paste & coconut cream
	Curry, lentil, prepared with tomato & curry paste or powder
	Lentil, dried
	Pappadam, raw
	Pappadam, microwaved without oil or salt
	Pappadam, fried
	Split peas
	Pea, split, dried
	Tofu
	Stir-fry, tofu, with mixed vegetables & rice noodles, soy-based sauce
	Tofu (soy bean curd), firm, deep-fried, unspecified oil
	Tofu (soy bean curd), firm, deep-fried, unspecified oil, with satay sauce
	Tofu (soy bean curd), burger pattie, as purchased
	Tofu (soy bean curd), burger pattie, baked

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
Dairy foods one serve = 250g milk–60g condensed milk–40g cheese–200g yoghurt–120g evaporated milk	
Low fat dairy foods	***Low fat dairy foods***
Contains <4g total fat/ serve, soy beverages fortified with calcium	*Products contain <4g total fat/ serve, are fortified (incl. soy beverages fortified with more than calcium), dairy food alternatives (oat and rice based), unfortified soy beverages, part of a mixed dish and/or nfs*
Milk, cow, fluid, reduced fat (~1%)	**Milk, cow, reduced fat**
Milk, cow, fluid, skim (~0.15% fat)	Milk, cow, fluid, reduced fat (~1.5%), increased calcium, added vitamins A & D
Yoghurt, reduced, low or no fat	Milk, cow, fluid, reduced fat (~1.5%), increased calcium, added vitamins D & folate
Yoghurt, natural, reduced fat (~2%)	Milk, cow, fluid, reduced fat (~1.5%), increased protein (~4%)
Yoghurt, natural, low fat (<0.5%)	Milk, cow, fluid, reduced fat (~1.5%), added omega 3
Yoghurt, reduced fat (~2%), apricot/mango/peach/passionfruit pieces or flavoured	Milk, cow, fluid, reduced fat (~1.5%), added vitamins B6 & folate & omega 3
Yoghurt, reduced fat (~2%), banana pieces or flavoured	Milk, cow, fluid, reduced fat (~1.5%), added vitamin D, & Ca, Mg & Zn
Yoghurt, reduced fat (~2%), berry pieces or flavoured	Milk, cow, fluid, reduced fat (~1%), added fibre
Yoghurt, reduced fat (~2%), berry pulp or juice	Milk, cow, fluid, reduced fat (~1%), added vitamins C & D & Fe
Yoghurt, reduced fat (~2%), tropical fruit pieces or flavoured	Milk, cow, fluid, reduced fat (~1%), added milk solids
Yoghurt, reduced fat (~2%), tropical fruit pulp or juice	Milk, cow, fluid reduced fat (1–2%), not further specified
Yoghurt, reduced fat (~2%), vanilla flavoured	Milk, cow, fluid, reduced fat (~1.5%), added phytosterols
Yoghurt, reduced fat (~1%), apricot/mango/peach/passionfruit pieces or flavoured	Thickshake, chocolate flavour, reduced fat cow milk, fast food style
Yoghurt, reduced fat (~1%), banana pieces and flavoured	Coffee, from instant coffee powder, with reduced fat milk
Yoghurt, reduced fat (~1%), berry pieces or flavoured	Coffee, from ground coffee beans, cappuccino, latte or flat white style, with reduced fat milk
Yoghurt, reduced fat (~1%), other flavoured	Beverage, chocolate flavour, with reduced fat milk, not further specified
Yoghurt, reduced fat (~1%), tropical fruit pieces or flavoured	Beverage, caramel, honeycomb or strawberry flavour, from unfortified base (Nesquik brand), with reduced fat milk
Yoghurt, reduced fat (~1%), vanilla flavoured	**Milk, cow, skim**
Yoghurt, low fat or no fat (<0.5%), apricot/mango/peach/passionfruit pieces or flavoured	Milk, cow, fluid, skim (~0.15% fat), added milk solids
Yoghurt, low fat or no fat (<0.5%), banana pieces or flavoured	Milk, cow, fluid, skim (~0.15% fat), not further specified
Yoghurt, low fat or no fat (<0.5%), berry pieces or flavoured	Milk, fluid, prepared, skim cows milk powder, standard dilution
Yoghurt, low fat or no fat (<0.5%), tropical fruit pieces or flavoured	Milk, powder, cow, skim

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
Yoghurt, low fat or no fat (<0.5%), vanilla flavoured	Milk, powder, cow, whey
Yoghurt, low fat or no fat (<0.5%), intense sweetened, fruit pieces or flavoured	Milkshake, home made, strawberry flavour, skim cow milk, no ice cream
Yoghurt, low fat or no fat (<0.5%), intense sweetened, vanilla flavoured	Milkshake, cafe style, chocolate flavour, skim cow milk
Custard, reduced fat	Milkshake, home made, chocolate flavour, skim cow milk
Custard, Dairy foods, chocolate, reduced fat, commercial	Coffee, from instant coffee powder, with skim milk
Custard, Dairy foods, vanilla, reduced fat, commercial	Coffee, from ground coffee beans, cappuccino, latte or flat white style, with skim milk
Cheese	Beverage, from coffee, drinking chocolate & skim milk, mocha or mochaccino style
Cheese, ricotta	Coffee, from instant coffee powder, with skim milk, decaffeinated
Cheese, ricotta, reduced fat (5%)	Beverage, drinking chocolate, from chocolate powder, with skim milk
Cheese, cottage, creamed, unflavoured	Beverage, caramel, honeycomb or strawberry flavour, from unfortified base (Nesquik brand), with skim milk & water
Cheese, cheddar, processed, reduced fat (<10% fat)	**Yoghurt, reduced, low or no fat**
Cheese, cheddar, processed, reduced fat (< 10% fat), added vitamin D	Yoghurt, reduced fat (~1%), not further specified
Milk, canned, evaporated, skim (<0.5% Fat)	Yoghurt, reduced fat (~2%), not further specified
Milk, canned, sweetened, condensed, skim (~0.2% fat)	Yoghurt, low fat or no fat (<0.5%), not further specified
Fortified soy beverage, reduced fat	Yoghurt, low fat or no fat (<0.5%), intense sweetened, not further specified
Soy beverage, reduced fat (~1.5%), unflavoured, added calcium	Yoghurt, reduced fat (~2%), fruit pulp or juice, not further specified
Soy beverage, reduced fat (~1.5%), unflavoured, added calcium	Smoothie, mixed berries (strawberry, raspberry, blueberry), yoghurt & reduced fat (~1%) milk, fast food style
Soy beverage, reduced fat (~1%), unflavoured, added calcium	Smoothie, mixed berries (strawberry, raspberry, blueberry), yoghurt, reduced fat (~1%) milk & ice cream
Soy beverage, low fat or no fat (<0.5%), unflavoured, added calcium	**Fortified soy beverage, reduced fat**
Soy beverage, reduced fat (~1.5%), chocolate flavour, added calcium	Soy beverage, reduced fat (~1%), unflavoured, unfortified
Soy Beverage, reduced fat (~1.5%), vanilla flavour, added calcium	Soy beverage, reduced fat (~1.5%), unflavoured, added fibre & calcium
Soy yoghurt	Soy beverage, reduced fat (~1.5%), unflavoured, added fibre, vitamin B2 & Ca
Soy yoghurt, low fat (<1%), berry pieces or flavoured	Soy beverage, reduced fat (~1.5%), unflavoured, added protein, vitamins A, B1, B2, & Ca, P & K
Soy yoghurt, low fat (<1%), mango/apricot/peach or passionfruit flavoured	Soy beverage, reduced fat (~1%), unflavoured, added vitamins A, B1, B2, & Ca, K, & P
Soy yoghurt, low fat (<1%), vanilla flavoured	Soy beverage, reduced fat, unflavoured, not further specified

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Soy Beverage, low fat or no free (<0.5%), unflavoured, added vitamins B1,B2, B12, A, & Ca, P, & K
	Milk, rice, fluid, calcium enriched
	Milk, rice, fluid, calcium & protein enriched
	Milk, rice, fluid, not further specified
	Milk, oat, fluid
	Soy beverage, reduced fat (~1.5%), unflavoured, added calcium & iron
	Soy beverage, reduced fat (~1.5%), unflavoured, added folate, calcium, & iron
	Soy beverage, reduced fat (~1.5%), unflavoured, added vitamins A & B & calcium
	Soy beverage, low fat or no fat (<0.5%), unflavoured, added vitamins A & B & calcium
	Coffee, from ground coffee beans, cappuccino, latte or flat white style, with soy milk
	Soy yoghurt
	Soy yoghurt, low fat (<1%), not further specified
Medium fat dairy foods	***Medium fat dairy foods***
Contains 4–10g total fat/ serve, soy beverages fortified with calcium	*Products contain 4–10g total fat/ serve, are fortified (incl. soy beverages fortified with more than calcium), dairy food alternatives (oat and rice based), unfortified soy beverages, part of a mixed dish and/or nfs*
Milk, cow, fluid, regular fat (~3.5%)	**Milk, cow, regular fat**
Milk, goat, fluid	Milk, cow, fluid, flavoured, strawberry, regular fat
Buttermilk, cultured, 2% fat	Milk, cow, fluid, flavoured, flavours other than chocolate, coffee or strawberry, regular fat
Yoghurt, regular fat	Milkshake, cafe style, strawberry flavour, regular fat cow milk
Yoghurt, natural, regular fat (~4%)	Milkshake, cafe style, strawberry flavour, regular fat cow milk, no ice cream
Yoghurt, goat, regular fat	Milkshake, home made, strawberry flavour, regular fat cow milk,
Yoghurt, regular fat (~3%), apricot/mango/peach/passionfruit pieces or flavoured	Milkshake, home made, strawberry flavour, unspecified cow milk
Yoghurt, regular fat (~3%), apricot/peach/mango/passionfruit pulp or juice	Milkshake, home made, banana flavour, unspecified cow milk
Yoghurt, regular fat (~3%), apricot/peach/mango/passionfruit pulp or juice, added honey	Milkshake, home made, caramel flavour, regular fat cow milk, no ice cream
Yoghurt, regular fat (~3%), banana pieces or flavoured	Milkshake, cafe style, vanilla flavour, regular fat cow milk
Yoghurt, regular fat (~3%), banana pulp or juice	Milkshake, cafe style, vanilla flavour, regular fat cow milk, no ice cream
Yoghurt, regular fat (~3%), berry pieces or flavoured	Milk, cow, fluid, flavoured, chocolate, regular fat

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
Yoghurt, regular fat (~3%), berry pulp or juice	Milk, cow, fluid, flavoured, coffee, regular fat
Yoghurt, regular fat (~3%), tropical fruit pieces or flavoured	Milkshake, cafe style, chocolate flavour, regular fat cow milk
Yoghurt, regular fat (~3%), tropical fruit pulp or juice	Milkshake, cafe style, chocolate flavour, with chocolate pieces, regular fat cow milk
Yoghurt, regular fat (~3%), vanilla flavoured	Milkshake, cafe style, chocolate flavour, regular fat cow milk, no ice cream
Yoghurt, regular fat, with fruit (strawberry, blueberry) & oats	Milkshake, home made, chocolate flavour, regular fat cow milk
Yoghurt, regular fat, with fruit (strawberry, blueberry) & oats, fast food style	Ice confection drink, chocolate milk, added ice & chocolate flakes
Yoghurt, extra creamy (~4.5% fat), apricot/mango/peach/passionfruit pieces or flavoured	Milk, cow, fluid, flavoured, strawberry, reduced fat
Yoghurt, extra creamy (~4.5% Fat), banana pieces or flavour	Milk, cow, fluid, flavoured, flavours other than chocolate, coffee or strawberry, reduced fat
Yoghurt, extra creamy (~4.5% fat), berry pieces or flavoured	Milk, cow, fluid, flavoured, chocolate, reduced fat
Yoghurt, extra creamy (~4.5% fat), vanilla flavoured	Milk, cow, fluid, flavoured, chocolate, reduced fat, calcium increased
Yoghurt, extra creamy (~4.5% fat), apricot/mango/peach/passionfruit pieces or flavoured, added vitamin D	Milk, cow, fluid, flavoured, coffee, reduced fat
	Milk, cow, fluid, flavoured, not further specified
Yoghurt, extra creamy (~4.5% fat), banana pieces or flavoured, added vitamin D	Coffee, from espresso coffee, regular fat milk, ice & sugar, iced coffee style
Yoghurt, extra creamy (~4.5% fat), berry pieces or flavouring, added vitamin D	Coffee, from espresso coffee, regular fat milk, ice, cream & caramel syrup, iced caramel style
Yoghurt, extra creamy (~4.5% fat), vanilla flavoured, added vitamin D	
Custard, regular fat	Beverage, chocolate flavour, from cocoa powder, with full fat milk & sugar
Custard, dairy foods, chocolate, regular fat, commercial	Beverage, chocolate flavour, from cocoa powder, with full fat milk, cream & sugar
Custard, dairy foods, vanilla, regular fat, commercial	Beverage, chocolate flavour, from straw, reduced fat (~1%) cows milk
Milk, canned, evaporated, regular	Beverage, drinking chocolate, from chocolate powder, with full fat milk
Milk, canned, sweetened, condensed, regular	Beverage, chocolate flavour, from unfortified base (Nesquik brand), with full fat milk
Soy beverage, regular fat	Beverage, chocolate flavour, with full fat milk, not further specified
Soy beverage, regular fat (~3%), unflavoured, added calcium	Beverage, chocolate flavour, with full fat milk & water, not further specified
Cheese	Beverage, banana or similar flavour, from base (Nesquik brand), with full fat milk
Cheese, blended, for pizza use	Beverage, banana or similar flavour, from base (Nesquik brand), with full fat milk & water
Cheese, feta (fetta), sheep & cows milk	Beverage, chocolate flavour, from base (Aktavite brand), with full fat milk
Cheese, goat	Beverage, chocolate flavour, from base (Milo brand), with full fat milk
Cheese, haloumy	Beverage, malt flavour, from fortified malted milk powder base, with full fat milk & water
Cheese, mozzarella	Beverage, drinking chocolate, with full fat milk, ice, cream & chocolate flakes, iced chocolate style
Cheese, cheddar, reduced fat (~ 25%)	

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
Cheese, cheddar, reduced fat (~ 15%)	Pudding, rice
Cheese, feta (fetta), cows milk, reduced fat	Pudding, rice, caramel flavoured
Cheese, cream, light (~15% fat)	Pudding, rice, vanilla flavoured
Cheese, cream, light (~15% fat), added vitamins A & D and calcium	Pudding, rice, with apple & cinnamon
Dip, cream cheese based, flavoured (e.g. gherkin, herb/garlic, onion/bacon)	Pudding, rice, with berries
Cheese, processed, Babybel style	Pudding, rice, with mango
Cheese spread, cheddar cheese-based	Pudding, vanilla flavour, prepared from instant, full fat milk
Cheese, camembert	Milk, cow, fluid, regular fat (~3.5%), increased protein
Soy yoghurt, regular fat	Milk, cow, fluid, regular fat (~3.5%), added vitamin D, Fe & Zn
Soy yoghurt, regular fat (~3%), mango/apricot/peach or passionfruit flavoured	Milk, fluid, prepared, full fat cows milk powder, standard dilution
Soy yoghurt, regular fat (~3%), berry pieces or flavoured	Milk, cow, fluid, regular fat (~3.5%), not further specified
Soy yoghurt, regular fat (~3%), vanilla flavoured	Milk, powder, cow, regular
	Coffee, from instant coffee powder, with full fat milk
	Coffee, from ground coffee beans, cappuccino, latte or flat white style, with regular fat milk
	Beverage, from coffee, drinking chocolate & regular fat milk, mocha or mochaccino style
	Coffee, from instant coffee powder, with full fat milk, decaffeinated
	Coffee, from espresso coffee, regular fat milk, ice, cream & caramel syrup, iced caramel
	Beverage, from coffee, drinking chocolate, regular fat milk, caramel syrup & cream, caramel mocha style
	Ice confection drink, non-chocolate flavoured milk, added fruit juice & ice
	Milk, goat
	Milk, powder, goat
	Yoghurt, regular fat
	Yoghurt, regular fat (~3%), not further specified
	Yoghurt, regular fat (~3%), fruit pulp or juice, not further specified
	Yoghurt, extra creamy (~4.5% fat), added vitamin D, not further specified
	Smoothie, chocolate, banana & yoghurt
	Smoothie, mango, banana & yoghurt

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Smoothie, mango, banana, coconut, tropical juice & yoghurt
	Smoothie, mango, banana, muesli & yoghurt, added herbal extracts
	Smoothie, mango, passionfruit, tropical juice, yoghurt & sorbet
	Smoothie, mango, banana, tropical juice, yoghurt & sorbet, added herbal extracts
	Smoothie, mixed berries (strawberry, raspberry, blueberry), apple juice, yoghurt
	Smoothie, strawberry, banana, apple juice & yoghurt
	Soy beverage, regular fat
	Soy beverage, regular fat (~3%), unflavoured, unfortified
	Soy beverage, regular fat (~3%), unflavoured, added calcium & iron
	Soy beverage, regular fat (~3%), unflavoured, added vitamin B & calcium
	Soy beverage, regular fat (~3%), unflavoured, not further specified
	Soy beverage, unflavoured, not further specified
	Soy beverage, not further specified
	Soy beverage, regular fat (~3%), chocolate flavour, added vitamins B1, B12 & A & Ca, P, K, Mg
	Soy beverage, regular fat (~3%), strawberry flavour, added vitamins B1, B12 & A & Ca, P, K, Mg
	Soy beverage, regular fat (~3%), vanilla flavour, added vitamins B1, B12 & A & Ca, P, K, Mg
	Soy beverage, flavoured, not further specified
	Ice confection, non-dairy (soy), regular fat, chocolate, added vitamins & minerals
	Ice confection, non-dairy (soy), regular fat, vanilla or strawberry flavoured, added vitamins & minerals
	Ice confection, non-dairy (soy), regular fat, vanilla & fruit swirl, added vitamins & minerals
	Soy yoghurt, regular fat
	Soy yoghurt, regular fat (~3%), not further specified

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
High fat dairy foods (>10g total fat/ serve)	***High fat dairy foods (>10g total fat/ serve)***
Contains >10g total fat/ serve, soy beverages fortified with calcium	
Milk, sheep, fluid	None
Yoghurt, Greek style	
Yoghurt, Greek style (~10%), natural	
Yoghurt, Greek style (~8.5%), natural	
Yoghurt, Greek style (~6% fat), plain or flavoured	
Yoghurt, Greek style (~6% fat), added apricot/peach/mango/passionfruit	
Yoghurt, Greek style (~6% fat), added mixed berries	
Custard, egg, vanilla, baked	
Cheese	
Cheese, blue vein	
Cheese, cheddar (mild, tasty & vintage styles)	
Cheese, colby style	
Cheese, edam	
Cheese, edam, smoked	
Cheese, gouda	
Cheese, havarti style	
Cheese, parmesan, finely grated	
Cheese, parmesan, shaved	
Cheese, pecorino style	
Cheese, provolone style	
Cheese, romano style	
Cheese, Swiss	
Cheese, cream	
Cheese spread, cream cheese-based	
Cheese, cheddar, processed	
Cheese, cheddar, processed, reduced sodium	
Cheese, processed, Babybel style	
Cheese, processed, Cheesy Pop style	

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
Cheese, processed, fridge stick	
Cheese, cheddar, processed, added Vitamin D	
Cheese, brie	
Soy-based, cheese	
Cheese, cream, reduced fat (~25% fat)	
Nuts and Seeds	
Raw (where possible), no added fat or salt	*Added fat, added salt, sweetened, roasted and/or as a paste/pulp or butter/jam mix*
Almond	**Almond**
Nut, almond, without skin, blanched	Nut, almond, with skin, roasted, with oil, salted
Nut, almond, with skin	Nut, almond, with skin, dry roasted
Nut, brazil, raw or blanched	Nut, almond, with skin, roasted, with oil
Nut, cashew, raw	**Cashew**
Nut, chestnut, roasted (no raw profile)	Nut, cashew, roasted, salted
Nut, hazelnut, raw	Nut, cashew, roasted, with oil
Nut, macadamia	**Macadamia**
Nut, pecan, unsalted	Nut, macadamia, roasted, with oil, salted
Nut, pine, raw	Nut, macadamia, roasted, with oil
Nut, pistachio, unsalted	**Nuts, mixed (peanut, cashew, hazelnut, brazil nut), with dried fruit**
Nut, walnut, raw	**Nut, pistachio, roasted, with oil, salted**
Nut, peanut, with skin, raw	**Peanuts**
Nuts, mixed (peanut, cashew, hazelnut, brazil nut)	Peanut butter & jam mixture
Seed, linseed or flaxseed	Peanut butter, smooth & crunchy, sweetened, salted
Mixed seeds	Peanut butter, smooth & crunchy, sweetened, salted, light
Seed, mixed (linseed, sunflower seed & almond mixture), LSA	Nut, peanut, with skin, roasted, with oil, salted
Seed, poppy	Nut, peanut, without skin, roasted, with oil, salted
Seed, pumpkin, hulled & dried	Nut, peanut, without skin, roasted, with oil, unsalted
Seed, sesame, white	Nut, peanut, roasted, unsalted, coated in toffee
Seed, sunflower	Peanut butter, smooth & crunchy, sweetened, unsalted
	Seed, sesame
	Tahini, sesame seed pulp

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
Fruit	
Raw or poached in water (canned for fruit salad and mixed fruit only), no added fat, unsweetened	*Products canned in juice or syrup (except fruit salad and mixed fruit), sweetened (sugar or intense sweetener), added fat, pureed, baked and/or nfs*
Apple	**Apple**
Apple, granny smith, unpeeled, raw	Apple, green skin, raw, not further specified
Apple, green skin, peeled, raw	Apple, red skin, raw, not further specified
Apple, green skin, unpeeled, raw	Apple, peeled, raw, not further specified
Apple, red skin, peeled, raw	Apple, peeled, baked, not further specified
Apple, red skin, unpeeled, raw	Apple, peeled, stewed, not further specified
Pear	Apple, peeled, stewed, sugar sweetened, not further specified
Pear, brown skin, unpeeled, raw	Apple, peeled, stewed, intense sweetened, not further specified
Pear, peeled, poached in water, drained, not further specified	Apple, unpeeled, raw, not further specified
Pear, nashi, peeled, raw	Apple, fried in butter, not further specified
Pear, nashi, unpeeled, raw	Apple, canned in syrup, pie style
Berries	Fruit, puree, apple & vanilla
Blackberry, raw	Apple, peeled, baked, with dried fruit, sugar sweetened, not further specified
Blueberry, fresh, raw	Apple, unpeeled, baked, with dried fruit, not further specified
Blueberry, fresh, stewed	Apple, toffee coated, not further specified
Boysenberry, fresh, raw	**Pear**
Mulberry, fresh, raw	Pear, peeled, raw, not further specified
Raspberry, fresh, raw	Pear, unpeeled, raw, not further specified
Raspberry, frozen	Pear, canned in pear juice
Raspberry, frozen, stewed	Pear, canned in pear juice, drained
Strawberry, fresh, raw	Pear, canned in light syrup
Strawberry, fresh, stewed	Pear, canned in light syrup, drained
Berries, mixed (strawberry, raspberry, blueberry, blackberry), fresh, raw	Pear, canned in syrup
Berries, mixed (strawberry, raspberry, blueberry, blackberry), canned, drained	Pear, canned in syrup, drained

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
Oranges and mandarins	Pear, canned in intense sweetened liquid
Orange, navel (all varieties), peeled, raw	Pear, canned in intense sweetened liquid, drained
Orange, navel (all varieties), unpeeled (pith & peel), raw	**Berries**
Orange, navel (washington), peeled, raw	Blueberry, canned in syrup, drained
Orange, valencia, peeled, raw	Raspberry, canned in syrup
Mandarin (imperial), peeled, raw	Raspberry, canned in syrup, drained
Mandarin (tangor), ellendale, peeled, raw	Strawberry, canned in syrup
Mandarin (tangelo), peeled, raw	Strawberry, canned in syrup, drained
Other citrus	**Oranges and mandarins**
Lemon, peeled, raw	Mandarin, peeled, raw, not further specified
Lemon peel, raw	Mandarin, canned in syrup, drained
Lime, peeled, raw	**Stone fruit**
Grapefruit, peeled, raw	Peach, fresh, unpeeled, poached in water, sugar sweetened, drained
Stone fruit	Peach, canned in pear juice
Peach, fresh, unpeeled, raw	Peach, canned in pear juice, drained
Apricot, fresh, raw	Peach, canned in light syrup
Nectarine, unpeeled, raw	Peach, canned in light syrup, drained
Plum, unpeeled, raw, not further specified	Peach, canned in syrup
Grape	Peach, canned in syrup, drained
Grape, red globe, raw	Peach, canned in intense sweetened liquid
Grape, thompson seedless or sultana, raw	Peach, canned in intense sweetened liquid, drained
Melon	Peach, fresh, unpeeled, poached in water, drained
Melon, honey dew, white skin, peeled, raw	Apricot, fresh, stewed
Melon, rockmelon (cantaloupe), peeled, raw	Apricot, fresh, stewed, sugar sweetened
Cherry, fresh, raw	Apricot, canned in pear juice
Banana, cavendish, peeled, raw	Apricot, canned in pear juice, drained
Pineapple (cayenne), fresh, peeled, raw	Apricot, canned in light syrup
Mango, peeled, raw	Apricot, canned in light syrup, drained

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
Pawpaw (papaya), peeled, raw	Apricot, canned in syrup
Kiwifruit, hayward, peeled, raw	Apricot, canned in syrup, drained
Kiwifruit, unpeeled, raw	Plum, dark, canned in syrup
Lychee, peeled, raw	Plum, dark, canned in syrup, drained
Rambutan, raw	Plum, unpeeled, stewed, not further specified
Feijoa, flesh, raw	**Grape**
Fig, unpeeled, raw	Grape, raw, not further specified
Passionfruit, raw	**Cherries**
Persimmon, peeled, raw	Cherry, black, canned in syrup, drained
Pomegranate, peeled, raw	**Banana**
Melon, watermelon, peeled, raw	Banana, cavendish, peeled, baked
Guava, hawaiian, raw	Banana, cavendish, peeled, fried with fat
Rhubarb, stalk, stewed (used instead of raw)	Banana, cavendish, peeled, coated with batter, fried with fat
Mixed fruit	**Pineapple**
Mixed fruit, peach & pear, canned in light syrup	Pineapple, canned in pineapple juice
Mixed fruit, peach & pear, canned in light syrup, drained	Pineapple, canned in pineapple juice, drained
Mixed fruit, puree, peach & mango	Pineapple, canned in pineapple juice, drained, fried, unspecified fat
Fruit Salad	Pineapple, canned in heavy syrup
Fruit salad, canned in pear juice	Pineapple, canned in heavy syrup, drained
Fruit salad, canned in pear juice, drained	Pineapple, canned in water, drained
Fruit salad, canned in heavy syrup	Pineapple, canned in pineapple juice, drained, coated with batter, fried, unspecified fat
Fruit salad, canned in heavy syrup, drained	**Mango**
Fruit salad, canned in syrup	Mango, pulp, canned
Fruit salad, canned in syrup, drained	**Lychee**
Fruit salad, fresh, commercial, with melon	Lychee, canned in pear juice, drained
Fruit salad, mixture of fresh fruit (apple, banana & strawberries) & canned fruit	**Passionfruit**
	Passionfruit, pulp, canned
	Guava
	Guava, pulp, canned

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Rhubarb
	Rhubarb, stalk, raw
	Rhubarb, stalk, stewed, sugar sweetened
	Mixed fruit
	Fruit, puree, apple & blackberry
	Fruit, puree, apple & kiwi
	Fruit, puree, apple & pear
	Fruit, puree, apple & raspberry
	Fruit, puree, apple & strawberry
Vegetables	
Green and Brassica Vegetables	***Green and Brassica Vegetables***
Cruciferous or green, commonly consumed forms, no added fat and/or no added salt	*Raw (and not commonly eaten raw), canned in brine and/or nfs*
Broccoli	**Broccoli**
Broccoli, fresh, raw	Broccoli, fresh, cooked, not further specified
Broccoli, fresh, baked without oil	**Brussels sprout**
Broccoli, fresh, boiled, drained	Brussels sprout, fresh, raw
Broccoli, fresh, stir-fried without oil	**Bok Choy**
Broccoflower	Cabbage, bok choy, raw
Broccoflower, raw	**White cabbage**
Broccoflower, boiled, drained	Sauerkraut, canned in brine, drained
Brussels sprout, fresh, boiled, drained	**Cauliflower**
Cabbage, bok choy, stir-fried without oil	Cauliflower, cooked, not further specified
Cabbage, savoy, raw	**Green Pea**
White Cabbage	Pea, green, canned in brine, boiled, drained
Cabbage, white, raw	**Asparagus**
Cabbage, white, boiled, drained	Asparagus, canned in brine, drained
Cabbage, white, stir-fried without oil	Asparagus, raw

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
Cauliflower	**Seaweed**
Cauliflower, raw	Seaweed, nori, dried
Cauliflower, boiled, drained	
Cauliflower, stir-fried without oil	
Kale	
Kale, raw	
Kale, boiled, drained	
Chicory	
Chicory, raw	
Chicory, boiled, drained	
Chives, raw	
Lettuce, cos, raw	
Lettuce, mignonette, raw	
Lettuce, iceberg, raw	
Lettuce, raw, not further specified	
Silverbeet	
Silverbeet, raw	
Silverbeet, boiled, drained	
Silverbeet, stir-fried without oil	
Spinach	
Spinach, English, raw	
Spinach, English, boiled, drained	
Spinach, English, stir-fried without oil	
Spinach, frozen, boiled, drained	
Water Spinach	
Spinach, water (ung choi), raw	
Spinach, water (ung choi), stir-fried without oil	

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
Green Peas	
Pea, green, fresh, raw	
Pea, green, fresh, boiled, drained	
Pea, green, fresh, stir-fried without oil	
Pea, green, frozen, boiled, drained	
Green Beans	
Bean, green, fresh, raw	
Bean, green, fresh, boiled, drained	
Bean, green, frozen, boiled, drained	
Red Cabbage	
Cabbage, red, raw	
Cabbage, red, boiled, drained	
Cabbage, red, stir-fried without oil	
Asparagus, boiled, drained	
Snowpea	
Snowpea, raw	
Snowpea, stir-fried without oil	
Basil, green, fresh, raw	
Parsley	
Parsley, curly, raw	
Parsley, boiled, not further specified	
Seaweed	
Seaweed, nori, poached	

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
Legumes	***Legumes***
See meats and alternatives	See meats and alternatives
Orange Vegetables	***Orange Vegetables***
Commonly consumed forms, no added fat, no added salt	*Raw (and not commonly eaten raw), canned in brine, added fat and/or nfs*
Carrot	Carrot
Carrot, mature, peeled, raw	Carrot, baby, canned in brine, boiled, drained
Carrot, mature, peeled, baked without oil	Carrot, mature, peeled, cooked, not further specified
Carrot, mature, peeled, boiled, drained	Sweet potato
Carrot, mature, peeled, stir-fried without oil	Sweet potato, orange flesh, peeled, raw
Sweet Potato	Sweet potato, orange flesh, peeled, stir-fried without oil
Sweet potato, orange flesh, peeled, baked without oil	Sweet potato, orange flesh, chips, fried, unspecified oil
Sweet potato, orange flesh, peeled, boiled, drained	Sweet potato, orange flesh, peeled, cooked, not further specified
Pumpkin	Pumpkin
Pumpkin, butternut, peeled, boiled, drained	Pumpkin, butternut, peeled, raw
Pumpkin, queensland blue, peeled, boiled, drained	Pumpkin, queensland blue, peeled, raw
	Pumpkin, peeled, raw, not further specified
	Pumpkin, peeled, cooked, not further specified
Starchy Vegetables	***Starchy Vegetables***
Commonly consumed forms, no added fat or salt	*Raw (and not commonly eaten raw), canned in brine, from dry powder, added fat, part of a mixed dish and/or nfs*
Potato	Potato
Potato, sebago, unpeeled, baked without oil	Potato, new or immature, peeled, raw
Potato, sebago, unpeeled, baked in foil, without oil	Potato, pale skin, peeled, raw, not further specified
Potato, pale skin, peeled, boiled, drained, not further specified	Potato, red skin, peeled, raw, not further specified
Potato, peeled, baked without oil, not further specified	Potato, peeled, raw, not further specified
Potato, peeled, boiled, drained, not further specified	Potato, cooked, not further specified
Potato, unpeeled, boiled, drained, not further specified	Salad, potato, commercial
Potato, boiled, drained, not further specified	Potato, chips, deep fried, salted, from take-away outlet
Potato, baked without oil, not further specified	Potato, chips, deep fried, unsalted, from take-away outlet

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
Potato, fries, homemade–fresh or frozen, baked without oil	Potato, chips, deep fried, salted, KFC style
Potato, wedges, homemade–fresh or frozen, peeled, baked without oil	Potato, chips, homemade–fresh or frozen, baked without oil
Potato, wedges, homemade–fresh or frozen, unpeeled, baked without oil	Potato, chips, homemade–fresh or frozen, fried, canola oil
Potato, wedges, homemade–fresh or frozen, baked without oil, not further specified	Potato, chips, homemade–fresh or frozen, fried, monounsaturated oil
Potato, hash brown, fresh or frozen, baked without oil	Potato, chips, homemade–fresh or frozen, fried, olive oil
Potato, hash brown, fresh or frozen, grilled or toasted	Potato, chips, homemade–fresh or frozen, fried, polyunsaturated blended oil
Potato, other varieties (e.g. gems, smiles, nuggets), fresh or frozen, baked without oil	Potato, chips, homemade–fresh or frozen, fried, sunflower oil
Potato, peeled, boiled, mashed, unspecified milk, not further specified	Potato, chips, homemade–fresh or frozen, fried, unspecified oil
Cassava	Potato, chips, low fat varieties, frozen, baked without oil
Cassava, yellow flesh, peeled, boiled, drained	Potato, fries, deep-fried, salted, from take-away outlet
Cassava, baked without oil, not further specified	Potato, fries, deep-fried, unsalted, from take-away outlet
Sweet potato	Potato, fries, deep-fried, salted, Mcdonalds style
Sweet potato, orange flesh, peeled, baked without oil	Potato, fries, deep-fried, salted, Mcdonalds style, with tomato sauce
Sweet potato, orange flesh, peeled, boiled, drained	Potato, fries, homemade–fresh or frozen, fried, canola oil
Sweet potato, white flesh, peeled, boiled, drained	Potato, fries, homemade–fresh or frozen, fried, corn oil
Taro	Potato, fries, homemade–fresh or frozen, fried, olive oil
Taro, peeled, baked without oil	Potato, fries, homemade–fresh or frozen, fried, polyunsaturated blended oil
Taro, peeled, boiled, drained	Potato, fries, homemade–fresh or frozen, fried, sunflower oil
Sweetcorn	Potato, fries, homemade–fresh or frozen, fried, unspecified oil
Sweetcorn, fresh on cob, boiled, drained	Potato, wedges, homemade–fresh or frozen, peeled, fried, unspecified oil
Sweetcorn, fresh on cob, stir-fried without oil	Potato, wedges, homemade–fresh or frozen, unpeeled, fried, unspecified oil
Sweetcorn, frozen, boiled, drained	Potato, wedges, homemade–fresh or frozen, fried, unspecified oil, not further specified
Sweetcorn, creamed, canned, heated	Potato, wedges, low fat varieties, frozen, baked without oil
	Potato, hash brown, fresh or frozen, fried, unspecified oil
	Potato, hash brown, fresh or frozen, cooked, not further specified
	Potato, gems or royals, par-fried in animal fat, frozen, baked without oil
	Potato, other varieties (e.g. gems, smiles, nuggets), fresh or frozen, fried, unspecified oil
	Potato, hash brown, deep-fried, Mcdonalds

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Potato, pale skin, peeled, mashed with milk & butter, not further specified
	Potato, peeled, boiled, mashed, unspecified butter, not further specified
	Potato, peeled, boiled, mashed, unspecified milk & butter, not further specified
	Potato, peeled, boiled, mashed, unspecified milk & table spread, not further specified
	Potato, peeled, boiled, mashed, unspecified table spread, not further specified
	Potato, peeled, boiled, mashed, not further specified
	Potato, mashed, dry powder
	Potato, mashed, reconstituted from dry powder with milk & water
	Potato, mashed, reconstituted from dry powder with milk & butter
	Potato, mashed, with gravy, fast food style
	Potato, scalloped/bake, with cheese
	Potato, scalloped/bake, with cream
	Potato, scalloped/bake, with cream & cheese
	Potato, scalloped/bake, with cream & milk
	Potato, scalloped/bake, with milk & cheese
	Potato, scalloped/bake, not further specified
	Potato, unpeeled, baked, with added cheese, not further specified
	Potato, scallop, battered, deep-fried, take-away outlet
	Potato, mashed & crumbed, deep-fried in oil, fast food style
	Potato, scalloped/bake, with cheese sauce from dry mix
	Potato, scalloped/bake, with milk
	Gnocchi, potato, boiled 28g starch
	Sweet potato, orange flesh
	Sweet potato, orange flesh, peeled, raw
	Sweet potato, orange flesh, peeled, cooked, not further specified
	Sweet potato, orange flesh, chips, fried, unspecified oil
	Sweet potato, orange flesh, peeled, stir-fried without oil

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	Included for weight only
	Sweet potato, white flesh
	Sweet potato, white flesh, peeled, raw
	Taro
	Taro, peeled, raw
	Taro, peeled, stir-fried without oil
	Sweetcorn
	Sweetcorn, fresh on cob, raw
	Sweetcorn, frozen, raw
	Sweetcorn, baby, canned in brine, drained, stir-fried without oil
	Sweetcorn, baby, canned in brine, heated, drained
	Sweetcorn, canned in brine, drained
	Sweetcorn, canned in brine, drained, stir-fried without oil
	Corn fritter, homemade
Other Vegetables	***Other Vegetables***
Commonly consumed forms, canned in water, no added fat or salt	*Raw (and not commonly eaten raw), canned in juice, paste form, added fat, part of a mixed dish and/or nfs*
Beetroot	**Beetroot**
Beetroot, fresh, peeled, baked without oil	Beetroot, fresh, peeled, raw
Beetroot, fresh, peeled, boiled, drained	**Parsnip**
Beetroot, canned, drained	Parsnip, peeled, raw
Celeriac	**Swede**
Celeriac, peeled, raw	Swede, peeled, raw
Celeriac, peeled, boiled, drained	**Turnip**
Celeriac, peeled, stir-fried without oil	Turnip, white, peeled, raw
Parsnip	**Celery**
Parsnip, peeled, baked without oil	Celery, stir-fried with soy sauce
Parsnip, peeled, boiled, drained	**Bean, broad**
Radish, white skinned, peeled, raw	Bean, broad, fresh, raw

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
Swede	**Bean, butter**
Swede, peeled, baked without oil	Bean, butter, fresh, raw
Swede, peeled, boiled, drained	**Tomato**
Turnip	Tomato, common, boiled with salt, drained
Turnip, white, peeled, baked without oil	Tomato, common, stir-fried without oil
Turnip, white, peeled, boiled, drained	Tomato, sun-dried, in canola oil
Turnip, white, peeled, boiled, drained, mashed, unspecified milk	Tomato, semi-dried without oil
Bamboo Shoot	Tomato, whole, canned in tomato juice
Bamboo shoot, canned in water, heated, drained	Tomato, whole, canned in tomato juice, drained
Bamboo shoot, canned in water, drained, stir-fried without oil	Tomato, whole, canned in tomato juice, boiled
Celery	Tomato, whole, canned in tomato juice, boiled, drained
Celery, raw	Tomato, crushed, canned in tomato juice, with herbs
Celery, stir-fried without oil	Tomato, canned in tomato juice, not further specified
Sprout	Tomato paste, with added salt
Sprout, alfalfa, raw	Tomato paste, without added salt
Sprout, bean, raw	Tomato puree, with added salt
Sprout, bean, stir-fried without oil	Tomato puree, without added salt
Sprout, snowpea, raw	Tomato, stuffed, Greek restaurant style
Bean, broad, fresh, boiled, drained	**Squash**
Bean, butter, fresh, boiled, drained	Squash, button, raw
Tomato	Squash, scallopini, raw
Tomato, cherry, raw	**Zucchini**
Tomato, common, raw	Zucchini, green skin, stir-fried, with cream-based sauce
Squash	Zucchini, green skin, stir-fried, with tomato-based sauce
Squash, button, boiled, drained	Zucchini, cooked, not further specified
Squash, stir-fried without oil, not further specified	

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
Zucchini	**Avocado**
Zucchini, green skin, raw	Dip, guacamole (avocado), homemade
Zucchini, green skin, baked without oil	**Capsicum, red**
Zucchini, green skin, boiled, drained	Capsicum, red, not further specified
Zucchini, green skin, stir-fried without oil	**Choko**
Avocado	Choko, peeled, raw
Avocado, hass, raw	**Cucumber**
Avocado, raw, not further specified	Dip, cucumber & yoghurt, Indian restaurant style
Capsicum, green	**Eggplant**
Capsicum, green, raw	Eggplant, raw
Capsicum, green, boiled or steamed	Dip, eggplant
Capsicum, green, stir-fried without oil	**Melon, bitter**
Capsicum, red	Melon, bitter, raw
Capsicum, red, raw	**Artichoke**
Capsicum, red, boiled or steamed	Artichoke, globe, raw
Capsicum, red, stir-fried without oil	**Mushroom**
Chilli	Mushroom, common, stir-fried, butter
Chilli (chili), green, raw	Mushroom, stir-fried, canola oil
Chilli (chili), red, raw	Mushroom, stir-fried, olive oil
Chilli (chili), red, stir-fried without oil	Mushroom, stir-fried, polyunsaturated blended oil
Choko, peeled, boiled, drained	Mushroom, stir-fried, sunflower oil
Cucumber, common	Mushroom, stir-fried, unspecified oil
Cucumber, common, peeled, raw	Mushroom, golden, asian, canned in brine, drained
Cucumber, common, unpeeled, raw	Mushroom, straw, asian, canned in brine, drained
Cucumber, lebanese, unpeeled, raw	Mushroom, dried
Eggplant	Mushroom, stuffed with breadcrumbs, cheese & bacon
Eggplant, baked without oil	**Leek**
Eggplant, boiled, drained	Leek, raw

continues…

continued…

Foods used to develop the composite nutrient compositions	
Included for nutrient profile and weight	**Included for weight only**
Eggplant, grilled	**Onion**
Eggplant, stir-fried without oil	Onion, dried
Melon, bitter, boiled or steamed	Onion, mature, peeled, raw, not further specified
Okra, boiled, drained	Onion, mature, peeled, baked, not further specified
Artichoke, globe, boiled	Onion, mature, peeled, boiled or steamed, not further specified
Mushroom	Onion, mature, peeled, stir-fried without oil, not further specified
Mushroom, common, raw	Onion, bhaji, deep-fried
Mushroom, common, boiled or steamed	Onion ring, battered, fried in solid vegetable oil
Mushroom, common, stir-fried without oil	**Shallot**
Garlic	Shallot, peeled, raw
Garlic, peeled, raw	Shallot, peeled, cooked, not further specified
Garlic, peeled, stir-fried without oil	**Fennel**
Leek, stir-fried without oil	Fennel, bulb, raw
Onion	
Onion, mature, brown skinned, peeled, raw	
Onion, mature, white skinned, peeled, raw	
Onion, mature, white skinned, peeled, stir-fried without oil	
Spring Onion	
Onion, spring, raw	
Onion, spring, baked or roasted	
Onion, spring, boiled or steamed	
Onion, spring, stir-fried without oil	
Shallot	
Shallot, peeled, boiled	
Shallot, peeled, stir-fried without oil	
Ginger, peeled, raw	
Fennel, bulb, boiled, drained	

Appendix 9: List of foods used for modelling 7 day diets and data used for selenium, vitamin B6 and vitamin B12 content

The AUSNUT 2007 database did not contain selenium, vitamin B6 or vitamin B12 data because these were not estimated as part of the 2007 Australian National Children's Nutrition and Physical Activity Survey. FSANZ provided some preliminary data on the selenium, vitamin B6 and vitamin B12 content of Australian foods from its draft unpublished NUTTAB 2009 database, where the data were available. These data were then matched to similar foods by the consultants to the NHMRC review. As not all the individual foods could be matched, some of the data were adjusted, derived or interpolated or missing values were imputed as zeros. The table below shows the figures used in this analysis. Because of these limitations, results relating to these nutrients should be interpreted with particular care.

	Content per 100g		
Foods	Selenium (µg)	Vitamin B6 (mg)	Vitamin B12 (ug)
Dairy foods			
Milk, cow, fluid, reduced fat (~1%)	0.97	0.04	0.60
Milk, cow, fluid, skim (~0.15% fat)	0.97	0.04	0.60
Soy beverage, reduced fat (~1%), unflavoured, added calcium	0.70	0.00	0.90
Yoghurt, natural, reduced fat (~2%)	1.40	0.06	0.86
Yoghurt, reduced fat (~2%), apricot/mango/peach/passionfruit pieces or flavoured	1.40	0.06	0.86
Yoghurt, reduced fat (~2%), tropical fruit pieces or flavoured	1.40	0.06	0.86
Yoghurt, reduced fat (~1%), apricot/mango/peach/passionfruit pieces or flavoured	1.40	0.06	0.86
Yoghurt, reduced fat (~1%), vanilla flavoured	1.40	0.06	0.86
Custard, dairy foods, vanilla, reduced fat, commercial	1.10	0.04	0.65
Cheese, ricotta	4.90	0.12	1.30
Cheese, cottage, creamed, unflavoured	4.90	0.12	1.30
Milk, canned, evaporated, skim (<0.5% Fat)	6.10	0.08	1.20
Milk, canned, sweetened, condensed, skim (~0.2% fat)	8.00	0.11	1.62
Milk, cow, fluid, regular fat (~3.5%)	1.30	0.09	0.60
Yoghurt, natural, regular fat (~4%)	1.65	0.12	0.83
Yoghurt, regular fat (~3%), apricot/mango/peach/passionfruit pieces or flavoured	1.65	0.12	0.83
Yoghurt, regular fat (~3%), apricot/peach/mango/passionfruit pulp or juice	1.65	0.12	0.83
Yoghurt, regular fat (~3%), banana pieces or flavoured	1.65	0.12	0.83
Yoghurt, regular fat (~3%), berry pieces or flavoured	1.65	0.12	0.83
Yoghurt, extra creamy (~4.5% fat), vanilla flavoured	1.65	0.12	0.83
Custard, dairy foods, vanilla, regular fat, commercial	1.30	0.09	0.60
Custard, dairy foods, vanilla, added fruit, not further specified	1.30	0.09	0.60
Milk, canned, evaporated, regular	7.60	0.20	1.34
Milk, canned, sweetened, condensed, regular	8.00	0.22	1.46
Cheese, feta (fetta), sheep & cows milk	4.90	0.12	1.30
Cheese, mozzarella	4.90	0.12	1.30
Cheese, cheddar, reduced fat (~ 25%)	4.90	0.12	1.30
Cheese, cheddar, reduced fat (~ 15%)	4.90	0.12	1.30
Cheese, camembert	4.90	0.12	1.30
Soy beverage, regular fat (~3%), unflavoured, added calcium	0.70	0.04	0.30
Soy yoghurt, regular fat (~3%), mango/apricot/peach or passionfruit flavoured	1.65	0.00	0.83
Sheeps milk	1.30	0.09	0.60
Cheese, blue vein	16.90	0.04	1.90
Cheese, cheddar (mild, tasty & vintage styles)	16.90	0.04	1.90
Cheese, colby style	16.90	0.04	1.90

continues…

continues…

	Content per 100g		
Foods	Selenium (µg)	Vitamin B6 (mg)	Vitamin B12 (ug)
Cheese, edam	16.90	0.04	1.90
Cheese, edam, smoked	16.90	0.04	1.90
Cheese, gouda	16.90	0.04	1.90
Cheese, havarti style	16.90	0.04	1.90
Cheese, parmesan, finely grated	16.90	0.04	1.90
Cheese, parmesan, shaved	16.90	0.04	1.90
Cheese, pecorino style	16.90	0.04	1.90
Cheese, provolone style	16.90	0.04	1.90
Cheese, romano style	16.90	0.04	1.90
Cheese, Swiss	16.90	0.04	1.90
Cheese, cream	16.90	0.04	1.90
Cheese spread, cream cheese-based	16.90	0.04	1.90
Cheese, cheddar, processed	16.90	0.04	1.90
Cheese, cheddar, processed, reduced sodium	16.90	0.04	1.90
Cheese, processed, Babybel style	16.90	0.04	1.90
Cheese, brie	16.90	0.04	1.90
Poultry, fish, seafood, eggs, legumes			
Chicken, breast, lean, baked	29.40	0.29	0.47
Chicken, breast, lean, stir-fried	29.40	0.29	0.47
Chicken, drumstick, lean, baked	29.40	0.29	0.47
Chicken, kebab, grilled or BBQ	29.40	0.29	0.47
Chicken, thigh, lean, casseroled	29.40	0.29	0.47
Chicken, thigh, lean, stir-fried	29.40	0.29	0.47
Chicken, wing, lean, baked	29.40	0.29	0.47
Chicken, wing, lean, casseroled	29.40	0.29	0.47
Chicken, whole, lean, grilled or BBQ	29.40	0.29	0.47
Duck, lean, stewed or casseroled	36.00	0.05	1.10
Turkey, breast, lean, baked	18.70	0.06	1.27
Quail, flesh & skin, baked	23.00	0.58	1.80
Egg, chicken, whole, hard-boiled	26.60	0.02	2.20
Egg, chicken, whole, poached	26.60	0.02	2.20
Crab, various types, fresh only	31.00	0.09	2.50
Lobster	25.00	0.22	0.30
Prawn	46.80	0.29	0.70
Clam	46.80	0.29	0.70
Mussel, green	67.20	0.08	20.00
Oyster	69.40	0.09	15.20
Scallop	25.00	0.10	2.10
Calamari	46.80	0.29	0.70
Blue grenadier (hoki)	69.00	0.05	0.83
Flathead	127.00	0.31	2.73
Trevally, dory, ling, cod, flounder or sole	45.60	0.14	0.83
Barramundi, aquacultured fillets	38.20	0.14	0.83
Whiting, king george	45.60	0.14	0.83

continues…

continues…

	Content per 100g		
Foods	Selenium (µg)	Vitamin B6 (mg)	Vitamin B12 (ug)
Tilapia	39.60	0.14	0.83
Bassa (basa)	23.50	0.14	0.83
Shark (flake), skinless fillet	31.00	0.15	0.50
Orange roughy	45.60	0.14	0.83
Cod, smoked	45.60	0.14	0.83
Gemfish	82.70	0.16	1.70
Bream	58.00	0.49	2.20
Anchovy	60.00	0.30	2.54
Mullet, yelloweye	116.40	0.23	4.60
Milkfish, aquacultured	36.80	0.30	2.54
Morwong	50.20	0.28	2.40
Tuna, canned in water, drained	60.00	0.30	2.54
Snapper	40.50	0.26	2.20
Salmon, Atlantic	27.00	0.55	2.00
Trout, rainbow, aquacultured	28.20	0.55	2.00
Silver perch, aquacultured	27.00	0.55	2.00
Bean, black	5.00	0.17	0.00
Bean, lima	5.00	0.17	0.00
Bean, soya	5.00	0.17	0.00
Chickpea	5.00	0.17	0.00
Lentil	5.00	0.17	0.00
Split Pea	5.00	0.17	0.00
Tofu	5.00	0.17	0.00
Red meats			
Beef, fillet, lean	10.80	0.14	1.77
Beef, fillet, semi-trimmed	10.80	0.14	1.77
Beef, fillet, scotch, semi-trimmed	10.80	0.14	1.77
Beef, mince, premium	10.80	0.14	1.77
Beef, mince, low fat	10.80	0.14	1.77
Beef, round steak, semi-trimmed	10.80	0.14	1.77
Beef, rump steak, lean	10.80	0.14	1.77
Beef, sirloin steak, semi-trimmed	10.80	0.14	1.77
Beef, topside steak, semi-trimmed	10.80	0.14	1.77
Lamb, chump chop, lean	19.40	0.11	2.23
Lamb, easy carve shoulder, semi-trimmed	19.40	0.11	2.23
Lamb, forequarter chop, semi-trimmed	19.40	0.11	2.23
Lamb, frenched cutlet/rack, lean	19.40	0.11	2.23
Lamb, leg roast, lean	19.40	0.11	2.23
Lamb, loin chop, semi-trimmed	19.40	0.11	2.23
Lamb, trim lamb, steaks, lean	19.40	0.11	2.23
Veal, leg steak, lean, grilled	15.80	0.99	3.00
Veal, loin chop, lean, grilled	15.80	0.99	3.00
Kangaroo, loin fillet, grilled	25.00	0.68	2.45

continues…

continues…

	Content per 100g		
Foods	Selenium (µg)	Vitamin B6 (mg)	Vitamin B12 (ug)
Pork, butterfly steak, lean	30.60	0.40	0.49
Pork, forequarter chop, lean	30.60	0.40	0.49
Pork, leg roast, lean	30.60	0.40	0.49
Pork, leg schnitzel, trimmed	30.60	0.40	0.49
Pork, leg steak, lean	30.60	0.40	0.49
Pork, loin chop, lean	30.60	0.40	0.49
Pork, medallion steak, lean	30.60	0.40	0.49
Pork, mince	30.60	0.40	0.49
Refined cereals			
Rice, white	1.30	0.01	0.00
Noodles	6.00	0.05	0.40
Instant noodles	6.10	0.05	0.40
Pasta, white	3.30	0.03	0.40
Other grains refined	0.15	0.01	0.00
Breakfast cereal unfortified	2.50	0.07	0.00
Breakfast cereal fortified	2.50	0.07	0.00
English Muffin refined	0.00	0.09	0.00
Crispbread refined	11.10	0.08	0.00
Crumpet refined	0.00	0.06	0.00
White bread	10.50	0.06	0.00
Frenck stick, vienna	10.00	0.08	0.00
Italian bread	10.00	0.08	0.00
Sour dough bread	10.00	0.08	0.00
Refined Bagel	12.00	0.04	0.00
Damper	7.60	0.09	0.10
Lavash	10.00	0.13	0.00
Naan	10.00	0.08	0.00
Flat white bread	10.00	0.08	0.00
Chappati	10.00	0.13	0.00
Focaccia	10.00	0.08	0.00
Refined Fruit bread	10.00	0.08	0.00
Cornbread	10.00	0.08	0.00
Wholegrain cereals			
Crispbreads wholegrain	10.80	0.18	0.00
Crumpet wholegrain	0.00	0.11	0.00
Rice brown	0.00	0.17	0.00
Pasta wholegrain	0.00	0.12	0.00
Breakfast cereal unfortified	13.60	0.43	0.00
Breakfast cereal fortified	13.60	0.43	0.00
Muesli	10.50	0.19	0.00
Porridge	0.00	0.01	0.00
Oats	14.00	0.07	0.00
Mixed grain bread	13.00	0.16	0.10

continues…

continues…

	Content per 100g		
Foods	Selenium (µg)	Vitamin B6 (mg)	Vitamin B12 (ug)
Wholegrain bread	11.70	0.12	0.15
Wholegrain bagel	10.00	0.08	0.00
Dark rye bread	11.00	0.07	0.00
Light rye bread	10.00	0.08	0.00
Flat wholemeal bread	10.20	0.19	0.00
Wholegrain fruit bread	10.00	0.08	0.00
Mixed grain fruit bread	10.00	0.08	0.00
Legumes (included also as meat aly)			
Bean, black	5.00	0.17	0.00
Bean, lima	5.00	0.17	0.00
Bean, soya	5.00	0.17	0.00
Chickpea	6.00	0.14	0.00
Lentils	6.00	0.15	0.00
Split pea	2.00	0.02	0.00
Tofu	5.00	0.09	0.00
Other vegetables			
Beetroot	0.55	0.07	0.00
Parsnip	0.00	0.07	0.00
Radish	0.00	0.00	0.00
Swede	0.00	0.00	0.00
Turnip	0.00	0.00	0.00
Celery	1.80	0.03	0.00
Alf Sprout	0.30	0.08	0.00
Bean, broad	0.30	0.08	0.00
Bean, butter	0.30	0.08	0.00
Tomato	0.40	0.03	0.00
Squash	0.00	0.00	0.00
Zucchini	0.00	0.04	0.00
Avocado	0.00	0.11	0.00
Capsicum green	0.40	0.00	0.00
Capsicum red	0.55	0.32	0.00
Choko	0.00	0.10	0.00
Cucumber	0.00	2.53	0.00
Eggplant	0.00	0.00	0.00
Artichoke	0.00	0.00	0.00
Leek	0.00	0.08	0.00
Spring onion	0.00	0.00	0.00
Shallot	0.00	0.16	0.00
Mushroom	29.10	0.04	0.00
Mixed vegetables	1.30	0.13	0.00
Onion	0.00	0.06	0.00

continues…

continues…

	Content per 100g		
Foods	Selenium (µg)	Vitamin B6 (mg)	Vitamin B12 (ug)
Orange vegetables			
Carrot	0.00	0.18	0.00
Sweet potato	0.00	0.00	0.00
Pumpkin	0.42	0.08	0.00
Green and brassica vegetables			
Broccoflower	0.20	0.23	0.00
Broccoli	0.00	0.10	0.00
Spinach	0.00	0.18	0.00
Chicory/endive	0.19	0.23	0.00
Asparagus	0.00	0.14	0.00
Silverbeet	0.00	0.88	0.00
Chives	0.10	0.10	0.00
Lettuce, cos, raw	0.60	0.06	0.00
Lettuce, iceberg	0.50	0.05	0.00
Green pea	1.00	0.13	0.00
Green bean	0.00	0.11	0.00
Cabbage, bok choy	0.00	0.74	0.00
Cabbage, savoy, raw	0.19	0.23	0.00
Cabbage salad/coleslaw	0.10	0.50	0.00
Cauliflower	0.00	0.04	0.00
Kale	0.20	0.23	0.00
Brussel	0.20	0.23	0.00
Snowpea	0.20	0.09	0.00
Parsley/cress	0.10	0.10	0.00
Starchy vegetables			
Potato	1.90	0.11	0.00
Cassava	0.00	0.00	0.00
Orange Sweet potato	0.00	0.00	0.00
Sweet potato, white flesh	0.00	0.00	0.00
Sweet Corn	1.30	0.19	0.00
Nuts and seeds			
Pumpkin seed	13.5	0.58	0
Sunflower seed	5	0.9	0
Sesame seed	22	0.25	0
Mixed seed	13.5	0.58	0
Peanuts	12	0.65	0
Almonds	2.6	0.14	0
Brazil nut	920	0.27	0
Cashew nut	33	0.35	0
Hazelnut	1	0.56	0
Chestnut	40	0.32	0
Macadamia	10	0.28	0

continues…

continues…

	Content per 100g		
Foods	Selenium (µg)	Vitamin B6 (mg)	Vitamin B12 (ug)
Mixed nuts	241	0.46	0
Pecan nuts	2	0.28	0
Pine nuts	1	1.5	0
Pistaccio nuts	1	1.5	0
Walnut	2	0.43	0
Fruit			
Apple	0.00	0.05	0.00
Pear/quince	0.50	0.03	0.00
Berry	1.40	0.04	0.00
Orange	0.00	0.04	0.00
Other citrus	0.40	0.00	0.00
Stone fruit	0.00	0.02	0.00
Grape	0.00	0.00	0.00
Melon	0.00	0.03	0.00
Cherry	0.30	0.04	0.00
Banana	0.20	0.20	0.00
Pineapple	0.00	0.00	0.00
Mango	0.00	0.00	0.00
Pawpaw	0.30	0.04	0.00
Kiwi	1.30	0.02	0.00
Lychee	0.28	0.04	0.00
Rambutan	0.28	0.04	0.00
Feijoa	0.28	0.04	0.00
Fig	0.28	0.04	0.00
Passionfruit	0.28	0.04	0.00
Persimmon	0.28	0.04	0.00
Watermelon	0.10	0.04	0.00
Guava	0.28	0.04	0.00
Rhubarb	0.28	0.04	0.00
Salad	0.10	0.02	0.00
Mixed fruit	0.10	0.02	0.00
Unsaturated oils and spreads[1]			
Poly margarines	0.50	0.00	0.00
Oil, blended, polyunsaturated vegetable oils	0.00	0.00	0.00
Oil, grapeseed	0.00	0.00	0.00
Oil, linseed or flaxseed	0.00	0.00	0.00
Oil, maize	0.00	0.00	0.00
Oil, sesame	0.00	0.00	0.00
Oil, sunflower	0.00	0.00	0.00
Oil, soybean	0.00	0.00	0.00

continues…

continues…

	Content per 100g		
Foods	Selenium (µg)	Vitamin B6 (mg)	Vitamin B12 (ug)
Extras			
Sweet biscuits	9.16	0.05	0.10
Cake/bun	5.58	0.07	0.80
Muffins savoury/cake	6.00	0.08	0.20
Puddings	3.00	0.07	0.10
Slice	2.00	0.04	0.00
Scone	7.80	0.05	0.00
Sweet pie/pastry	1.80	0.04	0.01
Quiche/savoury pastries	7.61	0.04	0.00
Pastie	8.00	0.03	0.00
Meat pies	6.50	0.04	0.20
Sausage roll	6.50	0.04	0.20
Pizza	11.40	0.08	0.40
Burgers	17.89	0.09	0.14
Burrito/enchilada/nachos	17.89	0.09	0.14
Dim sim, spring roll, chiko roll	4.05	0.08	0.00
Pancake, pikelet, crepe, waffle	5.82	0.04	0.29
Doughnut	5.90	0.03	0.00
Rice cake/cracker	0.00	0.00	0.00
Coconut milk/cream	0.00	0.00	0.00
Bacon	13.50	0.08	1.40
Ham	18.20	0.08	0.60
Deli meats	13.16	0.08	1.46
Cream	0.00	0.10	0.60
Ice cream	1.00	0.04	0.10
Butter	2.00	0.00	0.00
Monounsaturated oils	0.0	0.0	0.0
Olive oil spread	0.30	0.00	0.00
Monounsaturated margarines	0.30	0.00	0.00
Dairy blend	0.00	0.00	0.10
Fruit drink	0.50	0.02	0.00
Cordial	0.00	0.00	0.00
Confectionary	0.41	0.03	0.02
Soft drink	0.00	0.00	0.00
Choc and choc covered bars	1.77	0.06	0.12
Crisps and extruded snacks	1.00	0.07	0.00
Jelly	0.00	0.00	0.00
Ice confection	0.00	0.00	0.00
Breakfast muesli bars	2.00	0.88	0.00
Sauces	3.15	0.10	0.15
Sugars, jams, honey etc	0.00	0.00	0.00
Beer	0.00	0.03	0.00
Red wine	0.00	0.09	0.00

continues…

continues…

	Content per 100g		
Foods	Selenium (µg)	Vitamin B6 (mg)	Vitamin B12 (ug)
White wine	0.00	0.07	0.00
Alcoholic Punch/Cocktails	0.00	0.00	0.00
Spirits	0.00	0.00	0.00
Sherry/Port	0.00	0.06	0.00
Liqueur	0.40	0.00	0.00
Mixed alcoholic drink	0.13	0.02	0.00

[1] *Note: Modelled with polyunsaturated margarine as an example food from this group but could have been replaced with other unsaturated oil or nuts and seeds*

Appendix 10: Rice-based, pasta-style and plant-based (lacto-ovo vegetarian) diets

As dietary patterns and preferences in the Australian community can vary widely, an attempt was made to assess three different types of diets, one rice-based, one pasta-style and one plant-based (lacto-ovo vegetarian) diet.

These three diet types are discussed in an Appendix rather than in the main report, not because they are of lesser importance, but because the evidence-base for their development was less certain. Although some adjustments were made to across-group dietary patterns based on limited evidence, the within group preferences used were the same as those from the NNS95 and NCNPAS07. It is highly likely that those who follow vegetarian, rice or pasta-based diets will have different within food group preferences although it is, of course, recognised that even within the rest of the population preferences within groups could vary greatly.

As the background information about these cuisines within the Australian context was more limited than that for the general community, the analyses should be used for illustrative purposes only to highlight potential areas where special care might be required to attain nutrient needs.

This appendix discusses the overall results of these analyses. Additional background information on the diets can be found in Appendices 11–12 for the composite food group analyses and the the *7-day Foundation Diets* analysis.

A10.1 Rice-based and pasta-style diets

General comments

As some groups of people in Australia such as those from Asia or Southern Europe base their diets around rice or pasta as the staple, some further analyses were undertaken to see if diets containing higher levels of rice or pasta could conform to the NRVs within energy constraints.

For rice-based diets, additional serves from rice were included along with more legumes and less potato, cheese, meats and other refined cereals The pasta-style diets included more pasta but also included more legumes, nuts and seeds and green vegetables, less red meat, more white meats and fish, slightly more cheese and less of the other refined cereals and potato.

In designing these diets, data from FAOSTAT2003 for countries such as China or India or Italy and Greece and data from the NNS95 for "East Asian" born Australians, were taken into consideration. However, it is recognised that a variety of rice-based and pasta-style diets occur across different cultures and this analysis is illustrative only.

A 10.1.1 Rice-based and pasta-style diets for children

The patterns for the *Foundation Diets* higher in rice or pasta for children are shown below in Tables 10.1 and 10.2. In the composite food group analysis of the nutrients modelled, the only nutrient for which RDI could not be met was iron in the 14–18 year old girls.

7-day diet analysis

Nutrients included in the modelling

In children of all ages and genders, all the rice-based and pasta-style *7-day Foundation Diets* reached the EARs for all nutrients.

Other nutrients

All diets met the EAR for selenium, vitamin B6, Vitamin B12, riboflavin, niacin and phosphorus.

Table 10.1: Pasta-style *Foundation Diets* for boys and girls modelled to attain RDI for age group at energy level of youngest, sedentary (PAL 1.4) members of the age group

'Pasta-Style'				
Foundation Diets Boys				
Composite food group	Serve size	Boys 9–11yrs	Boys 12–13yrs	Boys 14–18yrs
Starchy vegetables	75g	0	0	3
Green & brassica vegetables	75g	14	14	14
Orange vegetables	75g	7	7	7
Legumes	75g	14	14	14
Nuts/seeds	30g	3	3	7
Other vegetables	75g	14	14	14
Fruit	150g	14	14	21
Wholegrain or higher fibre cereals/grains	Equiv 40g bread	21	21	28
Refined or lower fibre cereals/grains*	Equiv 40g bread	0	0	0
Meat and alts minus red	Equiv 65g red meats	9	9	9
Red meats (beef, lamb, veal, pork)	65g	5	5	5
Dairy foods**	Equiv 250g milk	17	24	24
Pasta	120g	7	14	14
Additional modelled allowances of unsaturated oils and spreads:				
Unsaturated oils and spreads***	10g	7	7	7

'Pasta-Style'				
Foundation Diets Girls				
Composite food group	Serve size	Girls 9–11yrs	Girls 12–13yrs	Girls 14–18yrs
Starchy vegetables	75g	0	0	0
Green & brassica vegetables	75g	14	14	14
Orange vegetables	75g	7	7	7
Legumes	75g	7	7	11
Nuts/seeds	30g	2	2	3
Other vegetables	75g	14	14	14
Fruit	150g	14	14	14
Wholegrain or higher fibre cereals/grains	Equiv 40g bread	21	24	24
Refined or lower fibre cereals/grains*	Equiv 40g bread	0	0	0
Meat and alts minus red	Equiv 65g red meats	7	7	10
Red meats (beef, lamb, veal, pork)	65g	7	7	7
Dairy foods**	Equiv 250g milk	17	24	25
Pasta	120g	7	7	10
Additional modelled allowances of unsaturated oils and spreads:				
Unsaturated oils and spreads***	10g	7	7	7

**Refined or lower fibre cereals were included as a group for cultural reasons; wholegrain or higher fibre can replace these if preferred.*
***Mostly low fat*
****As proxy for unsaturated oils and spreads and could be replaced with oil (7g/serve) or seeds or nuts (10g/serve)*

'Rice-Based'				
Foundation Diets Boys				
Composite food group	Serve size	Boys 9–11yrs	Boys 12–13yrs	Boys 14–18yrs
Starchy vegetables	75g	0	0	3
Green & brassica vegetables	75g	10	10	10
Orange vegetables	75g	7	7	7
Legumes	75g	14	14	14
Nuts/seeds	30g	2	2	7
Other vegetables	75g	11	11	11
Fruit	150g	14	14	14
Wholegrain or higher fibre cereals/grains	Equiv 40g bread	11	18	21
Refined or lower fibre cereals/grains*	Equiv 40g bread	0	0	0
Meat and alts minus red	Equiv 65g red meats	7	10	10
Red meats (beef, lamb, veal, pork)	65g	3.5	5	5
Dairy foods**	Equiv 250g milk	21	24.5	24.5
Rice	120g	17	21	21
Additional modelled allowance of unsaturated oils and spreads:				
Unsaturated oils and spreads***	10g	7	7	14

'Rice-Based'				
Foundation Diets Girls				
Composite food group	Serve size	Girls 9–11yrs	Girls 12–13yrs	Girls 14–18yrs
Starchy vegetables	75g	0	0	0
Green & brassica vegetables	75g	10	10	10
Orange vegetables	75g	7	7	7
Legumes	75g	14	14	14
Nuts/seeds	30g	2	2	3
Other vegetables	75g	11	11	11
Fruit	150g	14	14	14
Wholegrain or higher fibre cereals/grains	Equiv 40g bread	11	17	18
Refined or lower fibre cereals/grains*	Equiv 40g bread	0	0	0
Meat and alts minus red	Equiv 65g red meats	7	8	10
Red meats (beef, lamb, veal, pork)	65g	3	5	5
Dairy foods**	Equiv 250g milk	21	24.5	24.5
Rice	120g	14.5	17	17
Additional modelled allowances of unsaturated oils and spreads:				
Unsaturated oils and spreads***	10g	7	7	7

**Refined or lower fibre cereals were included as a group for cultural reasons; wholegrain or higher fibre can replace these if preferred.*
***Mostly low fat*
****As proxy for unsaturated oils and spreads and could be replaced with oil (7g/serve) or seeds or nuts (10g/serve)*

A 10.1.2 Pasta-style and rice-based diets for adults

The patterns of the diets analysed for men and women of various ages are shown in the Tables 10.3 and 10.4 below. Details of the diets are given in Appendices 11 and 12.

Pasta-style diets

The analyses showed it was possible to devise Pasta-style diets which conformed to most nutrient recommendations within energy constraints.

In the composite food group analyses, the only modelled nutrients not reaching RDI were iron in younger women and zinc and magnesium in men over 51 years.

7-day diet analyses

Nutrients included in the model

In men, all 100 *7-day Foundation Diets* met EAR for all nutrients with the exception of zinc for men 70+ years where 52% of diets were below EAR. For women all 100 7-day Diets reached EAR except for thiamin in women 70+ years where 1% of diets were below EAR.

Other nutrients

For men, all diets reached EAR for all nutrients except for selenium in men over 70 years where 12% were below the EAR and for vitamin B6, where 1% of diets for men 51–70 years and 33% of diets for men over 70 years, were below EAR.

In women, for nutrients not modelled but with an with an EAR (niacin, riboflavin, phosphorus, vitamin B6, B12 and selenium), all diets reached EAR except for selenium in 51–70 year old women and vitamin B6. In interpreting these results it should be remembered that the nutrient database used for selenium and B6 is incomplete.

Table 10.3: Pasta-style *Foundation Diets* for men and women that attain RDI for the group within energy needs of the smallest (160cm men; 150cm women) and least active (PAL 1.4) members of their group

'Pasta-Style'					
Foundation Diets Men					
Composite food group	Serve size	Men 19–30yrs	Men 31–50yrs	Men 51–70yrs	Men 70+yrs
Starchy vegetables	75g	7	7	3	3
Green & brassica vegetables	75g	7	7	7	7
Orange vegetables	75g	7	7	7	7
Legumes	75g	14	14	14	7
Nuts/seeds	30g	7	7	7	7
Other vegetables	75g	7	7	7	7
Fruit	150g	14	14	14	7
Wholegrain or higher fibre cereals/grains	Equiv 40g bread	28	28	28	25
Refined or lower fibre cereals/grains*	Equiv 40g bread	0	0	0	0
Meat and alts minus red	Equiv 65g red meats	4	4	4	4
Red meats (beef, lamb, veal, pork)	65g	3	3	3	3
Dairy**	Equiv 250g milk	21	21	19	26
Pasta	120g	14	14	7	7
Additional modelled allowances of unsaturated oils and spreads:					
Unsaturated oils and spreads***	10g	14	14	14	11

'Pasta-Style'					
Foundation Diets Women					
Composite food group	Serve size	Women 19–30yrs	Women 31–50yrs	Women 51–70yrs	Women 70+yrs
Starchy vegetables	75g	0	0	0	0
Green & brassica vegetables	75g	14	14	14	10
Orange vegetables	75g	7	7	7	7
Legumes	75g	14	7	7	7
Nuts/seeds	30g	3	3	3	3
Other vegetables	75g	14	14	14	7
Fruit	150g	14	14	14	14
Wholegrain or higher fibre cereals/grains	Equiv 40g bread	21	21	21	18
Refined or lower fibre cereals/grains*	Equiv 40g bread	0	0	0	0
Meat and alts minus red	Equiv 65g red meats	12	12	7	4
Red meats (beef, lamb, veal, pork)	65g	5	5	3	3
Dairy**	Equiv 250g milk	17	17	24	24
Pasta	120g	10	10	10	10
Additional modelled allowances of unsaturated oils and spreads:					
Unsaturated oils and spreads***	10g	7	7	7	7

**Refined or lower fibre cereals were included as a group for cultural reasons; wholegrain or higher refined can replace these if preferred.*
***Mostly low fat*
****As proxy for unsaturated oils and spreads and could be replaced with oil (7g/serve) or seeds or nuts (10g/serve)*

Rice-based diets

For the composite food modelling, the RDIs for the nutrients included in the model were attained within the kilojoule and food group limits for most nutrients for most age/genders. The exceptions were for iron in women 19–50 years and zinc for men 51 years and over.

For nutrients not included in the modelling, niacin, riboflavin, phosphorus and B12 all reached RDI in composite food group modelling for all groups.

7 day diet analysis

Nutrients included in modelling

For the *7 day diet* analysis with individual foods, for the nutrients included in the modelling, all diets reached all EARs except for zinc in men over 70 years (62% are below). In women, all 100 *7-day* diets reached the EAR for all nutrients.

Other nutrients

For men, for nutrients not included as inputs in the modelling, all diets reached the EAR for all nutrients except that between 7 and 18% of the diets did not reach EAR for selenium, the percentage increasing with age. In older men, 30% of diets also failed to reach the EAR for vitamin B6. However, it should be remembered that the database for these nutrients is incomplete.

For women, all diets reached EAR for all nutrients except for selenium where about 20% were below EAR in women over 50 years and for vitamin B6 where 14–18% of women over 51 years were below EAR. However, it should be remembered that the database for these nutrients is incomplete.

Table 10.4: Rice-based *Foundation Diets* for men and women which attain the RDI for their age group within the energy needs of the smallest (160cm men; 150cm women) and least active (PAL 1.4) members of their group.

Rice –Based Diet					
Foundation Diets Men					
Composite food group	Serve size	Men 19-30yrs	Men 31-50yrs	Men 51-70yrs	Men 70+yrs
Starchy vegetables	75g	3	3	3	3
Green & brassica vegetables	75g	7	7	7	7
Orange vegetables	75g	7	7	7	7
Legumes	75g	14	14	14	7
Nuts/seeds	30g	7	7	7	7
Other vegetables	75g	21	21	21	7
Fruit	150g	14	14	14	7
Wholegrain or higher fibre cereals/grains	Equiv 40g bread	28	28	28	25
Refined or lower fibre cereals/grains*	Equiv 40g bread	0	0	0	0
Meat and alts minus red	Equiv 65g red meats	4	4	4	4
Red meats (beef, lamb, veal, pork)	65g	3	3	3	3
Dairy foods**	Equiv 250g milk	17	17	17	24
Rice	120g	24	24	21	14
Additional modelled allowances of unsaturated oils and spreads:					
Unsaturated oils and spreads***	10g	14	14	7	7

'Rice-Based Diet'					
Foundation Diets Women					
Composite food group	Serve size	Women 19–30yrs	Women 31–50yrs	Women 51–70yrs	Women 70+yrs
Starchy vegetables	75g	0	0	0	0
Green & brassica vegetables	75g	10	10	10	7
Orange vegetables	75g	7	7	7	7
Legumes	75g	14	14	7	7
Nuts/seeds	30g	3	3	3	3
Other vegetables	75g	11	11	7	7
Fruit	150g	14	14	7	7
Wholegrain or higher fibre cereals/grains	Equiv 40g bread	17	17	24	24
Refined or lower fibre cereals/grains	Equiv 40g bread	0	0	0	0
Meat and alts minus red	Equiv 65g red meats	10	10	4	4
Red meats (beef, lamb, veal, pork)	65g	5	5	3	3
Dairy foods**	Equiv 250g milk	17	17	28	28
Rice	120g	14	14	14	10
Additional modelled allowances unsaturated oils and spreads:					
Unsaturated oils and spreads***	10g	7	7	7	7

**Refined or lower fibre cereals were included as a group for cultural reasons; wholegrain or higher fibre can replace these if preferred.*
***Mostly low fat*
****As proxy for unsaturated oils and spreads and could be replaced with oil (7g/serve) or seeds or nuts (10g/serve)*

A10.2 Plant-based (Lacto-ovo vegetarian) diets

As some people in Australia choose to follow diets which exclude consumption of meats, poultry or fish, a series of plant-based, lacto-ovo vegetarian *Foundation Diets* were devised for the various age-gender groups by addition of a new food group devised by the USDA when developing their food guide. This contained a mix of legumes, eggs, nuts and seeds to replace the meat component of omnivore diets. The mix was devised in such a manner as to ensure amino acid balance in a ratio of approximately 5 (legumes): 1 (eggs): 1 (nuts and seeds). As no national data were available about choices within food categories for lacto-ovo vegetarians, the same within food group proportions (e.g. for vegetables, fruits, cereals etc) were used as for the equivalent omnivore group. The increased NHMRC vegetarian iron and zinc RDIs and EARs set to account for bioavailability, were used to assess compliance. These higher values are set on best estimates of relative bioavailability but there is only limited clinical evidence available to confirm estimates. With particular reference to iron it should be remembered that as with omnivore RDIs, for younger children and women, there is a very high variability in iron requirements such that the amount to cover 97.5% of needs is considerable higher than average requirements and even than that needed by 90% of the group. The limitations of this analysis are recognised and the results are seen to be indicative only of areas which may need specific attention in the design of lacto-ovo vegetarian diets.

Children

In the composite modelling for lacto-ovo vegetarian children, the main limiting nutrient was iron. The vegetarian RDI could not be met for children up to 8 years or for those aged 14–18 years but all diets for children from 9–13 years met the higher vegetarian RDI for iron. For zinc all diets for all age/gender groups met the higher RDI for zinc except boys 14–18 years.

7-day diet analysis

Nutrients included in modelling

For lacto-ovo vegetarian children from 2–18 years, all diets reached the EAR for all nutrients except for 14–18 year old boys for whom none of the *7-day Foundation Diets* reached the EAR for zinc. This does not mean that it is not possible to construct diets that would attain zinc requirements for 14–18 year old lacto-ovo vegetarian boys, simply that this may be an area of diet that may need attention in children of this age with energy needs at the lower end of the range.

Other nutrients

All diets for all ages and genders reached the EAR for selenium, vitamin B6, vitamin B12, niacin, riboflavin and phosphorus. For nutrients with an AI, with no fish or meats in the diet all diets were low for LCn3 but average levels of linoleic and alpha-linolenic acid and vitamin E levels in the diets generally approximated or exceeded the AI. As with omnivore diets, vitamin D was generally below AI. All diets reached or exceeded the AI for potassium and sodium.

Table 10.5: Plant-based (Lacto-ovo vegetarian) *Foundation Diets* for boys and girls that reached RDI for the group within the energy needs of the youngest and least active (PAL 1.4) member of that group

Plant-Based (Lacto-Ovo Vegetarian)						
Foundation Diets Boys						
Composite food group	Serve size	Boys 2–3yrs	Boys 4–8yrs	Boys 9–11yrs	Boys 12–13yrs	Boys 14–18yrs
Starchy vegetables	75g	1.5	2	3	7	7
Green & brassica vegetables	75g	3.5	7	7	7	7
Orange vegetables	75g	3.5	7	7	7	7
Legumes	75g	3.5	5	5	7	7
Nuts/seeds	30g	0	1	2	2	7
Other vegetables	75g	3.5	7	7	14	14
Fruit	150g	7	7	14	14	14
Wholegrain or higher fibre cereals/grains	Equiv 40g bread	28	28	28	35	42
Refined or lower fibre cereals/grains	Equiv 40g bread	0	0	0	0	0
Eggs, nuts/seeds, legumes mix	210g	5	7	10	10	10
Dairy foods*	Equiv 250g milk	10.5	11	16	22	22
Additional modelled allowances of unsaturated oils and spreads:						
Polyunsaturated oils and spreads**	10g	3.5	5	7	7	7

Plant-Based (Lacto-Ovo Vegetarian)						
Foundation Diets Girls						
Composite food group	Serve size	Girls 2–3yrs	Girls 4–8yrs	Girls 9–11yrs	Girls 12–13yrs	Girls 14–18yrs
Starchy vegetables	75g	1	2	3	3	3
Green & brassica vegetables	75g	3.5	7	7	7	7
Orange vegetables	75g	3.5	7	7	7	7
Legumes	75g	3.5	4.5	7	7	7
Nuts/seeds	30g	0	1	2	2	7
Other vegetables	75g	3.5	7	7	7	7
Fruit	150g	7	7	7	7	7
Wholegrain or higher fibre cereals/grains	Equiv 40g bread	21	24	28	28	42
Refined or lower fibre cereals/grains	Equiv 40g bread	0	0	0	0	0
Eggs, nuts/seeds, legumes mix	210g	7	7	10	10	10
Dairy foods*	Equiv 250g milk	8	11	16	22	23
Additional modelled allowances of oils and spreads						
Unsaturated oils and spreads**	10g	3.5	3.5	3.5	3.5	3.5

**Mostly low fat*

***As proxy for unsaturated oils and spreads and could be replaced with oil (7g/serve) or seeds or nuts (10g/serve)*

Adults

In the composite food group analysis it was possible to attain all RDIs within the kilojoule limits except for iron in women and zinc in men and the two older women's groups.

7-day diet analysis

Nutrients included in modelling

As with omnivore diets for the men, zinc was the limiting nutrient with no *7-day plant-based, lacto-ovo Foundation Diets* reaching the vegetarian EAR for zinc. Other than this, all diets met the EAR for all of the modelled nutrients within the energy limits

For the lacto-ovo vegetarian women's groups, all EARs were met.

Other nutrients

For nutrients not included in the model, all men's diets met the EAR for niacin, riboflavin, vitamin B12 and phosphorus. The selenium EAR was not met for 4–8% of diets in the younger two men's groups, 34% in the 51–70 yr olds' diets and 44% in the 70+ years group. In the oldest age group, 27% of diets also did not meet the vitamin B6 EAR. However, it should be remembered that the database for these nutrients is incomplete.

Table 10.6: Plant-based (Lacto-ovo vegetarian) *Foundation Diets* for men and women that reached RDI for the group within the energy needs of the smallest (160cm men; 150cm women) and least active (PAL 1.4) member of that group

Plant-Based (Lacto-Ovo Vegetarian)					
Foundation Diets Men					
Composite food group	Serve size	Men 19–30yrs	Men 31–50yrs	Men 51–70yrs	Men 70+yrs
Starchy vegetables	75g	7	7	4	4
Green & brassica vegetables	75g	7	7	4	4
Orange vegetables	75g	7	7	4	4
Legumes	75g	7	7	4	4
Nuts/seeds	30g	7	7	7	7
Other vegetables	75g	14	14	7	7
Fruit	150g	14	14	14	14
Wholegrain or higher fibre cereals/grains	Equiv 40g bread	42	42	42	35
Refined or lower fibre cereals/grains	Equiv 40g bread	0	0	0	0
Meat alternatives (eggs, nuts/seeds, legumes)	210g	10	10	7	7
Dairy foods*	Equiv 250g milk	14	14	14	17
Additional modelled allowances of polyunsaturated oils and spreads:					
Unsaturated margarines**	10g	7	7	7	7

Plant-Based (Lacto-Ovo Vegetarian)					
Foundation Diets Women					
Composite food group	Serve size	Women 19–30yrs	Women 31–50yrs	Women 51–70yrs	Women 70+yrs
Starchy vegetables	75g	3	3	3	3
Green & brassica vegetables	75g	7	7	7	7
Orange vegetables	75g	7	7	7	7
Legumes	75g	7	7	7	7
Nuts/seeds	30g	2	2	3	3
Other vegetables	75g	7	7	7	7
Fruit	150g	7	7	7	7
Wholegrain or higher fibre cereals/grains	Equiv 40g bread	42	42	35	28
Refined or lower fibre cereals/grains	Equiv 40g bread	0	0	0	0
Meat alternatives (eggs, nuts/seeds, legumes)	210g	10	10	7	7
Dairy foods*	Equiv 250g milk	11	11	21	21
Additional modelled allowances of unsaturated oils and spreads:					
Unsaturated margarine**	10g	0	0		0

**Mostly low fat*

***As proxy for unsaturated oils and spreads. Could be replaced with oil (7g/serve) or seeds or nuts (10g/serve)*

Appendix 11: Foundation Diets from composite food group analysis

These diets match the summary serve per week patterns shown in the body of the report, however nutrient values given are per day. The 10 nutrients and energy which drive the modelling are listed at the top of the table. Shaded cells indicate data are below RDI. Nutrients and food components in the lower part of the table are assessed as outputs from modelling, for information only. Vitamin B12, vitamin B6 and selenium values should be interpreted cautiously as the data set is incomplete for these nutrients.

Table A11.1 Womens *Foundation Diets*

	Women	Women	Women	Women	Pregnant	Lactating	Pregnant	Lactating
	19–30yrs	31–50yrs	51–70yrs	70+yrs	19–30yrs	19–30yrs	31–50yrs	31–50yrs
Energy, excluding dietary fibre (kJ)	7125.33	7302.42	6981.25	6380.51	9069.84	8772.09	9310.18	9018.78
Energy, including dietary fibre (kJ)	7383.98	7561.16	7214.27	6586.64	9378.45	9095.18	9619.30	9342.62
Protein (g)	101.19	101.33	100.07	94.09	140.93	116.61	140.91	117.00
Thiamin (mg)	1.58	1.56	1.24	1.02	2.13	2.17	2.10	2.12
Vitamin A expressed as retinol equivalents (ug)	1435.64	1408.69	1458.53	1366.56	1472.77	1448.75	1451.56	1421.59
Vitamin C (mg)	125.28	125.61	129.79	122.37	126.12	129.93	126.34	130.19
Folic acid (ug)	757.50	726.93	708.71	641.08	953.67	985.27	916.52	940.96
Calcium (mg)	1073.50	1066.55	1470.26	1397.74	1218.39	1220.14	1203.90	1202.91
Iodine (ug)	210.22	210.84	274.70	260.32	257.93	251.07	261.26	250.51
Iron (mg)	12.17	12.11	9.65	8.55	16.68	15.62	16.58	15.42
Magnesium (mg)	375.13	379.19	383.15	346.97	473.17	473.37	478.11	478.80
Zinc (mg)	13.77	13.87	12.67	11.91	19.31	15.91	19.47	16.02
Fat, total (g)	52.39	52.89	53.49	52.57	64.14	61.26	64.85	61.66
Carbohydrate, total (g)	206.34	215.44	196.80	169.49	255.75	268.92	268.23	282.03
Sugars, total (g)	91.08	89.29	111.92	108.24	98.63	100.01	95.77	96.99
Starch (g)	114.13	124.96	83.29	59.64	155.96	167.78	171.22	183.84
Dietary Fibre (g)	34.02	33.77	30.01	25.99	40.35	42.76	40.15	42.50
Saturated fatty acids, total (g)	17.81	17.74	19.44	19.11	21.60	19.56	21.56	19.36
Monounsaturated fatty acids, total (g)	17.61	17.68	17.28	17.24	22.20	21.36	22.29	21.32
Polyunsaturated fatty acids, total (g)	12.84	13.19	12.61	12.10	15.02	15.52	15.44	16.04
Linoleic acid (g)	11.64	11.88	11.51	10.99	13.35	14.17	13.61	14.56

continues…

continued…

	Women	Women	Women	Women	Pregnant	Lactating	Pregnant	Lactating
	19–30yrs	31–50yrs	51–70yrs	70+yrs	19–30yrs	19–30yrs	31–50yrs	31–50yrs
Alpha linolenic acid (g)	0.90	0.93	0.87	0.81	1.08	1.04	1.13	1.09
Long chain omega 3 fatty acids, total (mg)	214.47	263.90	276.73	329.42	361.33	214.63	446.19	264.03
Preformed Vitamin A (retinol) (µg)	350.07	355.30	432.73	433.45	384.47	360.14	395.69	363.39
Provitamin A expressed as beta-carotene equivalents (µg)	6522.32	6332.22	6173.74	5617.15	6537.59	6539.17	6346.21	6359.90
Riboflavin (mg)	2.49	2.40	3.06	2.90	3.01	2.87	2.89	2.74
Niacin equivalents, total (mg)	51.48	50.39	49.47	45.76	71.16	61.48	69.56	60.30
Folate (DFEµg)	496.29	479.01	537.30	512.93	581.87	593.45	560.37	569.08
Vitamin D (µg)	3.27	3.41	4.27	4.49	3.94	3.36	4.22	3.48
Vitamin E (mg)	9.11	9.66	9.18	8.70	10.76	10.64	11.47	11.41
Phosphorus (mg)	1715.15	1722.36	1917.27	1776.64	2203.63	2025.89	2212.43	2034.15
Potassium (mg)	3676.33	3681.23	4096.89	3845.61	4319.85	4173.94	4310.39	4168.22
Sodium (mg)	1404.85	1395.37	1330.00	1178.46	1824.27	1783.24	1824.08	1761.88
Cholesterol (mg)	216.56	235.85	224.55	239.91	337.93	219.65	371.50	238.36
Selenium (µg)	75.23	77.95	72.96	64.80	110.63	89.58	114.85	94.24
Vitamin B6 (mg)	1.74	1.74	1.79	1.67	2.12	1.99	2.11	1.98
Vitamin B12 (µg)	5.94	6.39	8.28	8.11	7.52	6.03	8.15	6.52

Table A11.2. Men's *Foundation Diets*

	19–30 y	30–50 y	51–70 y	70+ y
Energy, excluding dietary fibre (kJ)	8633.83	8591.10	8020.18	7074.74
Energy, including dietary fibre (kJ)	8943.91	8894.29	8286.49	7304.92
Protein (g)	109.89	110.85	104.94	106.42
Thiamin (mg)	1.90	1.81	1.61	1.27
Vitamin A expressed as retinol equivalents (ug)	1643.61	1614.95	1575.83	1339.47
Vitamin C (mg)	131.62	127.98	129.15	131.69
Folic acid (ug)	815.81	808.83	741.41	693.55
Calcium (mg)	1053.24	1106.96	1120.85	1314.99
Iodine (ug)	197.49	210.00	219.07	256.02
Iron (mg)	14.47	14.12	12.30	10.28
Magnesium (mg)	452.51	449.10	392.32	373.99
Zinc (mg)	15.30	15.29	14.12	14.22
Fat, total (g)	77.33	78.78	70.87	57.03
Carbohydrate, total (g)	232.27	225.50	214.82	188.18
Sugars, total (g)	92.05	91.85	91.93	102.25
Starch (g)	139.07	132.14	121.38	84.19
Dietary Fibre (g)	40.37	39.42	34.42	29.20
Saturated fatty acids, total (g)	22.39	22.96	21.94	19.93
Monounsaturated fatty acids, total (g)	27.17	27.06	23.46	19.21
Polyunsaturated fatty acids, total (g)	22.31	23.23	20.34	13.48
Linoleic acid (g)	20.74	21.54	18.66	12.28
Alpha linolenic acid (g)	1.28	1.31	1.26	0.88
LC n-3 fatty acids, total (mg)	190.41	273.83	290.98	298.90
Preformed Vitamin A (retinol) (ug)	501.78	516.33	521.18	414.16
Provitamin A as beta-carotene equivalents (ug)	6863.11	6603.06	6340.22	5566.04
Riboflavin (mg)	2.58	2.53	2.48	2.79
Niacin equivalents, total (mg)	55.90	55.17	51.81	51.89
Folate, total (ug)	579.73	570.10	494.69	519.53
Vitamin D (ug)	4.04	4.42	4.61	4.15
Vitamin E (mg)	14.33	14.72	12.79	9.62
Phosphorus (mg)	1879.28	1899.27	1801.82	1871.34
Potassium (mg)	4047.50	4053.43	3907.85	3996.47
Sodium (mg)	1410.63	1451.95	1501.88	1265.24
Cholesterol (mg)	229.02	244.73	240.26	255.58
Selenium (ug)	87.48	90.58	81.44	76.70
Vit B6 (mg)	2.09	1.99	1.81	1.76
Vit B12 (ug)	5.78	6.06	6.23	7.51

Table A11.3. Women: Plant-based, Lactoovo vegetarian diets

	19–30y	30–50 y	51–70 y	70+ y
Energy, excluding dietary fibre (kJ)	6764.90	6843.41	6526.83	6095.49
Energy, including dietary fibre (kJ)	7144.60	7223.37	6842.13	6391.62
Protein (g)	88.16	89.17	89.82	85.36
Thiamin (mg)	2.12	2.13	1.69	1.50
Vitamin A expressed as retinol equivalents (ug)	1172.12	1133.45	1166.17	1080.14
Vitamin C (mg)	83.25	83.00	83.45	83.60
Folic acid (ug)	924.38	939.22	847.79	785.84
Calcium (mg)	1040.97	1024.91	1365.03	1295.24
Iodine (ug)	173.39	178.04	233.19	218.08
Iron (mg)	17.10	16.85	13.35	12.38
Magnesium (mg)	542.41	547.11	492.06	462.05
Zinc (mg)	12.32	12.27	11.81	11.13
Fat, total (g)	57.76	57.77	53.56	51.98
Carbohydrate, total (g)	186.25	189.73	179.87	162.31
Sugars, total (g)	70.77	68.23	86.70	83.14
Starch (g)	114.76	120.75	92.24	78.22
Dietary Fibre (g)	48.49	48.37	39.85	37.29
Saturated fatty acids, total (g)	14.18	13.94	16.15	15.55
Monounsaturated fatty acids, total (g)	21.94	21.89	19.47	19.16
Polyunsaturated fatty acids, total (g)	17.15	17.47	13.92	13.39
Linoleic acid (g)	16.12	16.41	13.11	12.63
Alpha linolenic acid (g)	0.98	1.04	0.88	0.83
LC n-3 fatty acids, total (mg)	49.54	49.43	39.81	39.36
Preformed Vitamin A (retinol) (ug)	201.98	194.75	258.51	251.52
Provitamin A expressed as beta-carotene equivalents (ug)	5821.36	5635.19	5454.29	4980.53
Riboflavin (mg)	2.36	2.20	2.74	2.58
Niacin equivalents, total (mg)	43.79	44.18	43.36	40.54
Folate, total (ug)	682.39	663.62	641.10	622.80
Vitamin D (ug)	1.50	1.42	2.16	2.12
Vitamin E (mg)	11.03	11.27	9.21	8.67
Phosphorus (mg)	1792.96	1785.93	1900.81	1787.20
Potassium (mg)	3520.65	3519.43	3664.16	3598.70
Sodium (mg)	1187.55	1227.88	1199.92	1071.27
Cholesterol (mg)	227.89	225.88	196.88	194.48
Selenium (ug)	57.99	60.50	54.06	47.70
Vit B6 (mg)	1.65	1.66	1.57	1.50
Vit B12 (ug)	3.39	3.50	5.50	5.30

Table A11.4. Men: Plant-based, Lactoovo *Foundation Diets*

Nutrient	19–30 y	31–50 y	51–70y	70+ y
Energy, excluding dietary fibre (kJ)	8501.90	8381.77	7647.81	7033.54
Energy, including dietary fibre (kJ)	8957.58	8824.46	8043.29	7354.39
Protein (g)	98.79	100.31	91.72	86.42
Thiamin (mg)	2.57	2.44	2.14	1.75
Vitamin A expressed as retinol equivalents (ug)	1417.81	1379.63	1324.33	872.05
Vitamin C (mg)	131.89	127.93	128.93	96.84
Folic acid (ug)	1058.53	1042.89	958.73	855.25
Calcium (mg)	1125.12	1178.22	1195.85	1220.17
Iodine (ug)	177.15	190.32	198.47	215.33
Iron (mg)	19.59	18.70	16.12	12.86
Magnesium (mg)	644.36	632.16	558.96	496.79
Zinc (mg)	14.46	14.16	12.67	11.36
Fat, total (g)	77.46	78.57	68.30	66.88
Carbohydrate, total (g)	235.54	224.41	211.90	184.15
Sugars, total (g)	94.00	94.10	94.27	91.67
Starch (g)	140.33	128.77	116.08	90.79
Dietary Fibre (g)	58.41	56.72	50.50	40.34
Saturated fatty acids, total (g)	18.63	19.02	17.59	17.83
Monounsaturated fatty acids, total (g)	30.04	30.03	25.70	25.24
Polyunsaturated fatty acids, total (g)	23.08	23.91	20.18	19.24
Linoleic acid (g)	21.89	22.69	19.09	18.29
Alpha linolenic acid (g)	1.19	1.21	1.10	1.02
LC n-3 fatty acids, total (mg)	53.00	52.17	39.28	38.90
Preformed Vitamin A (retinol) (ug)	297.73	303.13	291.34	313.09
Provitamin A expressed as beta-carotene equivalents (ug)	6727.88	6465.30	6204.71	3360.62
Riboflavin (mg)	2.69	2.61	2.49	2.42
Niacin equivalents, total (mg)	50.82	50.87	46.81	43.31
Folate, total (ug)	814.63	791.54	703.59	639.53
Vitamin D (ug)	2.17	2.20	2.21	2.42
Vitamin E (mg)	15.54	15.74	13.38	12.05
Phosphorus (mg)	2055.36	2060.93	1915.14	1804.25
Potassium (mg)	4435.00	4433.76	4246.00	3677.65
Sodium (mg)	1295.88	1317.82	1341.85	1176.22
Cholesterol (mg)	233.72	235.34	182.41	188.82
Selenium (ug)	73.30	74.77	65.37	62.50
Vit B6 (mg)	2.33	2.18	1.98	1.59
Vit B12 (ug)	3.90	3.94	3.74	4.24

Table A11.5. *Foundation Diets* 'rice-based' men

	19–30yrs	31–50yrs	51–70yrs	70+yrs
Energy, excluding dietary fibre (kJ)	8662.71	8598.03	7911.76	7003.53
Energy, including dietary fibre (kJ)	9002.22	8927.69	8221.98	7224.39
Protein (g)	95.76	96.97	94.23	93.48
Thiamin (mg)	1.81	1.72	1.59	1.29
Vitamin A expressed as retinol equivalents (ug)	1500.77	1457.58	1328.70	1125.61
Vitamin C (mg)	138.86	134.96	135.21	86.89
Folic acid (ug)	811.60	795.54	769.54	708.53
Calcium (mg)	1058.04	1121.58	1140.46	1323.25
Iodine (ug)	213.46	223.62	228.61	275.06
Iron (mg)	14.60	14.25	12.94	9.81
Magnesium (mg)	498.28	493.56	465.13	409.32
Zinc (mg)	14.22	14.16	13.48	12.51
Fat, total (g)	54.66	56.08	47.16	47.82
Carbohydrate, total (g)	297.54	289.33	270.88	216.92
Sugars, total (g)	99.64	99.16	100.18	92.34
Starch (g)	196.71	188.62	169.08	123.62
Dietary Fibre (g)	43.28	42.09	39.43	27.93
Saturated fatty acids, total (g)	14.66	15.13	13.28	14.94
Monounsaturated fatty acids, total (g)	19.93	19.89	17.24	17.25
Polyunsaturated fatty acids, total (g)	16.08	17.05	13.05	12.18
Linoleic acid (g)	15.00	15.88	12.05	11.38
Alpha linolenic acid (g)	0.92	0.95	0.77	0.69
LC n-3 fatty acids, total (mg)	95.46	143.25	153.06	157.44
Preformed Vitamin A (retinol) (ug)	308.74	318.65	247.46	299.48
Provitamin A expressed as beta-carotene equivalents (ug)	7164.68	6845.03	6499.55	4970.41
Riboflavin (mg)	2.63	2.57	2.54	2.82
Niacin equivalents, total (mg)	50.83	50.36	48.80	48.13
Folate, total (ug)	649.01	627.98	599.45	554.47
Vitamin D (ug)	2.45	2.69	2.38	2.86
Vitamin E (mg)	11.64	11.90	10.05	8.00
Phosphorus (mg)	1832.69	1851.39	1808.44	1835.61
Potassium (mg)	4145.96	4117.79	4096.08	3651.34
Sodium (mg)	997.58	1043.86	1052.81	979.87
Cholesterol (mg)	135.87	145.49	144.02	160.41
Selenium (ug)	71.73	74.41	70.56	67.41
Vit B6 (mg)	2.17	2.07	2.00	1.52
Vit B12 (ug)	4.84	5.06	5.24	6.57

Table A11.6 *Foundation Diets* Women 'Rice-based'

Nutrient	19–30 y	31–50 y	51–70 y	70+ y
Energy, excluding dietary fibre (kJ)	6881.94	6938.56	6787.89	6399.61
Energy, including dietary fibre (kJ)	7153.28	7213.34	6999.76	6596.47
Protein (g)	105.82	106.46	93.93	91.40
Thiamin (mg)	1.24	1.28	1.18	1.10
Vitamin A expressed as retinol equivalents (ug)	1328.10	1313.63	1254.92	1147.01
Vitamin C (mg)	121.28	120.92	92.30	77.30
Folic acid (ug)	653.72	662.82	684.20	673.71
Calcium (mg)	1048.95	1061.05	1456.59	1441.89
Iodine (ug)	203.93	209.85	289.76	288.62
Iron (mg)	12.53	12.70	9.60	9.02
Magnesium (mg)	410.28	419.63	391.86	372.20
Zinc (mg)	14.35	14.51	12.44	11.89
Fat, total (g)	43.30	44.21	40.10	40.77
Carbohydrate, total (g)	206.99	207.57	220.66	199.09
Sugars, total (g)	90.59	89.95	101.31	100.23
Starch (g)	115.17	116.31	118.40	97.91
Dietary Fibre (g)	34.10	34.48	26.62	24.70
Saturated fatty acids, total (g)	13.39	13.43	14.43	14.73
Monounsaturated fatty acids, total (g)	15.14	15.20	13.17	13.58
Polyunsaturated fatty acids, total (g)	11.14	11.76	9.32	9.21
Linoleic acid (g)	9.94	10.41	8.54	8.42
Alpha linolenic acid (g)	0.80	0.88	0.66	0.66
LC n-3 fatty acids, total (mg)	248.57	320.11	166.09	196.35
Preformed Vitamin A (retinol) (ug)	257.19	268.13	316.42	323.00
Provitamin A expressed as beta-carotene equivalents (ug)	6436.37	6286.91	5647.72	4960.66
Riboflavin (mg)	2.45	2.41	3.11	3.07
Niacin equivalents, total (mg)	50.81	49.99	46.83	45.73
Folate, total (ug)	555.79	551.30	542.49	533.96
Vitamin D (ug)	2.60	2.86	3.04	3.23
Vitamin E (mg)	8.57	8.88	6.55	6.27
Phosphorus (mg)	1755.39	1768.97	1878.95	1822.58
Potassium (mg)	3738.33	3796.49	3651.13	3534.11
Sodium (mg)	926.47	918.86	1029.79	1014.40
Cholesterol (mg)	239.68	268.20	162.53	173.00
Selenium (ug)	79.69	84.40	58.25	53.69
Vit B6 (mg)	1.83	1.82	1.53	1.45
Vit B12 (ug)	6.22	6.71	8.04	7.85

Table A11.7. Women 'Pasta-style' *Foundation Diets*

Nutrient	19–30 y	31–50 y	51–70 y	70+ y
Energy, excluding dietary fibre (kJ)	6938.53	7005.79	6637.09	6311.97
Energy, including dietary fibre (kJ)	7253.07	7295.57	6915.38	6553.69
Protein (g)	117.40	113.67	94.53	89.73
Thiamin (mg)	1.41	1.38	1.22	1.05
Vitamin A expressed as retinol equivalents (ug)	1430.38	1425.60	1385.68	1198.51
Vitamin C (mg)	145.98	145.21	149.98	114.14
Folic acid (ug)	698.79	659.31	663.53	603.91
Calcium (mg)	1109.05	1078.38	1333.24	1267.76
Iodine (ug)	187.39	196.94	228.87	222.84
Iron (mg)	14.00	12.88	10.48	9.26
Magnesium (mg)	425.58	400.11	382.81	348.61
Zinc (mg)	15.10	14.60	11.94	11.13
Fat, total (g)	50.08	49.38	43.05	42.16
Carbohydrate, total (g)	183.88	193.00	204.56	192.21
Sugars, total (g)	87.74	86.42	103.18	98.65
Starch (g)	94.86	105.28	99.79	91.99
Dietary Fibre (g)	39.50	36.34	34.85	30.18
Saturated fatty acids, total (g)	16.72	16.61	16.08	15.75
Monounsaturated fatty acids, total (g)	17.03	16.82	13.74	13.63
Polyunsaturated fatty acids, total (g)	12.09	11.61	9.72	9.30
Linoleic acid (g)	10.76	10.24	8.87	8.44
Alpha linolenic acid (g)	0.91	0.83	0.73	0.71
LC n-3 fatty acids, total (mg)	296.77	382.21	173.77	203.91
Preformed Vitamin A (retinol) (ug)	290.32	304.15	310.62	311.06
Provitamin A expressed as beta-carotene equivalents (ug)	6847.98	6739.49	6465.39	5340.48
Riboflavin (mg)	2.52	2.45	2.77	2.60
Niacin equivalents, total (mg)	53.99	51.97	43.68	40.86
Folate, total (ug)	577.83	521.55	539.56	499.12
Vitamin D (ug)	3.13	3.43	3.13	3.26
Vitamin E (mg)	9.61	9.64	7.86	6.98
Phosphorus (mg)	1902.30	1851.70	1813.72	1697.06
Potassium (mg)	3908.22	3759.16	3805.50	3454.36
Sodium (mg)	1159.21	1139.51	1074.37	988.28
Cholesterol (mg)	280.53	314.69	161.44	170.18
Selenium (ug)	92.00	95.91	61.54	55.22
Vit B6 (mg)	2.03	1.93	1.80	1.50
Vit B12 (ug)	8.05	7.34	7.37	7.21

Table A11.8 Men 'Pasta-style' *Foundation Diets*

	19–30 y	31–50 y	51–70 y	70+ y
Energy, excluding dietary fibre (kJ)	8573.51	8521.68	7896.28	7134.08
Energy, including dietary fibre (kJ)	8947.11	8885.28	8249.31	7377.73
Protein (g)	106.33	107.70	104.78	100.88
Thiamin (mg)	1.84	1.75	1.62	1.30
Vitamin A expressed as retinol equivalents (ug)	1585.78	1548.08	1383.49	1178.72
Vitamin C (mg)	147.19	143.53	135.36	86.95
Folic acid (ug)	788.36	773.04	764.92	681.79
Calcium (mg)	1215.30	1284.04	1237.80	1404.39
Iodine (ug)	180.67	192.12	197.97	248.85
Iron (mg)	14.90	14.54	13.66	10.05
Magnesium (mg)	482.31	478.06	457.52	395.21
Zinc (mg)	14.12	14.07	13.42	12.50
Fat, total (g)	65.45	67.06	55.56	55.27
Carbohydrate, total (g)	257.87	249.87	240.89	200.68
Sugars, total (g)	93.53	93.32	93.71	85.81
Starch (g)	163.14	155.01	145.55	113.93
Dietary Fibre (g)	48.34	47.02	44.72	30.74
Saturated fatty acids, total (g)	21.52	22.12	18.22	19.61
Monounsaturated fatty acids, total (g)	22.37	22.38	19.04	18.96
Polyunsaturated fatty acids, total (g)	16.77	17.73	14.02	12.71
Linoleic acid (g)	15.60	16.48	12.92	11.83
Alpha linolenic acid (g)	1.06	1.10	0.93	0.79
LC n-3 fatty acids, total (mg)	113.98	161.51	166.03	170.50
Preformed Vitamin A (retinol) (ug)	384.66	395.79	296.94	347.72
Provitamin A expressed as beta-carotene equivalents (ug)	7217.27	6923.37	6529.49	4997.60
Riboflavin (mg)	2.60	2.55	2.47	2.73
Niacin equivalents, total (mg)	49.90	49.54	47.98	47.01
Folate, total (ug)	625.77	605.48	594.84	527.73
Vitamin D (ug)	3.47	3.70	3.05	3.53
Vitamin E (mg)	12.29	12.54	10.90	8.49
Phosphorus (mg)	2000.39	2023.63	1946.58	1934.24
Potassium (mg)	4216.84	4192.99	4025.62	3504.25
Sodium (mg)	1338.11	1380.85	1297.91	1207.76
Cholesterol (mg)	162.24	172.13	161.26	177.41
Selenium (ug)	80.81	83.47	79.26	74.29
Vit B6 (mg)	2.21	2.11	2.04	1.52
Vit B12 (ug)	5.88	6.10	6.03	7.19

Table A11.9: *Foundation Diets* for toddlers age 13–23 months

Nutrient	Boys	Girls
Moisture (water) (g)	602.46	617.18
Energy, excluding dietary fibre (kJ)	3482.84	3484.34
Energy, including dietary fibre (kJ)	3610.87	3606.70
Protein (g)	50.98	50.47
Thiamin (mg)	0.85	0.81
Vitamin A as retinol equivalents (ug)	668.58	621.09
Vitamin C (mg)	56.54	54.15
Folic acid (ug)	350.25	344.04
Calcium (mg)	527.50	530.91
Iodine (ug)	94.77	96.29
Iron (mg)	6.50	6.26
Magnesium (mg)	185.68	185.68
Zinc (mg)	6.50	6.46
Fat, total (g)	20.51	20.47
Carbohydrate, total (g)	110.43	111.17
Sugars, total (g)	38.42	37.74
Starch (g)	71.48	72.92
Dietary Fibre (g)	17.47	16.76
Saturated fatty acids, total (g)	7.10	7.10
Monounsaturated fatty acids, total (g)	6.84	7.00
Polyunsaturated fatty acids, total (g)	4.70	4.54
Linoleic acid (g)	4.11	3.98
Alpha linolenic acid (g)	0.39	0.36
Long chain omega 3 fatty acids, total (mg)	113.02	112.21
Preformed Vitamin A (retinol) (ug)	124.80	122.86
Provitamin A as beta-carotene eq (ug)	3266.28	2993.59
Riboflavin (mg)	1.22	1.22
Niacin equivalents, total (mg)	24.51	24.51
Folate, total (ug)	214.97	211.05
Vitamin D (ug)	1.28	1.30
Vitamin E (mg)	3.57	3.51
Phosphorus (mg)	865.35	866.54
Potassium (mg)	1728.80	1729.20
Sodium (mg)	716.11	700.74
Cholesterol (mg)	116.38	114.02
Selenium (ug)	37.81	35.90
Vitamin B6 (mg)	0.84	0.88
Vitamin B12 (ug)	3.07	3.02

Table A11.10. *Foundation Diets*

Boys					
Nutrients	2–3 y	4–8 y	9–11 y	12–13 y	14–18 y
Energy, excluding dietary fibre (kJ)	4100.84	4982.93	6621.47	7915.37	8873.78
Energy, including dietary fibre (kJ)	4258.08	5187.52	6867.40	8185.19	9169.00
Protein (g)	57.91	75.05	96.96	112.23	118.47
Thiamin (mg)	0.99	1.19	1.50	1.72	2.09
Vitamin A as retinol equivalents (ug)	701.26	1248.16	1310.48	1424.22	1508.03
Vitamin C (mg)	67.12	106.61	131.86	136.65	141.78
Folic acids (ug)	429.24	542.12	651.86	774.51	865.49
Calcium (mg)	663.40	821.19	1014.22	1367.25	1423.05
Iodine (ug)	117.20	143.17	172.82	234.51	209.06
Iron (mg)	7.52	9.32	11.66	12.95	14.61
Magnesium (mg)	225.20	278.04	354.18	416.16	460.77
Zinc (mg)	7.37	9.85	12.49	14.28	13.68
Fat, total (g)	22.57	29.65	44.44	54.08	67.96
Carbohydrate, total (g)	135.89	155.65	198.45	238.91	258.29
Sugars, total (g)	54.12	69.34	90.54	109.99	107.86
Starch (g)	80.97	85.40	106.85	127.80	149.34
Dietary Fibre (g)	21.10	26.78	32.30	35.84	38.12
Saturated fatty acids, total (g)	7.89	10.83	15.68	19.82	21.96
Monounsaturated fatty acids, total (g)	7.35	9.66	15.42	18.07	22.85
Polyunsaturated fatty acids, total (g)	5.19	6.34	9.51	11.66	18.04
Linoleic acid (g)	4.55	5.51	8.43	10.46	16.57
Alpha linolenic acid (g)	0.46	0.56	0.73	0.89	1.16
LC n-3 fatty acids(mg)	113.32	153.05	197.38	201.35	191.14
Preformed Vitamin A (retinol) (ug)	140.94	195.24	262.66	362.47	371.82
Provitamin A as beta-carotene eq (ug)	3367.67	6325.59	6299.76	6387.35	6349.88
Riboflavin (mg)	1.50	1.91	2.47	3.17	3.27
Niacin equivalents, total (mg)	27.78	36.32	47.73	55.29	59.20
Folate, total (ug)	273.60	371.96	475.53	562.62	598.42
Vitamin D (ug)	1.41	1.94	2.71	3.54	4.00
Vitamin E (mg)	4.00	5.42	7.75	8.76	12.11
Phosphorus (mg)	1021.88	1281.37	1642.70	2014.70	2116.17
Potassium (mg)	2097.61	2817.09	3562.62	4190.75	4299.84
Sodium (mg)	821.27	1007.15	1175.32	1455.92	1635.07
Cholesterol (mg)	121.78	182.69	227.18	248.99	239.02
Selenium (ug)	41.13	54.18	67.56	74.73	78.04
Vitamin B6 (mg)	0.98	1.55	1.78	1.97	1.84
Vitamin B12 (ug)	3.67	4.76	5.80	7.54	8.01

Table A11.11. *Foundation Diets*

	Girls						
Nutrient	2–3yr	4–8yr	9–11yr	12–13yr	14–18yr	Pregnant 14–18yr	Lactating 14–18yr
Energy, excluding dietary fibre (kJ)	4103.6	4836.3	6364.45	7102.23	8189.76	9768.96	9738.4
Energy, including dietary fibre (kJ)	4254.97	5036.71	6583.18	7339.52	8471.81	10082.85	10069.2
Protein (g)	57.4	72.25	97.65	106.26	114.95	150.47	131.5
Thiamin (mg)	0.95	1.15	1.31	1.5	1.92	2.29	2.3
Vitamin A expressed as retinol equivalents (ug)	649.59	1218.21	1275.53	1304.18	1378.19	1411.58	1409.7
Vitamin C (mg)	64.86	107.95	127.76	128.18	132.01	132.57	137.0
Folic acid (ug)	422.66	506.94	604.53	688.66	815.14	926.84	980.1
Calcium (mg)	667.17	751.35	1108.91	1280.88	1394.58	1471.37	1629.3
Iodine (ug)	119.2	133.46	188.55	220.94	212.44	233.49	252.9
Iron (mg)	7.23	9.12	10.14	11.15	13.39	16.70	15.7
Magnesium (mg)	225.35	270.28	341.57	380.76	428.73	495.65	511.3
Zinc (mg)	7.32	9.19	12.48	13.55	12.78	17.07	14.4
Fat, total (g)	22.4	28.09	43.56	46.93	56.51	66.89	64.1
Carbohydrate, total (g)	137.02	153.23	184.5	212.31	246.08	280.97	304.5
Sugars, total (g)	53.41	67.54	91.97	100.82	103.24	106.10	116.1
Starch (g)	82.81	84.76	91.44	110.37	141.65	173.66	187.2
Dietary Fibre (g)	20.38	26.56	28.93	31.25	36.71	40.72	43.3
Saturated fatty acids, total (g)	7.87	9.61	15.78	17.35	19.23	22.54	21.1
Monounsaturated fatty acids, total (g)	7.48	9.37	14.98	15.94	18.97	23.20	22.0
Polyunsaturated fatty acids, total (g)	4.98	6.39	9.11	9.64	13.74	15.50	15.9
Linoleic acid (g)	4.37	5.53	8.11	8.59	12.36	13.68	14.4
Alpha linolenic acid (g)	0.43	0.55	0.7	0.76	1.05	1.21	1.2
Long chain n3 fatty acids, total (mg)	112.44	168.88	210.32	211.98	210.01	351.48	210.4
Preformed Vitamin A (retinol) (ug)	138.43	176.15	272.89	299.26	300.57	332.05	311.2
Provitamin A expressed as beta-carotene eq (ug)	3073.91	6261.47	6028.52	6043.73	6042.18	6053.38	6085.6
Riboflavin (mg)	1.49	1.77	2.44	2.77	2.99	3.34	3.5
Niacin equivalents, total (mg)	27.8	34.9	46.49	50.87	55.79	72.27	64.6

continues…

continued…

	Girls						
Nutrient	2–3yr	4–8yr	9–11yr	12–13yr	14–18yr	Pregnant 14–18yr	Lactating 14–18yr
Folate, total (ug)	269.45	345.47	447.49	492	514.32	563.06	600.7
Vitamin D (ug)	1.43	1.77	2.76	3.02	3.43	4.03	3.6
Vitamin E (mg)	3.96	5.53	7.71	8.05	10.10	11.56	11.5
Phosphorus (mg)	1024.13	1218.94	1677.78	1878.65	2039.96	2427.17	2383.2
Potassium (mg)	2100.1	2769.35	3555.19	3818.76	4111.26	4600.72	4692.4
Sodium (mg)	805.62	951.95	1189.43	1379.4	1723.47	2042.12	2040.8
Cholesterol (mg)	119.33	176.67	235.25	244.58	243.05	372.83	251.8
Selenium (ug)	39.12	52.19	67.01	72.13	81.99	115.98	93.4
Vitamin B6 (mg)	1.02	1.61	1.87	1.98	1.73	2.05	2.0
Vitamin B12 (ug)	3.61	4.43	6.64	7.43	7.92	9.82	9.2

TableA 11.12. *Foundation Diets* Plant-based, Lacto-ovo vegetarian diets

Boys					
	2–3 y	4–8 y	9–11 y	12–13 y	14–18 y
Moisture (water) (g)	738.74	900.99	1255.97	1516.40	1593.06
Energy, excluding dietary fibre (kJ)	4363.22	5134.21	6729.47	7814.84	9042.03
Energy, including dietary fibre (kJ)	4590.85	5429.23	7086.11	8211.40	9455.38
Protein (g)	55.00	65.86	85.46	100.47	115.64
Thiamin (mg)	1.33	1.63	1.88	2.16	2.71
Vitamin A as retinol equivalents (ug)	691.17	1201.72	1282.19	1337.05	1515.65
Vitamin C (mg)	56.13	84.59	108.55	117.37	141.24
Folic acid (ug)	579.69	705.13	859.58	997.60	1149.42
Calcium (mg)	766.89	810.89	1084.26	1381.43	1499.43
Iodine (ug)	124.47	131.75	169.63	223.73	236.29
Iron (mg)	9.95	12.51	14.67	16.63	19.38
Magnesium (mg)	322.76	396.38	487.08	563.47	630.37
Zinc (mg)	7.40	9.10	11.30	13.16	13.56
Fat, total (g)	32.54	42.09	58.83	63.17	84.29
Carbohydrate, total (g)	132.72	146.43	185.05	224.98	235.78
Sugars, total (g)	57.86	60.86	91.97	109.29	112.29
Starch (g)	74.02	84.89	91.83	114.36	122.36
Dietary Fibre (g)	29.35	37.65	45.55	51.67	52.87
Saturated fatty acids, total (g)	8.50	10.28	15.21	17.15	21.44
Monounsaturated fatty acids, total (g)	11.43	15.58	21.61	22.72	32.13
Polyunsaturated fatty acids, total (g)	9.87	12.73	17.34	18.17	23.22
Linoleic acid (g)	9.21	11.92	16.40	17.20	21.77
Alpha linolenic acid (g)	0.67	0.80	0.91	1.01	1.13
Long chain omega 3 fatty acids, total (mg)	23.62	30.76	46.86	47.40	139.28
Preformed Vitamin A (retinol) (ug)	158.63	186.47	284.31	325.56	401.86
Provitamin A as beta-carotene eq (ug)	3199.99	6096.53	5998.76	6083.52	6235.71
Riboflavin (mg)	1.62	1.82	2.44	3.07	3.69
Niacin equivalents, total (mg)	26.85	32.78	41.89	49.85	58.95
Folate, total (ug)	411.05	523.24	711.58	812.60	903.67
Vitamin D (ug)	1.14	1.29	2.06	2.43	2.96
Vitamin E (mg)	6.09	7.80	11.99	12.40	17.99
Phosphorus (mg)	1142.13	1331.57	1709.25	2071.55	2331.53
Potassium (mg)	2311.23	2875.47	3738.52	4495.90	4786.12
Sodium (mg)	797.60	864.77	915.73	1123.79	1375.20
Cholesterol (mg)	113.18	145.81	216.34	229.84	629.29
Selenium (ug)	36.14	49.87	55.28	62.60	91.36
Vitamin B6 (mg)	1.07	1.62	1.84	2.08	2.17
Vitamin B12 (ug)	2.86	3.08	4.36	5.69	7.90

Table A11.13. *Foundation Diets* Plant-based, Lacto-ovo vegetarian diets

Girls					
Nutrients	2–3 y	4–8 y	9–11 y	12–13 y	14–18 y
Moisture (water) (g)	696.71	810.13	1130.53	1342.31	1388.14
Energy, excluding dietary fibre (kJ)	4160.54	4612.41	6435.03	6849.94	8155.11
Energy, including dietary fibre (kJ)	4383.28	4883.50	6767.57	7183.30	8505.01
Protein (g)	53.42	59.14	85.43	93.46	109.18
Thiamin (mg)	1.16	1.40	1.80	1.83	2.29
Vitamin A as retinol equivalents (ug)	633.46	1155.46	1160.39	1187.39	1361.97
Vitamin C (mg)	53.69	82.54	83.54	83.93	89.58
Folic acid (ug)	522.57	607.78	793.97	843.48	1007.41
Calcium (mg)	644.63	694.71	1104.86	1340.40	1467.73
Iodine (ug)	102.06	108.69	168.74	214.87	243.57
Iron (mg)	9.69	11.44	14.70	14.73	16.99
Magnesium (mg)	312.78	358.59	494.22	521.20	550.62
Zinc (mg)	7.19	8.26	11.57	12.33	12.26
Fat, total (g)	34.96	38.78	56.95	57.68	73.14
Carbohydrate, total (g)	116.84	129.42	171.32	186.59	213.59
Sugars, total (g)	49.16	54.02	70.50	85.55	90.77
Starch (g)	66.91	74.70	99.91	100.07	121.97
Dietary Fibre (g)	28.51	34.46	42.63	42.70	44.68
Saturated fatty acids, total (g)	8.47	9.07	14.19	14.70	19.20
Monounsaturated fatty acids, total (g)	13.44	15.18	21.16	21.31	28.12
Polyunsaturated fatty acids, total (g)	10.33	11.35	17.26	17.22	19.03
Linoleic acid (g)	9.67	10.62	16.26	16.27	17.54
Alpha linolenic acid (g)	0.62	0.67	1.00	1.00	1.13
Long chain omega 3 fatty acids, total (mg)	30.76	30.72	45.94	43.39	140.09
Preformed Vitamin A (retinol) (ug)	154.21	155.58	231.29	257.14	370.18
Provitamin A as beta-carotene eq (ug)	2880.28	6003.19	5581.67	5592.66	5523.87
Riboflavin (mg)	1.38	1.53	2.16	2.64	3.33
Niacin equivalents, total (mg)	24.77	28.19	39.29	43.19	52.14
Folate, total (ug)	396.14	460.91	624.58	674.10	720.00
Vitamin D (ug)	1.05	1.07	1.69	1.87	2.71
Vitamin E (mg)	7.43	8.28	10.75	10.78	16.53
Phosphorus (mg)	1058.61	1177.55	1731.60	1941.04	2186.53
Potassium (mg)	2194.43	2592.65	3387.61	3768.34	4020.89
Sodium (mg)	666.24	776.02	1054.31	1106.90	1579.37
Cholesterol (mg)	140.79	140.87	211.57	220.04	632.04
Selenium (ug)	36.67	40.96	56.46	57.97	95.96
Vitamin B6 (mg)	1.11	1.54	1.82	1.91	1.79
Vitamin B12 (ug)	2.44	2.45	4.33	5.74	8.04

Table A11.14. *Foundation Diets* 'Rice-based' diets

Boys			
Nutrient	9–11 y	12–13 y	14–18 y
Energy, excluding dietary fibre (kJ)	6572.96	7958.95	9000.32
Energy, including dietary fibre (kJ)	6823.53	8236.46	9317.62
Protein (g)	94.33	117.58	126.64
Thiamin (mg)	1.13	1.41	1.84
Vitamin A expressed as retinol equivalents (ug)	1289.36	1333.29	1382.05
Vitamin C (mg)	125.46	126.08	138.43
Folic acid (ug)	604.19	714.12	802.56
Calcium (mg)	1114.36	1317.83	1405.30
Iodine (ug)	199.87	244.86	230.41
Iron (mg)	10.64	12.89	14.75
Magnesium (mg)	381.90	452.79	536.07
Zinc (mg)	11.92	14.71	14.19
Fat, total (g)	36.57	43.20	61.67
Carbohydrate, total (g)	215.35	259.58	271.56
Sugars, total (g)	95.80	107.02	107.35
Starch (g)	118.33	151.28	163.05
Dietary Fibre (g)	31.42	34.81	40.32
Saturated fatty acids, total (g)	11.86	14.33	16.94
Monounsaturated fatty acids, total (g)	12.16	14.56	22.01
Polyunsaturated fatty acids, total (g)	9.37	10.46	17.96
Linoleic acid (g)	8.43	9.31	16.51
Alpha linolenic acid (g)	0.70	0.79	1.10
LC n-3 fatty acids, total (mg)	154.83	220.93	210.69
Preformed Vitamin A (retinol) (ug)	251.36	292.82	254.80
Provitamin A expressed as beta-carotene eq (ug)	6245.97	6262.36	6218.88
Riboflavin (mg)	2.49	3.02	3.16
Niacin equivalents, total (mg)	44.18	55.94	61.80
Folate, total (ug)	546.09	619.00	679.72
Vitamin D (ug)	2.32	2.83	3.06
Vitamin E (mg)	7.35	8.16	12.15
Phosphorus (mg)	1674.22	2044.52	2232.29
Potassium (mg)	3667.88	4174.41	4558.29
Sodium (mg)	751.08	970.07	1061.75
Cholesterol (mg)	192.71	264.51	262.77
Selenium (ug)	59.60	78.81	82.38
Vitamin B6 (mg)	1.74	1.99	2.03
Vitamin B12 (ug)	6.03	7.41	7.26

TableA 11.15. *Foundation Diets* 'Rice-based' diets

Girls			
Nutrients	9–11 yr	12–13 yr	14–18yr
Energy, excluding dietary fibre (kJ)	6348.7	7437.9	7656.3
Energy, including dietary fibre (kJ)	6590.9	7699.7	7932.8
Protein (g)	91.9	109.4	116.6
Thiamin (mg)	1.1	1.3	1.4
Vitamin A expressed as retinol equivalents (ug)	1232.6	1263.1	1259.3
Vitamin C (mg)	121.6	122.1	129.0
Folic acid (ug)	585.2	674.7	692.2
Calcium (mg)	1130.6	1311.0	1343.1
Iodine (ug)	195.2	234.1	222.6
Iron (mg)	10.2	11.9	12.7
Magnesium (mg)	383.6	441.0	446.0
Zinc (mg)	11.6	14.1	12.4
Fat, total (g)	36.4	41.6	44.1
Carbohydrate, total (g)	205.0	240.5	240.2
Sugars, total (g)	93.7	103.6	102.8
Starch (g)	110.1	135.6	136.2
Dietary Fibre (g)	30.4	32.9	34.8
Saturated fatty acids, total (g)	11.6	13.6	13.7
Monounsaturated fatty acids, total (g)	12.0	13.8	15.2
Polyunsaturated fatty acids, total (g)	9.7	10.5	11.2
Linoleic acid (g)	8.8	9.4	10.0
Alpha linolenic acid (g)	0.7	0.8	0.9
LC n-3 fatty acids, total (mg)	164.5	202.4	240.1
Preformed Vitamin A (retinol) (ug)	241.8	270.2	189.5
Provitamin A expressed as beta-carotene eq (ug)	5958.9	5973.8	5925.0
Riboflavin (mg)	2.4	2.8	2.9
Niacin equivalents, total (mg)	42.5	51.1	53.7
Folate, total (ug)	518.7	571.9	569.0
Vitamin D (ug)	2.2	2.6	2.6
Vitamin E (mg)	7.7	8.4	9.4
Phosphorus (mg)	1667.8	1965.8	2023.5
Potassium (mg)	3522.9	3932.3	4157.5
Sodium (mg)	831.4	1017.2	1151.4
Cholesterol (mg)	193.5	234.4	269.1
Selenium (ug)	59.2	70.6	83.6
Vitamin B6 (mg)	1.8	2.0	1.8
Vitamin B12 (ug)	6.0	7.3	7.4

Table A11.16. *Foundation Diets* 'Pasta-style' diets

Boys			
Nutrients	9–11 yr	12–13 yr	14–18 yr
Moisture (water) (g)	1413.16	1705.31	1738.12
Energy, excluding dietary fibre (kJ)	6739.06	7943.85	9096.01
Energy, including dietary fibre (kJ)	7051.60	8277.37	9478.02
Protein (g)	108.20	123.48	133.80
Thiamin (mg)	1.50	1.57	2.08
Vitamin A as retinol equivalents (ug)	1366.02	1411.75	1454.44
Vitamin C (mg)	151.06	151.36	162.65
Folic acid (ug)	684.76	740.79	866.49
Calcium (mg)	1060.76	1341.41	1454.99
Iodine (ug)	162.67	214.89	202.67
Iron (mg)	13.54	14.15	16.62
Magnesium (mg)	412.91	454.42	542.65
Zinc (mg)	13.11	14.43	14.46
Fat, total (g)	47.19	50.39	67.14
Carbohydrate, total (g)	187.89	236.92	257.65
Sugars, total (g)	89.83	105.28	106.05
Starch (g)	96.86	130.38	150.45
Dietary Fibre (g)	39.23	41.81	48.39
Saturated fatty acids, total (g)	15.81	17.67	19.98
Monounsaturated fatty acids, total (g)	15.87	16.59	23.10
Polyunsaturated fatty acids, total (g)	11.39	11.67	18.76
Linoleic acid (g)	10.22	10.51	17.29
Alpha linolenic acid (g)	0.83	0.87	1.20
Long chain omega 3 fatty acids, total (mg)	213.55	213.88	202.74
Preformed Vitamin A (retinol) (ug)	270.33	313.42	288.14
Provitamin A as beta-carotene eq (ug)	6586.25	6606.33	6529.83
Riboflavin (mg)	2.49	3.03	3.24
Niacin equivalents, total (mg)	49.45	55.37	62.16
Folate, total (ug)	573.80	629.83	702.71
Vitamin D (ug)	2.78	3.16	3.42
Vitamin E (mg)	8.98	9.24	12.84
Phosphorus (mg)	1802.20	2130.56	2337.61
Potassium (mg)	3814.96	4245.61	4638.65
Sodium (mg)	989.26	1094.14	1271.06
Cholesterol (mg)	245.99	260.24	253.76
Selenium (ug)	75.91	82.20	85.76
Vitamin B6 (mg)	2.02	2.15	2.12
Vitamin B12 (ug)	5.90	7.89	9.44

Table A11.17. *Foundation Diets* 'Pasta-style' diets

Girls			
Nutrients	9–11 y	12–13 y	14–18 y
Moisture (water) (g)	1331.83	1558.37	1642.03
Energy, excluding dietary fibre (kJ)	6288.79	6985.85	7831.63
Energy, including dietary fibre (kJ)	6550.34	7256.84	8147.43
Protein (g)	99.64	110.63	128.68
Thiamin (mg)	1.34	1.46	1.64
Vitamin A as retinol equivalents (ug)	1294.43	1338.60	1357.50
Vitamin C (mg)	145.74	146.26	154.69
Folic acid (ug)	600.12	680.58	731.25
Calcium (mg)	1006.30	1297.98	1406.80
Iodine (ug)	158.06	210.82	199.75
Iron (mg)	11.66	12.20	14.16
Magnesium (mg)	362.73	404.96	448.05
Zinc (mg)	12.89	14.11	13.75
Fat, total (g)	43.04	46.17	53.10
Carbohydrate, total (g)	178.89	202.60	218.28
Sugars, total (g)	83.71	100.24	99.48
Starch (g)	94.04	101.17	117.52
Dietary Fibre (g)	32.88	34.03	39.70
Saturated fatty acids, total (g)	15.04	16.82	18.61
Monounsaturated fatty acids, total (g)	14.47	15.28	17.93
Polyunsaturated fatty acids, total (g)	9.86	10.11	11.89
Linoleic acid (g)	8.80	9.07	10.53
Alpha linolenic acid (g)	0.72	0.76	0.94
Long chain omega 3 fatty acids (mg)	209.70	210.12	269.23
Preformed Vitamin A (retinol) (ug)	249.95	291.35	242.61
Provitamin A as beta-carotene eq (ug)	6276.36	6296.92	6265.24
Riboflavin (mg)	2.23	2.79	2.97
Niacin equivalents, total (mg)	45.14	50.41	56.65
Folate, total (ug)	473.12	535.43	567.06
Vitamin D (ug)	2.56	2.93	3.28
Vitamin E (mg)	8.20	8.42	10.11
Phosphorus (mg)	1659.30	1938.52	2160.77
Potassium (mg)	3395.84	3832.79	4238.83
Sodium (mg)	1048.39	1203.92	1414.02
Cholesterol (mg)	227.06	241.33	298.62
Selenium (ug)	67.62	71.60	91.14
Vitamin B6 (mg)	1.93	2.06	1.90
Vitamin B12 (ug)	6.01	7.55	9.37

Appendix 12: 7 day simulated *Foundation Diets* for men, women, boys and girls omnivore, lacto-ovo vegetarian, 'rice-based' and 'pasta-based' diets based on composite food group analysis patterns

- The following pages show the nutrient and food serves profile of the 7-day diets. The 7-day *Foundation Diets* were based on the food patterns developed using the composite food group modelling but using individual foods.
- Each of the following pages represents the analysis of 700 one day diets, analysed as 100 7-day diets. The outputs show the mean intake and the maximum and minimum nutrient compositions for the 100 7-day diets based on the pattern of food group intake shown at the top of the page. The serves are expressed on a weekly basis but the analysis is expressed per day. Individual foods from each food group are used to "populate" the food patterns in proportion to how often they are currently eaten using data from NNS95 and NCNPAS07 data.
- The last two columns show the percentage of diets that reached either the EAR or the RDI or AI. Diets were considered acceptable if there were none below EAR. AIs are shown for information only. AIs are generally set at the highest median intake in the population for any age group within a gender (usually the younger age band). Thus it would be expected that somewhat more than half the population would have intakes below AI. At lower energy intakes it is likely that most people will be below AI.
- The % energy as fat, carbohydrate, protein and alcohol shown at the bottom of the page were estimated by adding energy derived from the average fat (37kJ/g), protein (17kJ/g), carbohydrate (16kJ/g) and alcohol (29kJ/g). The kilojoules from dietary fibre were derived from the figure for Energy including fibre minus energy excluding fibre and added to the carbohydrate energy contribution. The energy from each component was then expressed as a percentage of the calculated energy. Energy calculated from the average protein, carbohydrate, fats and alcohol of a number of diets do not exactly equal those obtained when using the average energy obtained from the food database for diets but are within 2–3% of the total.

Appendix 13: Food group sources of nutrients for mean of 100 7-day *Foundation diets*

Abbreviations:		
	GreenV	Green and brassiac vegetables
	OrangeV	Orange vegetables
	OtherV	Other vegetables
	WGcereal	Wholegrain cereals
	Refcereal	Refined cereals
	WMeat	Poultry/fish/seafood/eggs/legumes
	RMeat	Red meats
	PolyMarg	Polyunsaturated margarines and oils

[1] "Girls 13 – 23 months

[1] 5 7 7 2 0 14 7 32 17 7 7 0 2 0 14 7 0 0 0

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.6	1.3	1.9	1.2	0	3.3	4.8	27.6	19.5	8.6	8.0	17.5	3.8
Energy	2.6	1.5	2.1	1.3	0	3.4	5.0	27.9	19.2	8.5	7.7	16.9	3.7
Protein	1.5	2.7	1.1	1.8	0	2.1	1.1	18.7	10.1	20.0	19.6	21.1	0.1
Fat	0.5	0.5	0.4	1.1	0	8.3	0.6	16.3	5.9	13.9	14.4	20.7	17.3
Carbohydrate	3.8	0.9	2.8	0.9	0	1.7	8.4	36.4	29.1	1.1	0.0	14.8	0.0
Sugars	1.2	1.7	5.6	0.2	0	4.7	22.9	18.7	2.7	0.3	0.0	41.9	0.0
Starch	5.1	0.5	1.3	1.3	0	0.1	0.8	45.8	42.9	1.5	0.0	0.7	0.0
Fibre	11.9	8.4	7.3	3.6	0	8.2	10.2	33.5	11.8	4.1	0.0	0.9	0.0
Saturated fat	0.2	0.3	0.2	0.5	0	5.4	0.2	12.6	3.3	11.9	16.5	37.2	11.7
Monounsaturated fat	0.2	0.0	0.0	0.5	0	13.6	0.0	14.9	5.9	15.9	18.8	15.5	14.6
Polyunsaturated fat	1.1	1.3	1.4	3.0	0	6.4	0.8	23.1	8.5	12.0	4.7	4.0	33.8
Linoleic acid	1.2	1.5	1.2	3.0	0	7.0	0.4	24.2	8.2	9.5	3.0	4.3	36.5
Alpha linolenic acid	0.1	0.0	0.3	4.8	0	0.0	4.6	23.9	14.0	10.2	7.3	13.4	21.4
LC n3 fatty acids	0.3	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	69.4	26.7	3.6	0.0
Vitamin A equivs	3.2	4.8	61.4	0.0	0	6.5	1.9	2.0	0.2	3.4	0.3	9.6	6.8
Retinol	0.1	0.0	0.0	0.0	0	0.0	0.4	8.5	0.4	17.4	0.9	41.0	31.3
Provitamin A	4.0	6.1	77.2	0.0	0	8.1	2.4	0.3	0.1	0.0	0.2	0.9	0.8
Thiamin	2.8	4.8	2.8	1.3	0	3.6	3.0	52.4	15.6	4.8	3.8	5.2	0.0
Riboflavin	0.8	4.1	1.9	0.4	0	4.3	2.2	26.8	5.3	7.4	4.5	42.5	0.0
Niacin	2.4	2.2	1.8	1.0	0	3.9	1.1	27.9	9.3	18.6	16.2	15.6	0.0
Folate (total)	2.2	8.5	2.8	3.4	0	7.6	10.3	29.9	6.5	7.1	0.5	21.1	0.1
Folate equivs	1.4	5.2	1.7	2.1	0	4.7	6.4	46.2	14.5	4.4	0.3	13.0	0.1
Vitamin C	9.2	32.4	8.2	0.0	0	28.1	19.2	1.1	0.5	0.1	0.2	1.0	0.0
Vitamin D	0.2	0.0	0.0	0.0	0	0.0	0.0	7.1	0.1	27.5	7.8	40.4	16.9
Vitamin E	0.6	1.8	5.6	1.9	0	16.0	6.3	14.9	5.3	16.3	7.9	4.4	19.1
Calcium	0.4	2.4	2.3	0.8	0	2.2	1.4	23.5	4.1	3.0	0.5	59.4	0.0
Iron	2.7	6.7	2.7	3.2	0	5.0	3.1	38.4	12.8	9.8	13.1	2.5	0.0
Iodine	0.2	0.5	0.2	0.1	0	0.5	0.4	33.5	10.1	7.0	0.7	46.8	0.1
Magnesium	3.5	5.1	2.9	2.6	0	5.4	5.2	37.1	8.1	8.3	4.9	16.9	0.0
Phosphorus	2.3	2.9	1.7	1.5	0	3.2	1.3	26.1	8.4	12.3	9.8	30.5	0.0
Potassium	8.0	6.4	6.7	1.8	0	11.0	8.0	15.9	3.4	8.1	7.1	23.5	0.1
Sodium	1.0	1.1	1.3	0.5	0	1.7	0.3	39.7	17.7	8.3	2.9	22.9	2.6
Zinc	1.7	4.0	1.6	1.7	0	3.7	1.6	21.8	7.2	10.1	29.5	17.1	0.0
Cholesterol	0.0	0.0	0.0	0.0	0	0.0	0.0	2.7	0.2	57.4	23.0	16.6	0.0
Selenium	1.3	0.2	0.1	1.6	0	4.0	0.4	20.8	11.5	38.9	11.9	9.3	0.1
Vitamin B6	3.4	4.4	4.8	1.8	0	29.6	6.3	17.4	3.8	11.6	5.9	10.9	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0	0.0	0.0	1.8	7.5	16.0	18.7	56.1	0.0

[1] "Girls 2 - 3"

```
 [1]  5  7  7  4  0 14 14 38 18  7  7  0  2  0 19  7  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.2	1.1	1.6	2.0	0	2.8	8.2	27.9	17.5	7.3	6.8	19.4	3.2
Energy	2.2	1.3	1.8	2.2	0	2.9	8.6	28.2	17.3	7.2	6.6	18.7	3.1
Protein	1.3	2.4	1.0	3.1	0	1.9	2.0	19.5	9.4	17.6	17.3	24.4	0.1
Fat	0.5	0.5	0.4	2.0	0	7.6	1.0	17.7	5.7	12.7	13.2	22.9	15.8
Carbohydrate	3.1	0.8	2.3	1.5	0	1.4	13.7	35.2	25.0	0.9	0.0	16.3	0.0
Sugars	0.9	1.2	4.0	0.3	0	3.3	32.3	15.7	2.0	0.2	0.0	40.1	0.0
Starch	4.5	0.5	1.2	2.3	0	0.1	1.4	47.9	40.0	1.3	0.0	0.8	0.0
Fibre	9.8	7.0	6.0	5.9	0	6.8	16.9	32.9	10.4	3.4	0.0	1.0	0.0
Saturated fat	0.2	0.2	0.2	0.8	0	4.9	0.4	13.5	3.2	10.7	14.9	40.5	10.6
Monounsaturated fat	0.2	0.0	0.0	1.0	0	12.7	0.1	16.5	5.9	14.8	17.6	17.5	13.7
Polyunsaturated fat	1.0	1.2	1.2	5.4	0	5.8	1.4	25.0	8.2	10.9	4.3	4.6	30.8
Linoleic acid	1.1	1.3	1.1	5.4	0	6.4	0.7	26.2	7.9	8.7	2.7	5.1	33.3
Alpha linolenic acid	0.1	0.0	0.3	8.1	0	0.0	7.8	24.1	12.6	8.7	6.2	14.0	18.2
LC n3 fatty acids	0.3	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	69.1	26.6	3.9	0.0
Vitamin A equivs	3.1	4.6	58.5	0.0	0	6.2	3.7	2.2	0.2	3.3	0.3	11.6	6.4
Retinol	0.1	0.0	0.0	0.0	0	0.0	0.7	9.0	0.4	15.4	0.8	45.8	27.8
Provitamin A	3.9	5.9	75.2	0.0	0	7.9	4.6	0.4	0.1	0.0	0.2	1.0	0.8
Thiamin	2.4	4.1	2.4	2.3	0	3.1	5.1	53.3	14.1	4.1	3.2	5.9	0.0
Riboflavin	0.6	3.4	1.5	0.6	0	3.5	3.6	26.0	4.6	6.0	3.6	46.5	0.0
Niacin	2.1	1.9	1.6	1.7	0	3.4	1.9	29.3	8.7	16.5	14.3	18.5	0.0
Folate (total)	1.7	6.7	2.2	5.3	0	6.0	16.3	28.0	5.4	5.6	0.4	22.3	0.1
Folate equivs	1.1	4.3	1.4	3.4	0	3.8	10.4	44.8	12.6	3.6	0.2	14.3	0.1
Vitamin C	7.6	27.1	6.8	0.0	0	23.4	32.1	1.0	0.5	0.1	0.2	1.1	0.0
Vitamin D	0.1	0.0	0.0	0.0	0	0.0	0.0	7.6	0.1	24.9	7.1	44.8	15.3
Vitamin E	0.5	1.6	5.0	3.4	0	14.2	11.1	15.8	5.0	14.5	7.0	4.9	17.0
Calcium	0.3	1.9	1.8	1.3	0	1.7	2.2	22.2	3.5	2.4	0.4	62.2	0.0
Iron	2.3	5.9	2.3	5.6	0	4.4	5.4	39.6	11.8	8.5	11.4	2.9	0.0
Iodine	0.2	0.4	0.2	0.2	0	0.4	0.7	32.1	8.6	5.7	0.5	51.0	0.0
Magnesium	2.9	4.2	2.4	4.3	0	4.5	8.6	36.5	7.1	6.8	4.0	18.6	0.0
Phosphorus	2.0	2.4	1.5	2.5	0	2.7	2.3	26.2	7.5	10.4	8.3	34.1	0.0
Potassium	6.6	5.3	5.5	3.0	0	9.1	13.2	15.5	3.0	6.7	5.9	26.2	0.0
Sodium	0.8	1.0	1.1	0.9	0	1.5	0.5	41.0	16.3	7.2	2.5	24.9	2.2
Zinc	1.5	3.6	1.4	3.0	0	3.2	2.8	23.0	6.8	8.9	26.1	19.7	0.0
Cholesterol	0.0	0.0	0.0	0.0	0	0.0	0.0	3.1	0.3	54.7	21.9	20.0	0.0
Selenium	1.2	0.2	0.1	2.9	0	3.6	0.6	22.7	11.2	35.8	10.9	10.7	0.1
Vitamin B6	2.9	3.8	4.2	3.2	0	25.6	10.9	17.9	3.5	10.1	5.1	12.8	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0	0.0	0.0	1.8	6.6	13.4	15.6	62.6	0.0

[1] "Girls 4 - 8"

```
 [1]  7 14 14  4  0 21 21 38 18 11 10  0  2  0 21 10  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.6	1.9	2.2	1.7	0	2.6	10.1	23.6	14.8	9.7	8.4	18.4	4.0
Energy	2.6	2.2	2.6	1.9	0	2.8	10.5	23.8	14.5	9.5	8.0	17.6	3.8
Protein	1.5	3.8	1.3	2.5	0	2.0	2.3	15.3	7.5	22.5	19.7	21.4	0.1
Fat	0.5	0.8	0.5	1.7	0	5.2	1.3	14.3	5.4	16.4	15.5	20.3	18.2
Carbohydrate	3.9	1.4	3.4	1.3	0	1.9	17.8	31.3	21.9	0.9	0.0	16.2	0.0
Sugars	0.8	1.8	6.2	0.2	0	4.2	37.3	12.2	1.6	0.2	0.0	35.3	0.0
Starch	6.4	1.0	1.1	2.2	0	0.1	1.7	46.9	38.3	1.3	0.0	0.9	0.0
Fibre	8.7	10.9	10.7	4.8	0	7.3	18.9	26.9	8.2	2.8	0.0	0.8	0.0
Saturated fat	0.2	0.4	0.2	0.7	0	3.2	0.5	10.8	2.6	14.4	17.8	36.7	12.5
Monounsaturated fat	0.1	0.0	0.0	0.9	0	8.3	0.1	13.1	6.3	19.4	20.4	15.5	15.8
Polyunsaturated fat	0.9	1.9	1.7	4.5	0	4.5	1.7	20.6	7.4	12.8	5.3	3.8	34.9
Linoleic acid	1.1	2.1	1.5	4.6	0	4.9	0.9	21.9	6.9	10.2	3.3	4.4	38.3
Alpha linolenic acid	0.1	0.0	0.3	6.7	0	0.0	9.1	19.4	14.5	9.2	8.1	12.0	20.6
LC n3 fatty acids	0.2	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	70.0	27.1	2.7	0.0
Vitamin A equivs	0.7	4.4	70.3	0.0	0	5.6	3.0	1.0	0.1	2.9	0.2	6.9	4.9
Retinol	0.1	0.0	0.0	0.0	0	0.0	0.9	6.0	0.2	20.0	1.2	40.4	31.2
Provitamin A	0.8	5.2	82.6	0.0	0	6.5	3.5	0.2	0.0	0.0	0.1	0.6	0.5
Thiamin	2.9	6.9	4.5	1.9	0	3.6	6.7	46.8	12.8	5.0	4.0	4.9	0.0
Riboflavin	0.7	5.7	2.3	0.5	0	3.3	4.1	22.1	4.2	8.4	4.9	43.9	0.0
Niacin	2.4	3.1	2.3	1.4	0	3.4	2.2	22.8	7.3	21.5	16.6	17.0	0.0
Folate (total)	1.9	9.9	3.5	4.4	0	6.8	19.3	22.2	4.7	5.9	0.6	20.6	0.1
Folate equivs	1.3	6.7	2.4	3.0	0	4.7	13.2	38.2	12.1	4.0	0.4	14.0	0.1
Vitamin C	6.5	30.7	5.9	0.0	0	24.0	31.0	0.7	0.3	0.1	0.2	0.7	0.0
Vitamin D	0.2	0.0	0.0	0.0	0	0.0	0.0	5.3	0.0	28.4	7.6	40.7	17.8
Vitamin E	0.2	2.1	6.5	2.8	0	16.2	11.6	12.1	4.0	16.7	6.6	3.6	17.6
Calcium	0.4	3.5	3.3	1.2	0	2.1	3.1	18.9	3.3	3.1	0.5	60.6	0.1
Iron	2.7	9.3	3.3	4.5	0	4.9	6.5	33.9	9.6	9.8	13.2	2.5	0.0
Iodine	0.3	1.1	0.3	0.2	0	0.5	0.9	27.5	8.7	8.1	0.6	51.7	0.1
Magnesium	3.4	6.9	4.0	3.8	0	5.2	9.8	30.4	5.9	8.4	4.8	17.4	0.0
Phosphorus	2.4	4.1	2.5	2.2	0	3.0	2.8	21.5	6.0	13.8	9.9	31.8	0.0
Potassium	7.4	7.8	8.5	2.3	0	9.3	14.6	11.6	2.2	7.6	6.2	22.3	0.0
Sodium	0.9	1.5	2.5	0.9	0	1.8	0.7	35.8	16.7	11.0	3.1	22.4	2.7
Zinc	1.6	5.8	2.0	2.5	0	3.6	3.3	18.3	5.3	10.7	29.6	17.4	0.0
Cholesterol	0.0	0.0	0.0	0.0	0	0.0	0.0	1.8	0.2	61.7	21.4	14.9	0.0
Selenium	1.3	0.4	0.1	2.2	0	2.6	0.5	18.0	9.0	44.6	12.6	8.8	0.1
Vitamin B6	2.7	5.5	6.7	2.1	0	35.6	9.5	11.8	2.3	10.1	4.6	9.1	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0	0.0	0.0	1.4	5.0	18.1	19.1	56.5	0.0

[1] "Girls 9 - 11"

```
 [1] 10 14 14  4  4 28 28 38 18 14 14  0  6  0 35 14  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.8	1.3	1.9	1.4	3.2	2.5	9.9	18.7	11.3	9.3	8.8	24.8	4.2
Energy	2.9	1.6	2.1	1.5	3.2	2.7	10.4	18.9	11.2	9.1	8.5	23.9	4.1
Protein	1.6	2.5	1.1	1.9	1.9	2.0	2.1	10.8	5.5	21.8	20.4	28.3	0.1
Fat	0.4	0.5	0.4	1.3	9.7	3.5	1.0	9.4	3.5	13.2	13.7	27.2	16.5
Carbohydrate	4.6	1.0	3.0	1.1	0.5	2.3	19.0	27.7	18.4	0.5	0.0	21.8	0.0
Sugars	0.8	1.3	4.6	0.2	0.5	4.4	35.8	7.7	1.1	0.1	0.0	43.5	0.0
Starch	8.5	0.8	1.4	2.0	0.5	0.1	1.7	47.8	35.8	0.9	0.0	0.5	0.0
Fibre	9.4	9.1	9.1	4.3	2.3	9.3	23.1	23.7	7.5	1.8	0.0	0.4	0.0
Saturated fat	0.2	0.2	0.2	0.5	3.7	2.1	0.4	6.2	1.5	11.1	15.0	48.3	10.7
Monounsaturated fat	0.1	0.0	0.0	0.7	14.2	5.3	0.1	8.5	4.0	15.9	17.5	19.9	13.8
Polyunsaturated fat	0.8	1.2	1.4	3.6	14.7	3.7	1.3	15.3	5.2	10.8	4.9	3.0	34.1
Linoleic acid	0.9	1.3	1.2	3.6	16.3	4.0	0.8	16.1	4.7	8.3	3.0	3.2	36.3
Alpha linolenic acid	0.1	0.0	0.4	5.6	2.7	0.0	8.9	15.1	11.7	8.3	8.1	16.3	22.8
LC n3 fatty acids	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65.5	28.8	5.4	0.0
Vitamin A equivs	1.0	4.4	60.8	0.0	0.0	7.1	3.2	0.7	0.0	2.9	0.3	12.9	6.6
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.5	2.5	0.1	13.9	0.9	53.4	28.5
Provitamin A	1.3	5.6	77.7	0.0	0.0	9.0	4.0	0.2	0.0	0.0	0.1	1.2	0.8
Thiamin	3.6	5.3	3.7	1.6	4.7	4.2	8.0	42.0	10.5	5.3	5.3	5.9	0.0
Riboflavin	0.7	3.7	1.8	0.3	0.6	3.2	3.5	13.9	2.8	7.7	4.8	56.8	0.0
Niacin	2.6	2.1	1.8	1.0	2.8	3.5	2.2	16.3	5.3	22.4	17.2	22.8	0.0
Folate (total)	2.0	7.4	2.7	3.3	3.2	7.2	20.9	15.9	3.2	4.3	0.6	29.3	0.1
Folate equivs	1.5	5.5	2.0	2.4	2.3	5.3	15.4	30.8	9.4	3.1	0.4	21.7	0.1
Vitamin C	8.0	22.4	5.8	0.0	0.0	28.0	34.0	0.5	0.2	0.1	0.2	0.8	0.0
Vitamin D	0.2	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	19.8	7.2	54.6	16.1
Vitamin E	0.2	1.4	4.7	1.9	8.4	15.6	11.4	11.5	2.9	13.6	6.9	4.0	17.6
Calcium	0.4	2.3	2.2	1.2	0.5	2.0	2.8	10.8	2.1	2.4	0.5	72.8	0.0
Iron	3.4	8.0	3.2	4.1	2.7	6.1	7.2	29.7	8.1	9.4	16.2	1.8	0.0
Iodine	0.3	0.6	0.2	0.1	0.0	0.5	0.9	18.1	6.2	6.2	0.6	66.1	0.1
Magnesium	3.8	5.3	3.2	3.1	4.7	5.5	9.2	25.1	4.6	7.7	5.3	22.3	0.0
Phosphorus	2.4	2.7	1.8	1.7	2.3	3.0	2.6	15.5	4.4	12.7	10.1	40.8	0.0
Potassium	8.4	5.7	6.7	1.6	1.4	9.7	13.9	8.5	1.7	7.1	6.9	28.3	0.1
Sodium	0.9	1.3	1.7	0.9	0.0	2.1	0.7	28.0	12.9	10.9	3.4	34.1	3.1
Zinc	1.7	4.1	1.5	1.8	2.5	3.5	3.0	13.8	3.9	10.9	30.4	23.1	0.0
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.2	54.0	22.3	22.7	0.0
Selenium	1.5	0.3	0.2	1.6	1.9	2.7	0.5	14.3	7.2	43.1	13.4	13.4	0.1
Vitamin B6	3.2	4.7	5.2	1.6	2.8	28.3	9.8	11.3	2.0	11.5	5.5	14.2	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	3.6	14.2	17.3	64.1	0.0

[1] "Girls 12 - 13"

```
 [1] 10 14 14  4  4 28 28 48 22 14 14  0  7  0 44 14  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.5	1.1	1.6	1.2	2.8	2.2	8.7	20.8	12.2	8.2	7.8	27.1	3.7
Energy	2.5	1.4	1.9	1.3	2.8	2.4	9.2	21.1	12.1	8.0	7.5	26.3	3.6
Protein	1.4	2.3	1.0	1.7	1.7	1.8	1.8	12.3	6.0	19.7	18.3	31.7	0.1
Fat	0.3	0.4	0.4	1.2	8.9	3.2	0.9	10.8	3.9	12.1	12.5	30.2	15.1
Carbohydrate	3.9	0.9	2.6	0.9	0.4	1.9	16.3	29.9	19.2	0.4	0.0	23.4	0.0
Sugars	0.7	1.1	4.1	0.1	0.4	3.9	31.6	8.6	1.2	0.1	0.0	48.2	0.0
Starch	7.0	0.6	1.2	1.6	0.4	0.1	1.4	50.1	36.2	0.7	0.0	0.5	0.0
Fibre	8.7	8.4	8.4	3.9	2.2	8.6	21.4	27.7	8.5	1.7	0.0	0.5	0.0
Saturated fat	0.1	0.2	0.1	0.4	3.3	1.8	0.3	6.9	1.6	9.8	13.3	52.4	9.5
Monounsaturated fat	0.1	0.0	0.0	0.6	13.2	4.9	0.1	9.9	4.6	14.8	16.3	22.6	12.8
Polyunsaturated fat	0.8	1.2	1.3	3.4	13.9	3.5	1.2	18.2	6.0	10.2	4.6	3.4	32.2
Linoleic acid	0.9	1.3	1.2	3.4	15.4	3.8	0.7	19.1	5.4	7.9	2.9	3.8	34.3
Alpha linolenic acid	0.0	0.0	0.3	5.1	2.5	0.0	8.1	17.4	13.0	7.6	7.4	17.9	20.7
LC n3 fatty acids	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.9	28.6	6.4	0.0
Vitamin A equivs	1.0	4.2	59.0	0.0	0.0	6.9	3.1	0.8	0.1	2.9	0.3	15.4	6.4
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.4	2.8	0.1	12.3	0.8	58.2	25.2
Provitamin A	1.3	5.5	77.5	0.0	0.0	9.0	4.0	0.2	0.0	0.0	0.1	1.5	0.8
Thiamin	3.1	4.6	3.2	1.4	4.1	3.6	6.9	46.2	11.1	4.6	4.6	6.4	0.0
Riboflavin	0.6	3.1	1.6	0.3	0.5	2.7	3.0	14.8	2.9	6.5	4.0	60.0	0.0
Niacin	2.3	1.9	1.6	0.9	2.5	3.1	2.0	18.5	5.9	20.1	15.5	25.7	0.0
Folate (total)	1.8	6.6	2.4	2.9	2.8	6.4	18.6	17.8	3.5	3.8	0.5	32.7	0.1
Folate equivs	1.3	4.7	1.8	2.1	2.0	4.6	13.3	33.6	9.9	2.7	0.4	23.5	0.1
Vitamin C	8.0	22.4	5.8	0.0	0.0	27.9	33.8	0.6	0.3	0.1	0.2	1.0	0.0
Vitamin D	0.2	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	17.5	6.4	59.2	14.3
Vitamin E	0.2	1.3	4.5	1.8	8.0	14.9	10.9	13.9	3.4	13.0	6.6	4.6	16.8
Calcium	0.3	1.9	1.8	1.0	0.4	1.6	2.3	11.2	2.1	2.0	0.4	74.8	0.0
Iron	3.1	7.3	2.9	3.7	2.5	5.5	6.6	34.1	9.0	8.6	14.7	2.1	0.0
Iodine	0.2	0.5	0.2	0.1	0.0	0.4	0.7	18.6	6.2	5.1	0.5	67.4	0.0
Magnesium	3.4	4.7	2.8	2.8	4.2	4.9	8.1	28.0	4.9	6.8	4.7	24.7	0.0
Phosphorus	2.1	2.4	1.6	1.4	2.0	2.6	2.2	17.0	4.7	11.0	8.8	44.2	0.0
Potassium	7.7	5.2	6.1	1.5	1.2	8.8	12.7	9.7	1.9	6.5	6.3	32.3	0.0
Sodium	0.7	1.1	1.4	0.8	0.0	1.7	0.6	29.9	13.4	9.3	2.9	35.5	2.6
Zinc	1.5	3.7	1.4	1.7	2.2	3.2	2.8	15.8	4.3	9.9	27.6	26.0	0.0
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.2	51.2	21.1	26.5	0.0
Selenium	1.3	0.3	0.1	1.5	1.7	2.5	0.4	16.7	8.1	39.7	12.3	15.2	0.1
Vitamin B6	3.0	4.4	4.9	1.5	2.6	26.5	9.2	13.3	2.3	10.7	5.1	16.6	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.8	12.1	14.8	68.4	0.0

[1] "Girls 14 - 18"

```
 [1] 10 14 14  4  4 28 28 70 28 14 14  0  7  0 42 28  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.2	1.0	1.5	1.1	2.2	2.5	7.4	25.6	13.8	7.4	6.9	21.8	6.6
Energy	2.2	1.2	1.7	1.2	2.2	2.7	7.8	26.0	13.7	7.2	6.6	21.1	6.4
Protein	1.4	2.1	1.0	1.6	1.4	2.5	1.7	17.2	7.1	18.2	17.2	28.4	0.1
Fat	0.3	0.4	0.3	1.0	6.3	3.7	0.9	13.6	4.1	10.5	10.7	21.7	26.5
Carbohydrate	3.5	0.8	2.3	0.9	0.5	1.9	13.5	35.4	21.6	0.6	0.0	19.0	0.0
Sugars	0.7	1.2	4.1	0.2	0.4	4.1	30.3	12.7	1.4	0.2	0.0	44.7	0.0
Starch	5.5	0.5	1.0	1.4	0.6	0.2	0.9	52.1	36.4	1.0	0.0	0.4	0.0
Fibre	6.8	7.1	7.1	3.4	2.0	9.2	17.3	35.5	8.8	2.3	0.0	0.4	0.0
Saturated fat	0.1	0.2	0.1	0.4	2.4	2.4	0.4	9.4	1.8	9.5	12.7	41.9	18.7
Monounsaturated fat	0.1	0.0	0.0	0.5	9.8	5.8	0.1	12.7	4.8	12.8	14.2	16.3	23.0
Polyunsaturated fat	0.5	0.8	1.0	2.3	8.0	2.8	0.9	18.9	5.3	7.5	3.3	2.6	46.0
Linoleic acid	0.6	0.9	0.8	2.2	8.6	3.6	0.6	19.4	4.7	5.8	2.1	2.3	48.4
Alpha linolenic acid	0.0	0.0	0.3	3.6	3.8	0.0	6.6	20.6	11.3	6.2	5.4	11.3	31.0
LC n3 fatty acids	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65.3	28.1	6.4	0.0
Vitamin A equivs	1.0	4.0	56.2	0.0	0.0	6.4	4.2	1.2	0.1	2.9	0.3	11.4	12.4
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.4	3.6	0.1	11.4	0.7	38.2	45.5
Provitamin A	1.4	5.5	75.8	0.0	0.0	8.6	5.5	0.3	0.0	0.0	0.1	1.1	1.5
Thiamin	2.4	3.5	2.4	1.0	2.7	2.9	5.3	51.8	10.8	3.6	4.9	8.8	0.0
Riboflavin	0.6	3.1	1.5	0.3	0.8	3.3	2.9	20.5	3.2	6.2	4.0	53.7	0.0
Niacin	2.2	1.8	1.6	0.9	2.1	3.3	2.1	26.9	7.1	18.5	14.9	18.9	0.0
Folate (total)	1.8	6.8	2.5	3.3	2.7	6.0	16.8	26.7	4.4	4.9	0.7	23.1	0.2
Folate equivs	1.1	4.1	1.6	2.0	1.6	3.7	10.3	46.9	10.9	3.0	0.4	14.1	0.1
Vitamin C	7.3	21.4	5.4	0.0	0.0	29.4	32.9	0.8	0.2	0.1	0.2	2.3	0.0
Vitamin D	0.2	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.1	16.5	6.5	45.7	27.7
Vitamin E	0.2	1.1	3.6	1.9	8.0	10.2	9.0	13.8	3.2	11.2	5.0	5.8	27.2
Calcium	0.3	1.8	1.7	0.7	0.4	2.0	2.2	16.2	2.5	2.0	0.4	69.6	0.1
Iron	2.6	6.1	2.5	3.0	1.6	5.6	5.9	41.7	9.2	8.0	11.8	2.1	0.0
Iodine	0.2	0.4	0.2	0.1	0.0	0.4	0.8	28.5	7.8	5.3	0.5	55.7	0.1
Magnesium	3.0	4.1	2.5	2.4	3.3	5.1	7.0	34.2	5.7	6.6	4.2	21.8	0.0
Phosphorus	2.0	2.2	1.5	1.3	1.5	2.8	2.2	22.1	5.6	10.3	8.3	40.2	0.0
Potassium	7.4	5.1	5.8	1.5	1.2	8.1	12.2	13.4	2.3	6.4	6.0	30.4	0.1
Sodium	0.6	1.0	1.1	0.8	0.0	1.1	0.5	38.5	12.8	8.0	2.4	29.1	4.2
Zinc	1.4	3.4	1.3	1.6	1.7	3.0	2.9	20.9	5.3	9.2	25.8	23.4	0.0
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.2	52.7	22.0	23.6	0.0
Selenium	1.2	0.2	0.1	1.4	1.8	1.4	0.4	23.4	8.8	35.9	11.9	13.2	0.1
Vitamin B6	3.6	5.7	5.7	2.0	2.5	8.2	10.0	20.3	3.4	12.8	7.1	18.9	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	4.5	12.9	14.5	66.3	0.0

[1] "Pregnant girls"

```
 [1] 10 14 14  4  4 28 28 82 38 24 24  0  7  0 42 28  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	1.8	0.8	1.2	0.9	1.8	2.1	6.2	25.1	15.7	10.6	9.8	18.3	5.6
Energy	1.9	1.0	1.4	1.0	1.8	2.3	6.5	25.5	15.6	10.4	9.5	17.7	5.4
Protein	1.0	1.6	0.7	1.2	1.1	1.9	1.3	15.4	7.4	23.8	22.6	21.7	0.1
Fat	0.2	0.3	0.3	0.8	5.3	3.1	0.7	13.4	4.7	15.2	15.4	18.3	22.3
Carbohydrate	3.0	0.7	2.0	0.8	0.4	1.7	11.8	36.3	25.7	1.0	0.0	16.6	0.0
Sugars	0.7	1.1	4.0	0.1	0.4	4.0	29.5	14.5	1.8	0.3	0.0	43.5	0.0
Starch	4.5	0.4	0.8	1.2	0.5	0.2	0.7	49.8	40.3	1.3	0.0	0.4	0.0
Fibre	6.1	6.4	6.4	3.1	1.8	8.3	15.6	37.5	10.8	3.6	0.0	0.4	0.0
Saturated fat	0.1	0.2	0.1	0.3	2.0	2.0	0.3	9.4	2.1	13.8	18.4	35.5	15.8
Monounsaturated fat	0.1	0.0	0.0	0.4	7.9	4.7	0.1	12.1	5.3	17.8	19.7	13.2	18.7
Polyunsaturated fat	0.5	0.7	0.9	2.0	7.1	2.5	0.8	19.6	6.4	11.4	5.1	2.2	40.8
Linoleic acid	0.5	0.8	0.8	2.0	7.8	3.2	0.5	20.5	5.8	9.0	3.2	2.1	43.7
Alpha linolenic acid	0.0	0.0	0.2	3.1	3.3	0.0	5.7	20.8	13.3	9.2	8.0	9.8	26.7
LC n3 fatty acids	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.2	28.9	3.8	0.0
Vitamin A equivs	1.0	4.0	54.9	0.0	0.0	6.2	4.1	1.3	0.1	4.8	0.5	11.1	12.1
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.4	3.9	0.2	17.9	1.2	34.9	41.6
Provitamin A	1.4	5.4	75.6	0.0	0.0	8.5	5.5	0.4	0.1	0.1	0.2	1.1	1.5
Thiamin	2.0	2.9	2.1	0.8	2.3	2.4	4.4	51.0	12.3	5.2	7.1	7.4	0.0
Riboflavin	0.5	2.8	1.4	0.2	0.7	2.9	2.5	21.4	3.9	9.5	6.1	48.0	0.0
Niacin	1.7	1.3	1.2	0.7	1.6	2.5	1.6	24.0	7.3	24.2	19.4	14.4	0.0
Folate (total)	1.7	6.1	2.3	3.0	2.4	5.5	15.2	28.4	5.5	7.7	1.1	21.0	0.2
Folate equivs	1.0	3.6	1.4	1.8	1.4	3.2	9.0	48.0	13.0	4.5	0.7	12.4	0.1
Vitamin C	7.3	21.4	5.4	0.0	0.0	29.3	32.7	0.9	0.3	0.1	0.3	2.3	0.0
Vitamin D	0.1	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.1	24.2	9.5	39.0	23.7
Vitamin E	0.1	0.9	3.2	1.6	7.0	8.8	7.8	14.1	3.7	16.6	7.4	5.0	23.6
Calcium	0.3	1.7	1.6	0.7	0.4	1.9	2.1	18.0	3.2	3.3	0.6	66.0	0.1
Iron	2.1	4.9	2.0	2.4	1.3	4.5	4.7	39.2	10.0	11.0	16.3	1.6	0.0
Iodine	0.2	0.4	0.1	0.1	0.0	0.4	0.7	29.8	9.5	8.2	0.8	49.8	0.1
Magnesium	2.6	3.5	2.2	2.0	2.8	4.4	6.1	34.7	6.7	9.7	6.3	18.8	0.0
Phosphorus	1.7	1.9	1.3	1.1	1.3	2.4	1.9	21.7	6.3	14.9	12.0	33.8	0.0
Potassium	6.6	4.6	5.2	1.3	1.1	7.2	10.9	14.0	2.8	9.8	9.3	27.2	0.1
Sodium	0.5	0.8	0.9	0.7	0.0	0.9	0.4	38.0	14.7	11.5	3.4	24.5	3.5
Zinc	1.1	2.6	1.0	1.2	1.3	2.3	2.2	18.7	5.5	12.0	34.0	17.9	0.0
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.2	58.8	24.5	15.3	0.0
Selenium	0.9	0.2	0.1	1.0	1.3	1.0	0.3	19.4	8.5	43.5	14.5	9.4	0.1
Vitamin B6	3.0	4.8	4.8	1.6	2.1	6.9	8.4	20.0	3.8	18.4	10.2	15.8	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	5.0	18.2	20.5	54.6	0.0

[1] "Lactating girls"

```
 [1] 14 14 14  6  8 28 28 84 42 14 14  0  7  0 50 28  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.6	0.8	1.2	1.4	3.6	2.1	6.2	25.8	17.4	6.2	5.8	21.2	5.6
Energy	2.6	1.0	1.4	1.5	3.6	2.3	6.6	26.2	17.2	6.1	5.6	20.5	5.4
Protein	1.7	1.8	0.8	2.1	2.4	2.2	1.5	18.1	9.4	15.9	15.1	28.9	0.1
Fat	0.4	0.3	0.3	1.3	11.1	3.3	0.8	14.3	5.4	9.3	9.4	20.8	23.4
Carbohydrate	3.9	0.6	1.9	1.1	0.8	1.5	10.9	34.4	26.2	0.5	0.0	18.2	0.0
Sugars	0.8	1.0	3.7	0.2	0.7	3.7	27.0	13.6	1.8	0.2	0.0	47.2	0.0
Starch	5.8	0.3	0.8	1.6	0.9	0.2	0.7	47.3	41.3	0.7	0.0	0.4	0.0
Fibre	8.0	6.0	6.0	4.4	3.3	7.8	14.7	36.1	11.2	2.0	0.0	0.4	0.0
Saturated fat	0.2	0.2	0.1	0.6	4.4	2.2	0.3	10.4	2.5	8.7	11.6	41.9	17.1
Monounsaturated fat	0.1	0.0	0.0	0.7	16.8	5.0	0.1	13.1	6.2	11.0	12.2	15.2	19.8
Polyunsaturated fat	0.7	0.7	0.8	2.9	13.8	2.4	0.8	19.5	6.8	6.5	2.9	2.4	39.7
Linoleic acid	0.7	0.8	0.7	2.9	14.8	3.1	0.5	20.0	6.1	5.0	1.8	2.3	41.5
Alpha linolenic acid	0.0	0.0	0.2	4.6	6.5	0.0	5.6	21.2	14.6	5.3	4.6	10.6	26.6
LC n3 fatty acids	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65.1	28.0	6.6	0.0
Vitamin A equivs	1.4	4.0	55.1	0.0	0.0	6.2	4.1	1.4	0.1	2.8	0.3	12.5	12.2
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.4	4.1	0.2	10.8	0.7	40.6	43.2
Provitamin A	1.9	5.4	75.2	0.0	0.0	8.5	5.5	0.4	0.1	0.0	0.1	1.3	1.5
Thiamin	2.8	2.9	2.0	1.2	4.4	2.4	4.3	51.1	13.3	3.0	4.0	8.5	0.0
Riboflavin	0.7	2.7	1.3	0.3	1.3	2.8	2.5	21.1	4.2	5.3	3.4	54.3	0.0
Niacin	2.7	1.5	1.3	1.2	3.6	2.9	1.8	27.9	9.2	16.0	12.8	19.2	0.0
Folate (total)	2.2	5.8	2.2	4.2	4.6	5.2	14.4	27.4	5.7	4.2	0.6	23.3	0.2
Folate equivs	1.3	3.4	1.3	2.5	2.7	3.1	8.5	46.7	13.6	2.5	0.4	13.9	0.1
Vitamin C	9.9	20.7	5.2	0.0	0.1	28.3	31.7	0.9	0.4	0.1	0.2	2.6	0.0
Vitamin D	0.2	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.1	15.7	6.2	47.7	26.3
Vitamin E	0.2	1.0	3.2	2.5	14.0	8.9	7.9	14.5	4.2	9.8	4.3	5.7	23.8
Calcium	0.4	1.6	1.5	0.9	0.8	1.7	1.9	16.6	3.2	1.7	0.3	69.3	0.1
Iron	3.0	5.2	2.1	3.9	2.8	4.7	5.0	42.6	11.7	6.8	10.1	2.1	0.0
Iodine	0.2	0.4	0.1	0.1	0.0	0.3	0.7	28.5	9.8	4.5	0.4	54.9	0.1
Magnesium	3.5	3.4	2.1	3.0	5.5	4.3	5.9	34.5	7.2	5.5	3.5	21.6	0.0
Phosphorus	2.4	1.9	1.3	1.7	2.5	2.4	1.9	22.7	7.1	8.8	7.1	40.1	0.0
Potassium	9.0	4.5	5.1	2.0	2.1	7.1	10.7	14.1	3.0	5.6	5.3	31.5	0.1
Sodium	0.7	0.8	0.9	1.0	0.0	0.9	0.4	38.9	16.3	6.7	2.0	27.7	3.5
Zinc	1.8	3.0	1.2	2.1	3.0	2.6	2.5	22.1	7.0	8.1	22.8	23.7	0.0
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.3	51.0	21.3	25.7	0.0
Selenium	1.5	0.2	0.1	1.9	3.2	1.2	0.3	24.7	11.6	31.5	10.5	13.1	0.1
Vitamin B6	4.4	5.0	5.0	2.6	4.4	7.2	8.8	21.4	4.4	11.2	6.2	19.6	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	5.9	11.3	12.7	68.2	0.0

[1] "Boys 13 – 23months"

```
 [1]  5  7  7  2  0 14  7 32 17  7  7  0  2  0 14  7  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.6	1.4	1.7	1.2	0	2.8	4.7	26.9	19.6	8.6	8.0	18.5	3.8
Energy	2.6	1.7	1.9	1.3	0	3.0	4.9	27.3	19.4	8.5	7.7	17.9	3.7
Protein	1.5	3.0	1.0	1.9	0	2.1	1.1	17.9	10.2	20.3	19.5	21.4	0.1
Fat	0.5	0.5	0.3	1.3	0	5.8	0.6	16.8	5.9	14.1	14.4	22.2	17.4
Carbohydrate	3.9	1.1	2.6	0.8	0	1.8	8.2	35.4	29.5	0.8	0.0	15.8	0.0
Sugars	1.2	1.7	5.5	0.2	0	5.0	21.8	18.4	2.4	0.3	0.0	43.4	0.0
Starch	5.3	0.7	1.0	1.2	0	0.1	0.7	44.8	44.3	1.1	0.0	0.8	0.0
Fibre	11.9	9.0	7.9	3.9	0	8.0	9.6	33.5	11.7	3.6	0.0	0.9	0.0
Saturated fat	0.2	0.3	0.1	0.6	0	3.7	0.2	12.3	3.3	12.0	16.4	39.3	11.7
Monounsaturated fat	0.2	0.0	0.0	0.7	0	9.4	0.1	15.8	6.2	16.4	19.1	17.0	15.0
Polyunsaturated fat	1.1	1.3	1.1	3.6	0	4.8	0.8	24.4	8.3	12.0	4.8	4.3	33.4
Linoleic acid	1.2	1.5	1.0	3.6	0	5.3	0.4	25.7	7.9	9.5	3.0	4.6	36.2
Alpha linolenic acid	0.1	0.0	0.2	5.8	0	0.0	4.5	23.6	13.7	10.1	7.5	13.9	20.7
LC n3 fatty acids	0.3	0.0	0.0	0.0	0	0.0	0.0	0.0	0.1	68.8	27.0	3.9	0.0
Vitamin A equivs	2.3	3.5	64.0	0.0	0	6.6	2.3	1.5	0.1	3.2	0.3	9.8	6.3
Retinol	0.1	0.0	0.0	0.0	0	0.0	0.3	6.9	0.3	17.3	1.0	43.5	30.6
Provitamin A	2.8	4.4	79.6	0.0	0	8.2	2.8	0.3	0.1	0.0	0.1	0.9	0.7
Thiamin	2.7	5.3	2.9	1.5	0	3.4	2.8	53.1	14.6	4.6	4.1	5.0	0.0
Riboflavin	0.7	4.3	1.6	0.4	0	4.0	2.1	26.9	4.7	7.5	4.7	43.1	0.0
Niacin	2.4	2.4	1.7	1.1	0	3.8	1.1	26.5	9.5	19.1	16.3	16.2	0.0
Folate (total)	2.2	8.0	2.8	3.8	0	7.6	9.8	30.1	6.1	6.8	0.6	22.0	0.1
Folate equivs	1.4	4.9	1.7	2.3	0	4.7	6.0	46.0	14.9	4.2	0.4	13.5	0.1
Vitamin C	8.7	32.4	6.6	0.0	0	31.5	18.3	1.1	0.5	0.1	0.2	0.6	0.0
Vitamin D	0.2	0.0	0.0	0.0	0	0.0	0.0	6.0	0.1	26.3	7.6	42.8	17.0
Vitamin E	0.5	1.4	5.5	1.8	0	18.1	5.9	14.9	5.2	16.1	7.4	4.3	19.1
Calcium	0.4	2.4	2.3	1.0	0	2.1	1.3	22.4	4.0	3.1	0.5	60.2	0.1
Iron	2.7	6.5	2.4	3.2	0	4.9	3.1	40.4	12.1	9.1	12.8	2.8	0.0
Iodine	0.2	0.5	0.2	0.1	0	0.5	0.4	31.6	10.8	7.3	0.6	47.7	0.1
Magnesium	3.6	5.0	2.9	3.1	0	5.3	5.0	36.4	8.0	8.5	4.9	17.3	0.0
Phosphorus	2.4	3.1	1.7	1.7	0	3.2	1.4	24.9	8.3	12.5	9.8	31.0	0.0
Potassium	8.2	6.2	6.7	2.0	0	10.8	7.8	15.6	3.3	8.2	7.1	24.1	0.1
Sodium	0.9	0.9	1.6	0.2	0	1.6	0.3	40.2	17.3	9.0	2.9	22.6	2.5
Zinc	1.7	4.4	1.5	1.8	0	3.5	1.7	21.4	7.2	10.1	29.1	17.7	0.0
Cholesterol	0.0	0.0	0.0	0.0	0	0.0	0.0	2.2	0.3	57.5	22.4	17.6	0.0
Selenium	1.2	0.3	0.1	1.4	0	3.7	0.3	21.8	11.6	38.6	11.9	9.0	0.1
Vitamin B6	3.6	4.9	5.9	1.9	0	25.6	6.3	17.5	4.1	12.2	6.2	11.7	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0	0.0	0.0	1.7	7.6	16.2	18.5	56.0	0.0

[1] "Boys 2 - 3"

```
 [1]  5  7  7  4  0 14 14 38 18  7  7  0  2  0 19  7  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.2	1.2	1.4	2.1	0	2.4	8.0	27.1	17.7	7.3	6.8	20.6	3.3
Energy	2.2	1.5	1.6	2.3	0	2.5	8.3	27.4	17.4	7.2	6.6	19.8	3.1
Protein	1.4	2.6	0.9	3.4	0	1.8	1.9	18.7	9.5	17.9	17.1	24.7	0.1
Fat	0.5	0.5	0.3	2.4	0	5.3	1.1	18.1	5.6	12.8	13.1	24.5	15.8
Carbohydrate	3.1	0.9	2.1	1.4	0	1.5	13.4	34.1	25.4	0.7	0.0	17.4	0.0
Sugars	0.8	1.2	3.9	0.3	0	3.6	30.9	15.5	1.8	0.2	0.0	41.6	0.0
Starch	4.7	0.6	0.9	2.1	0	0.1	1.3	47.0	41.4	1.0	0.0	0.9	0.0
Fibre	9.9	7.5	6.6	6.4	0	6.6	15.9	33.0	10.2	2.9	0.0	1.1	0.0
Saturated fat	0.2	0.3	0.1	1.0	0	3.3	0.4	13.0	3.1	10.8	14.6	42.7	10.5
Monounsaturated fat	0.2	0.0	0.0	1.2	0	8.8	0.1	17.4	6.0	15.3	17.8	19.3	14.0
Polyunsaturated fat	1.0	1.2	1.0	6.5	0	4.4	1.4	26.2	7.9	10.9	4.4	4.9	30.2
Linoleic acid	1.1	1.4	0.9	6.5	0	4.8	0.7	27.6	7.6	8.6	2.7	5.4	32.7
Alpha linolenic acid	0.1	0.0	0.2	9.8	0	0.0	7.6	23.5	12.2	8.5	6.3	14.5	17.4
LC n3 fatty acids	0.3	0.0	0.0	0.0	0	0.0	0.0	0.0	0.1	68.5	26.9	4.3	0.0
Vitamin A equivs	2.2	3.4	60.8	0.0	0	6.3	4.4	1.7	0.1	3.1	0.3	11.9	6.0
Retinol	0.1	0.0	0.0	0.0	0	0.0	0.5	7.3	0.3	15.3	0.9	48.6	27.1
Provitamin A	2.7	4.3	77.2	0.0	0	7.9	5.5	0.3	0.1	0.0	0.1	1.1	0.7
Thiamin	2.3	4.5	2.5	2.5	0	2.9	4.8	54.0	13.3	4.0	3.5	5.6	0.0
Riboflavin	0.6	3.5	1.3	0.7	0	3.3	3.4	26.1	4.1	6.1	3.8	47.1	0.0
Niacin	2.1	2.1	1.5	1.9	0	3.4	1.9	27.8	8.9	16.9	14.4	19.2	0.0
Folate (total)	1.7	6.3	2.2	6.0	0	6.0	15.4	28.1	5.1	5.3	0.5	23.3	0.1
Folate equivs	1.1	4.0	1.4	3.8	0	3.8	9.8	44.6	12.9	3.4	0.3	14.8	0.1
Vitamin C	7.3	27.3	5.6	0.0	0	26.5	30.8	1.1	0.4	0.1	0.2	0.7	0.0
Vitamin D	0.2	0.0	0.0	0.0	0	0.0	0.0	6.4	0.1	23.6	6.9	47.6	15.3
Vitamin E	0.4	1.2	4.9	3.2	0	16.2	10.5	15.8	5.0	14.4	6.6	4.7	17.1
Calcium	0.3	1.9	1.8	1.6	0	1.7	2.1	21.2	3.4	2.5	0.4	62.9	0.0
Iron	2.3	5.6	2.0	5.6	0	4.2	5.4	41.6	11.1	7.9	11.0	3.2	0.0
Iodine	0.2	0.4	0.2	0.2	0	0.4	0.7	30.3	9.2	5.9	0.5	52.0	0.0
Magnesium	2.9	4.1	2.4	5.1	0	4.4	8.2	35.6	7.0	7.0	4.1	19.1	0.0
Phosphorus	2.0	2.7	1.5	2.8	0	2.7	2.3	25.0	7.5	10.6	8.3	34.7	0.0
Potassium	6.7	5.1	5.5	3.3	0	8.9	12.8	15.3	2.9	6.7	5.8	26.8	0.0
Sodium	0.8	0.8	1.4	0.4	0	1.4	0.6	41.6	15.9	7.8	2.5	24.7	2.2
Zinc	1.5	3.9	1.3	3.2	0	3.1	3.0	22.4	6.7	8.9	25.7	20.2	0.0
Cholesterol	0.0	0.0	0.0	0.0	0	0.0	0.0	2.5	0.3	54.7	21.3	21.1	0.0
Selenium	1.1	0.3	0.1	2.6	0	3.4	0.5	23.8	11.3	35.5	10.9	10.4	0.1
Vitamin B6	3.1	4.3	5.1	3.4	0	22.1	10.9	18.0	3.8	10.6	5.4	13.5	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0	0.0	0.0	1.6	6.7	13.6	15.4	62.6	0.0

[1] "Boys 4 - 8"

```
 [1]  7 14 14  4  0 21 21 38 18 11 10  0  4  0 24 10  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.5	1.7	2.2	1.7	0	2.6	9.7	22.7	14.2	9.4	8.1	21.4	3.8
Energy	2.5	2.1	2.5	1.8	0	2.8	10.1	23.0	13.9	9.1	7.8	20.6	3.7
Protein	1.5	3.6	1.3	2.6	0	2.0	2.1	14.0	7.2	21.5	19.1	25.0	0.1
Fat	0.4	0.7	0.5	1.8	0	5.1	1.2	12.2	4.5	15.2	14.6	26.7	17.2
Carbohydrate	3.8	1.2	3.3	1.2	0	1.8	17.4	31.3	21.5	0.9	0.0	17.6	0.0
Sugars	0.7	1.7	6.1	0.2	0	3.8	36.0	11.0	1.7	0.3	0.0	38.5	0.0
Starch	6.4	0.9	1.1	2.0	0	0.1	1.7	48.2	37.8	1.4	0.0	0.5	0.0
Fibre	7.4	10.6	10.7	5.0	0	7.3	18.8	28.6	7.9	3.3	0.0	0.5	0.0
Saturated fat	0.2	0.4	0.1	0.7	0	3.0	0.4	7.4	2.2	12.5	15.8	46.4	11.0
Monounsaturated fat	0.1	0.0	0.0	0.9	0	8.3	0.1	11.2	5.1	18.4	19.8	20.8	15.2
Polyunsaturated fat	0.9	1.9	1.7	5.1	0	4.8	1.6	20.1	6.8	13.3	5.1	3.6	35.3
Linoleic acid	1.0	2.1	1.4	5.2	0	5.1	0.9	21.3	6.5	10.9	3.2	3.9	38.4
Alpha linolenic acid	0.0	0.0	0.3	7.8	0	0.0	8.7	19.3	11.3	10.3	7.3	14.5	20.4
LC n3 fatty acids	0.2	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	66.3	28.8	4.7	0.0
Vitamin A equivs	0.8	3.7	70.3	0.0	0	5.1	2.7	0.6	0.1	2.8	0.2	8.9	4.8
Retinol	0.1	0.0	0.0	0.0	0	0.0	0.6	2.9	0.2	17.7	0.9	49.5	28.2
Provitamin A	0.9	4.4	83.8	0.0	0	6.1	3.1	0.2	0.0	0.0	0.1	0.7	0.5
Thiamin	2.8	6.3	4.4	2.1	0	3.5	6.5	48.9	12.5	5.1	3.6	4.5	0.0
Riboflavin	0.6	5.2	2.0	0.5	0	3.7	3.7	20.5	3.7	7.8	4.2	48.0	0.0
Niacin	2.3	2.8	2.3	1.4	0	3.7	2.1	22.4	7.1	20.4	15.8	19.8	0.0
Folate (total)	1.7	8.8	3.2	4.3	0	6.2	18.6	22.2	4.5	6.0	0.4	23.8	0.1
Folate equivs	1.2	6.0	2.2	2.9	0	4.3	12.8	38.0	11.7	4.1	0.3	16.3	0.1
Vitamin C	6.7	32.7	6.0	0.0	0	22.7	29.7	0.9	0.3	0.1	0.2	0.6	0.0
Vitamin D	0.2	0.0	0.0	0.0	0	0.0	0.0	2.6	0.0	21.7	7.4	52.0	16.2
Vitamin E	0.2	1.7	6.7	2.4	0	15.6	11.8	12.3	3.6	16.6	7.3	3.8	17.9
Calcium	0.3	2.9	3.0	1.2	0	2.0	2.7	14.8	3.0	3.1	0.5	66.4	0.0
Iron	2.6	8.4	3.1	4.5	0	4.9	6.2	36.1	9.5	9.9	13.0	1.8	0.0
Iodine	0.2	0.7	0.3	0.2	0	0.5	0.9	22.6	8.3	7.9	0.6	58.0	0.0
Magnesium	3.3	6.5	3.9	4.0	0	5.2	9.3	29.9	5.6	8.6	4.7	19.0	0.0
Phosphorus	2.2	3.9	2.4	2.2	0	3.1	2.6	19.2	5.7	13.0	9.6	36.2	0.0
Potassium	7.4	7.6	8.3	2.4	0	9.5	13.7	10.7	2.2	7.6	6.3	24.3	0.0
Sodium	0.7	1.5	2.5	0.4	0	1.7	0.6	34.7	14.6	10.0	2.9	27.8	2.6
Zinc	1.5	5.2	1.9	2.4	0	3.4	3.0	17.1	5.0	12.3	28.2	20.0	0.0
Cholesterol	0.0	0.0	0.0	0.0	0	0.0	0.0	0.9	0.2	59.4	20.6	18.9	0.0
Selenium	1.3	0.4	0.1	2.1	0	3.9	0.5	18.7	8.6	41.7	11.5	11.3	0.1
Vitamin B6	2.7	5.5	7.0	2.2	0	30.7	9.9	13.4	2.3	10.4	4.6	11.2	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0	0.0	0.0	1.3	4.6	16.6	17.2	60.2	0.0

```
[1] "Boys 9 - 11"
 [1] 10 14 14  4  4 28 28 46 24 14 14  0  6  0 28 14  0  0  0
```

	StarchV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.7	1.3	1.8	1.2	3.0	2.8	9.7	20.8	14.5	8.9	8.4	20.8	4.1
Energy	2.7	1.6	2.0	1.3	3.0	3.0	10.1	21.1	14.3	8.7	8.1	20.2	3.9
Protein	1.6	2.7	1.1	1.9	2.1	2.1	2.1	13.3	7.3	21.7	20.5	23.5	0.1
Fat	0.4	0.5	0.4	1.0	9.2	4.9	1.0	11.0	4.6	12.4	13.2	25.3	16.2
Carbohydrate	4.3	1.0	2.8	1.0	0.4	2.1	17.9	29.3	22.8	0.8	0.0	17.5	0.0
Sugars	0.8	1.4	4.7	0.2	0.5	4.4	36.6	12.2	1.5	0.2	0.0	37.7	0.0
Starch	7.3	0.7	1.3	1.7	0.4	0.1	1.5	44.1	41.0	1.2	0.0	0.6	0.0
Fibre	8.4	8.5	8.3	3.8	2.2	8.7	20.7	27.3	9.0	2.7	0.0	0.3	0.0
Saturated fat	0.2	0.2	0.1	0.4	3.8	3.0	0.4	7.9	2.0	10.6	14.8	45.9	10.7
Monounsaturated fat	0.1	0.0	0.0	0.5	13.3	7.5	0.1	9.8	5.2	14.7	16.8	18.5	13.4
Polyunsaturated fat	0.8	1.3	1.3	2.8	13.5	4.4	1.4	16.6	6.7	10.6	4.7	3.0	32.9
Linoleic acid	0.9	1.3	1.1	2.8	15.3	4.9	0.8	17.3	6.0	8.4	2.9	3.1	35.1
Alpha linolenic acid	0.0	0.0	0.3	5.0	0.0	0.0	9.1	16.2	15.2	9.2	7.7	14.9	22.1
LC n3 fatty acids	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.8	30.8	6.2	0.0
Vitamin A equivs	1.0	4.6	61.5	0.0	0.0	6.7	4.0	1.2	0.1	2.7	0.3	11.3	6.4
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.7	5.2	0.2	13.6	0.9	50.1	29.3
Provitamin A	1.2	5.8	77.3	0.0	0.0	8.4	5.0	0.2	0.0	0.0	0.1	1.1	0.7
Thiamin	3.2	5.1	3.3	1.6	4.4	3.9	6.9	45.3	12.4	5.0	5.3	3.7	0.0
Riboflavin	0.7	3.8	1.7	0.4	0.6	3.4	3.7	23.2	3.6	7.3	4.7	46.9	0.0
Niacin	2.5	2.1	1.8	1.0	3.2	3.6	2.2	19.7	6.9	21.2	16.8	18.9	0.0
Folate (total)	1.9	7.2	2.6	3.1	3.8	6.5	18.7	22.5	4.0	4.8	0.6	24.1	0.1
Folate equivs	1.4	5.2	1.9	2.3	2.8	4.7	13.6	35.1	11.6	3.5	0.4	17.4	0.1
Vitamin C	7.8	22.9	5.7	0.0	0.0	28.2	33.5	0.9	0.3	0.1	0.2	0.5	0.0
Vitamin D	0.2	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.0	19.6	7.5	51.8	16.3
Vitamin E	0.2	1.6	4.8	1.5	10.6	16.1	11.3	9.5	3.8	13.1	6.7	3.2	17.6
Calcium	0.4	2.7	2.4	0.9	0.5	2.2	3.0	17.2	3.0	2.6	0.5	64.5	0.1
Iron	3.0	7.5	2.8	3.5	1.9	5.4	6.7	35.1	9.6	9.0	14.1	1.5	0.0
Iodine	0.3	0.6	0.2	0.1	0.0	0.5	1.0	21.9	8.9	6.1	0.7	59.5	0.1
Magnesium	3.7	5.2	3.1	2.8	4.3	5.4	9.3	29.3	5.9	7.9	5.2	17.9	0.0
Phosphorus	2.5	2.8	1.8	1.6	2.1	3.1	2.7	19.9	5.9	12.8	10.3	34.4	0.0
Potassium	8.4	6.0	6.6	1.8	1.3	10.2	14.3	11.4	2.2	7.5	6.9	23.4	0.1
Sodium	0.9	1.3	1.8	0.3	0.0	2.0	0.8	30.9	17.4	9.8	3.5	28.1	3.1
Zinc	1.7	4.1	1.5	1.7	2.2	3.5	3.2	17.1	5.2	10.4	30.1	19.3	0.0
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.2	53.0	23.3	21.7	0.0
Selenium	1.4	0.3	0.1	1.6	2.0	3.1	0.4	16.3	9.4	40.5	13.6	11.2	0.1
Vitamin B6	3.4	5.3	5.5	1.7	2.9	23.1	10.4	13.4	2.8	11.9	6.5	13.0	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	5.4	14.4	19.4	59.9	0.0

[1] "Boys 12 - 13"

```
 [1] 14 14 14  4  4 28 28 56 28 14 14  0  8  0 42 21  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	3.1	1.1	1.5	1.0	2.5	2.3	8.1	21.2	14.1	7.4	7.0	25.4	5.1
Energy	3.2	1.3	1.7	1.1	2.5	2.5	8.5	21.5	14.0	7.3	6.8	24.7	4.9
Protein	1.9	2.3	0.9	1.6	1.8	1.8	1.8	13.9	7.4	18.7	17.7	29.9	0.1
Fat	0.4	0.4	0.3	0.8	7.6	4.0	0.8	11.0	4.4	10.2	10.8	29.3	19.9
Carbohydrate	5.0	0.8	2.4	0.8	0.4	1.8	14.9	29.7	22.1	0.6	0.0	21.6	0.0
Sugars	0.9	1.1	3.8	0.1	0.4	3.6	30.2	12.2	1.4	0.2	0.0	46.0	0.0
Starch	8.5	0.6	1.1	1.4	0.3	0.1	1.3	44.9	40.0	1.0	0.0	0.7	0.0
Fibre	10.6	7.7	7.5	3.4	2.0	7.8	18.7	30.0	9.5	2.5	0.0	0.5	0.0
Saturated fat	0.2	0.2	0.1	0.3	3.0	2.4	0.3	7.7	1.8	8.3	11.7	51.2	12.7
Monounsaturated fat	0.1	0.0	0.0	0.4	11.4	6.4	0.1	10.2	5.2	12.5	14.3	22.3	17.1
Polyunsaturated fat	0.9	1.0	1.0	2.3	11.0	3.6	1.1	16.5	6.4	8.6	3.9	3.3	40.3
Linoleic acid	1.0	1.1	0.9	2.3	12.3	4.0	0.6	16.9	5.7	6.8	2.4	3.5	42.5
Alpha linolenic acid	0.1	0.0	0.3	4.1	0.0	0.0	7.4	16.0	14.4	7.5	6.3	17.2	26.9
LC n3 fatty acids	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.4	30.1	8.3	0.0
Vitamin A equivs	1.3	4.2	56.5	0.0	0.0	6.2	3.7	1.4	0.1	2.5	0.3	14.9	8.9
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.5	4.6	0.1	9.8	0.7	52.3	31.9
Provitamin A	1.7	5.7	76.2	0.0	0.0	8.3	4.9	0.3	0.1	0.0	0.1	1.5	1.1
Thiamin	3.9	4.5	2.9	1.4	3.8	3.4	6.0	48.0	12.6	4.3	4.6	4.7	0.0
Riboflavin	0.8	3.0	1.4	0.3	0.5	2.6	2.8	22.0	3.3	5.6	3.7	54.1	0.0
Niacin	3.0	1.9	1.5	0.9	2.8	3.1	1.9	20.7	6.9	18.3	14.5	24.4	0.0
Folate (total)	2.2	6.1	2.2	2.7	3.3	5.5	15.8	23.2	4.0	4.1	0.5	30.4	0.1
Folate equivs	1.6	4.4	1.6	1.9	2.4	4.0	11.4	36.0	11.4	2.9	0.4	22.0	0.1
Vitamin C	10.5	22.1	5.5	0.0	0.0	27.2	32.4	1.1	0.3	0.1	0.2	0.7	0.0
Vitamin D	0.2	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0	15.0	5.7	56.4	18.6
Vitamin E	0.2	1.4	4.3	1.3	9.4	14.2	10.0	10.2	4.0	11.6	5.9	4.0	23.3
Calcium	0.4	2.0	1.8	0.6	0.4	1.7	2.2	15.5	2.6	1.9	0.4	70.4	0.1
Iron	3.8	6.7	2.5	3.1	1.8	4.9	6.0	38.5	10.1	8.1	12.7	2.0	0.0
Iodine	0.3	0.5	0.2	0.1	0.0	0.4	0.7	19.7	7.6	4.5	0.5	65.5	0.1
Magnesium	4.4	4.4	2.6	2.4	3.6	4.6	8.0	30.4	5.8	6.8	4.4	22.6	0.0
Phosphorus	2.8	2.3	1.5	1.3	1.7	2.5	2.2	19.8	5.6	10.4	8.4	41.3	0.0
Potassium	10.0	5.1	5.6	1.5	1.1	8.6	12.1	11.8	2.2	6.4	5.9	29.6	0.1
Sodium	1.0	1.1	1.5	0.3	0.0	1.6	0.7	30.4	16.4	7.9	2.8	32.6	3.8
Zinc	2.0	3.6	1.3	1.5	1.9	3.0	2.8	18.3	5.3	9.1	26.4	24.7	0.0
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.2	48.2	21.2	28.4	0.0
Selenium	1.8	0.3	0.1	1.4	1.8	2.8	0.4	17.9	9.9	36.6	12.3	14.6	0.1
Vitamin B6	4.3	4.8	5.0	1.6	2.6	20.8	9.4	14.7	3.0	10.7	5.8	17.3	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	4.8	11.1	14.9	68.2	0.0

[1] "Boys 14 - 18"

```
 [1] 14 14 14  4  8 28 28 64 34 14 14  0  8  0 42 28  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.9	1.0	1.4	1.0	4.8	2.1	7.4	23.0	15.7	7.0	6.6	20.8	6.3
Energy	3.0	1.2	1.6	1.1	4.7	2.3	7.8	23.3	15.6	6.8	6.4	20.0	6.1
Protein	1.8	2.0	0.9	1.7	3.4	2.6	1.8	14.5	8.5	17.9	16.8	27.9	0.1
Fat	0.3	0.3	0.3	1.1	14.2	1.8	0.8	11.3	3.9	9.8	10.2	21.3	24.6
Carbohydrate	4.6	0.8	2.2	0.7	0.6	2.0	13.6	32.8	24.8	0.4	0.0	17.4	0.0
Sugars	0.8	1.2	4.0	0.1	0.8	4.5	30.4	14.8	1.9	0.1	0.0	41.3	0.0
Starch	7.3	0.5	1.0	1.0	0.5	0.2	1.1	45.8	41.4	0.6	0.0	0.4	0.0
Fibre	7.2	7.0	7.0	3.6	3.7	8.7	17.6	32.9	9.9	2.1	0.0	0.3	0.0
Saturated fat	0.2	0.2	0.1	0.5	6.1	1.1	0.2	8.3	1.8	9.0	12.4	42.5	17.7
Monounsaturated fat	0.0	0.0	0.0	0.6	21.1	2.4	0.1	9.9	4.3	12.0	13.2	15.6	20.7
Polyunsaturated fat	0.6	0.8	0.8	2.6	17.6	1.8	0.8	15.3	5.2	7.1	2.9	2.3	42.2
Linoleic acid	0.7	0.8	0.7	2.5	19.1	2.3	0.5	15.5	4.7	5.6	1.8	2.1	43.7
Alpha linolenic acid	0.0	0.1	0.2	5.1	2.8	0.0	6.1	17.0	11.3	7.2	5.5	12.4	32.4
LC n3 fatty acids	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.4	31.4	7.0	0.0
Vitamin A equivs	1.3	3.5	58.5	0.0	0.0	6.5	3.2	1.1	0.1	2.5	0.3	11.0	12.0
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.3	3.7	0.1	10.2	0.7	39.6	45.4
Provitamin A	1.8	4.6	77.8	0.0	0.0	8.6	4.1	0.3	0.1	0.0	0.1	1.1	1.5
Thiamin	3.1	3.6	2.3	1.2	5.9	2.6	5.5	49.1	13.1	3.5	3.0	7.1	0.0
Riboflavin	0.7	2.7	1.3	0.3	1.1	2.9	2.9	25.4	4.1	5.6	3.5	49.5	0.0
Niacin	2.9	1.7	1.5	0.9	5.2	3.1	1.8	23.5	8.4	18.2	13.8	18.8	0.0
Folate (total)	2.1	5.6	2.1	2.9	6.2	4.8	16.3	28.5	5.5	3.9	0.4	21.5	0.2
Folate equivs	1.5	3.8	1.4	2.0	4.2	3.3	11.1	41.4	13.6	2.7	0.2	14.7	0.1
Vitamin C	9.9	18.3	5.1	0.0	0.0	27.0	35.4	1.4	0.5	0.0	0.2	2.3	0.0
Vitamin D	0.2	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	15.5	6.2	47.9	26.8
Vitamin E	0.2	0.8	3.5	1.2	15.8	8.8	8.3	13.1	3.1	9.4	5.3	5.0	25.4
Calcium	0.4	1.7	1.7	1.0	0.8	1.9	2.4	15.4	3.2	1.9	0.4	69.1	0.1
Iron	3.3	5.6	2.2	3.0	3.0	5.1	5.2	41.5	11.2	7.0	11.5	1.5	0.0
Iodine	0.3	1.0	0.2	0.1	0.0	0.4	0.7	22.1	10.0	4.5	0.5	59.9	0.1
Magnesium	3.9	3.6	2.4	2.7	6.3	4.6	7.3	32.0	6.4	6.1	4.0	20.6	0.0
Phosphorus	2.7	2.1	1.4	1.5	3.2	2.7	2.1	20.5	6.5	10.0	8.1	39.3	0.0
Potassium	10.0	4.6	5.5	1.6	2.3	7.5	11.9	12.9	2.6	6.1	5.8	29.1	0.1
Sodium	0.7	0.9	1.3	0.2	0.0	1.3	0.6	33.8	16.3	5.8	2.5	32.0	4.5
Zinc	1.9	3.3	1.3	1.6	3.5	2.7	2.5	20.3	6.2	9.1	25.4	22.3	0.0
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.2	52.0	22.4	23.7	0.0
Selenium	1.8	0.3	0.1	1.4	2.6	1.4	0.3	21.5	10.9	34.1	11.2	14.2	0.1
Vitamin B6	4.6	5.0	5.5	1.8	5.9	4.7	10.8	21.7	3.8	12.2	6.0	18.1	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	5.4	10.6	15.1	67.7	0.0

[1] "Boys 14 - 18 extra foundation"

```
[1] 14 14 14  4  8 28 28 64 34 14 14  0  8  0 42 42  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.8	1.0	1.4	1.0	4.6	2.0	7.2	22.3	15.3	6.8	6.4	20.1	9.2
Energy	2.9	1.2	1.5	1.1	4.6	2.3	7.6	22.7	15.1	6.6	6.2	19.5	8.9
Protein	1.8	2.0	0.9	1.7	3.4	2.6	1.8	14.5	8.5	17.9	16.8	27.9	0.2
Fat	0.3	0.3	0.2	1.0	12.6	1.6	0.7	10.1	3.5	8.7	9.1	19.0	32.8
Carbohydrate	4.6	0.8	2.2	0.7	0.6	2.0	13.6	32.8	24.8	0.4	0.0	17.4	0.0
Sugars	0.8	1.2	4.0	0.1	0.8	4.5	30.4	14.8	1.8	0.1	0.0	41.3	0.0
Starch	7.3	0.5	1.0	1.0	0.5	0.2	1.1	45.8	41.4	0.6	0.0	0.4	0.0
Fibre	7.2	7.0	7.0	3.6	3.7	8.7	17.6	32.9	9.9	2.1	0.0	0.3	0.0
Saturated fat	0.2	0.2	0.1	0.5	5.6	1.0	0.2	7.7	1.7	8.2	11.4	39.0	24.4
Monounsaturated fat	0.0	0.0	0.0	0.5	19.1	2.2	0.1	8.9	3.9	10.8	12.0	14.2	28.2
Polyunsaturated fat	0.5	0.6	0.7	2.2	14.6	1.5	0.6	12.7	4.3	5.9	2.4	1.9	52.2
Linoleic acid	0.6	0.7	0.5	2.1	15.7	1.9	0.4	12.7	3.9	4.6	1.4	1.8	53.8
Alpha linolenic acid	0.0	0.1	0.2	4.4	2.4	0.0	5.2	14.6	9.7	6.2	4.7	10.7	41.8
LC n3 fatty acids	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.4	31.4	7.0	0.0
Vitamin A equivs	1.3	3.3	55.2	0.0	0.0	6.1	3.0	1.1	0.1	2.3	0.3	10.4	17.0
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.2	3.0	0.1	8.3	0.6	32.2	55.5
Provitamin A	1.7	4.6	77.2	0.0	0.0	8.6	4.1	0.3	0.1	0.0	0.1	1.1	2.2
Thiamin	3.1	3.6	2.3	1.2	5.9	2.6	5.5	49.1	13.1	3.5	3.0	7.1	0.0
Riboflavin	0.7	2.7	1.3	0.3	1.1	2.9	2.9	25.4	4.1	5.6	3.5	49.5	0.0
Niacin	2.9	1.7	1.5	0.9	5.2	3.1	1.8	23.5	8.4	18.2	13.8	18.8	0.0
Folate (total)	2.1	5.6	2.1	2.9	6.2	4.8	16.3	28.5	5.5	3.9	0.4	21.5	0.3
Folate equivs	1.5	3.8	1.4	2.0	4.2	3.3	11.1	41.4	13.6	2.7	0.2	14.7	0.2
Vitamin C	9.9	18.3	5.1	0.0	0.0	27.0	35.4	1.4	0.5	0.0	0.2	2.3	0.0
Vitamin D	0.2	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	13.6	5.4	42.3	35.4
Vitamin E	0.2	0.7	3.1	1.0	14.0	7.8	7.4	11.7	2.8	8.4	4.7	4.4	33.8
Calcium	0.4	1.7	1.7	1.0	0.8	1.9	2.4	15.4	3.2	1.9	0.4	69.1	0.1
Iron	3.3	5.6	2.2	3.0	3.0	5.1	5.2	41.5	11.2	7.0	11.5	1.5	0.0
Iodine	0.3	1.0	0.2	0.1	0.0	0.4	0.7	22.1	10.0	4.5	0.5	59.9	0.1
Magnesium	3.9	3.6	2.4	2.7	6.3	4.6	7.3	32.0	6.4	6.1	4.0	20.6	0.1
Phosphorus	2.7	2.1	1.4	1.5	3.2	2.7	2.1	20.5	6.5	9.9	8.1	39.3	0.1
Potassium	10.0	4.6	5.5	1.6	2.2	7.5	11.9	12.9	2.6	6.1	5.8	29.1	0.1
Sodium	0.7	0.9	1.3	0.2	0.0	1.3	0.5	33.1	16.0	5.7	2.5	31.3	6.6
Zinc	1.9	3.3	1.3	1.6	3.5	2.7	2.5	20.3	6.2	9.1	25.4	22.3	0.0
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.2	52.0	22.4	23.7	0.0
Selenium	1.8	0.3	0.1	1.4	2.6	1.4	0.3	21.5	10.9	34.1	11.2	14.2	0.2
Vitamin B6	4.6	5.0	5.5	1.8	5.9	4.7	10.8	21.7	3.8	12.2	6.0	18.1	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	5.4	10.6	15.1	67.7	0.0

[1] "Women 19 - 30"

```
 [1]  5  7  7  2  2 14 14 28 14  7  7  0  3  0 14 14  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.5	1.1	1.5	1.2	2.9	2.5	9.0	23.5	13.9	8.5	7.8	18.0	7.5
Energy	2.6	1.4	1.7	1.3	2.9	2.8	9.4	23.7	13.7	8.3	7.6	17.5	7.2
Protein	1.5	2.3	1.0	1.8	1.8	2.3	2.2	16.1	7.6	21.2	19.7	22.3	0.1
Fat	0.3	0.4	0.3	1.1	8.3	2.9	0.9	12.6	3.4	10.6	11.2	20.4	27.6
Carbohydrate	4.1	1.0	2.4	1.0	0.4	2.3	17.2	33.2	22.7	0.8	0.0	14.8	0.0
Sugars	0.7	1.5	4.6	0.2	0.5	4.3	36.1	16.3	1.9	0.2	0.0	33.7	0.0
Starch	6.8	0.5	0.7	1.6	0.4	0.7	1.7	46.9	39.4	1.2	0.0	0.1	0.0
Fibre	8.1	7.5	8.1	3.6	1.9	10.6	19.5	29.7	7.9	2.9	0.0	0.1	0.0
Saturated fat	0.2	0.2	0.1	0.5	3.4	1.9	0.3	10.8	1.6	9.3	13.1	39.3	19.3
Monounsaturated fat	0.1	0.0	0.0	0.6	13.4	4.3	0.1	11.7	3.8	12.5	14.6	15.4	23.5
Polyunsaturated fat	0.6	0.9	1.0	2.6	9.4	2.7	1.1	15.4	4.6	8.6	3.5	1.5	48.2
Linoleic acid	0.7	0.9	0.9	2.5	10.3	3.0	0.6	15.6	4.6	6.8	2.1	1.7	50.4
Alpha linolenic acid	0.0	0.0	0.3	4.3	1.1	0.0	7.8	17.4	7.4	8.2	6.4	11.0	35.9
LC n3 fatty acids	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.8	28.7	4.4	0.0
Vitamin A equivs	0.2	3.7	55.5	0.0	0.0	9.5	4.4	1.6	0.0	2.5	0.3	10.3	11.9
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.4	5.7	0.0	10.4	0.8	37.9	44.8
Provitamin A	0.2	4.9	73.7	0.0	0.0	12.6	5.8	0.3	0.0	0.0	0.1	0.9	1.5
Thiamin	3.0	4.3	3.2	1.2	3.8	4.0	6.0	48.9	12.8	5.0	5.1	2.6	0.0
Riboflavin	0.7	3.4	1.8	0.3	0.8	3.9	4.2	26.3	1.5	7.5	4.7	45.1	0.0
Niacin	2.3	1.8	1.6	0.9	2.3	4.0	2.5	23.4	8.4	19.2	15.8	17.8	0.0
Folate (total)	1.9	7.0	2.6	3.0	2.5	6.2	16.1	25.7	5.0	5.0	0.6	24.2	0.2
Folate equivs	1.2	4.5	1.7	1.9	1.6	4.0	10.4	38.4	16.7	3.2	0.4	15.6	0.1
Vitamin C	8.4	24.8	5.1	0.0	0.0	22.8	37.1	0.9	0.1	0.1	0.2	0.4	0.0
Vitamin D	0.1	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.0	19.5	6.4	41.6	27.0
Vitamin E	0.1	1.3	3.7	1.9	8.6	10.6	10.3	13.1	2.0	10.9	4.7	2.3	30.5
Calcium	0.4	2.2	2.3	1.2	0.5	2.3	2.9	21.0	3.4	2.9	0.5	60.3	0.1
Iron	2.8	6.1	2.6	3.5	2.2	5.7	6.6	37.4	8.8	10.3	13.2	0.9	0.0
Iodine	0.2	0.5	0.2	0.1	0.0	0.4	1.0	26.4	12.7	8.2	0.6	49.6	0.1
Magnesium	3.5	4.3	2.9	2.8	4.5	5.3	9.7	31.8	6.1	8.1	4.8	16.1	0.1
Phosphorus	2.4	2.5	1.8	1.6	2.2	3.4	2.8	22.8	5.5	12.8	9.9	32.3	0.1
Potassium	8.2	5.7	6.5	1.6	1.3	9.6	15.2	13.9	2.5	7.7	6.6	21.2	0.1
Sodium	0.7	1.1	1.5	1.0	0.0	1.9	0.6	34.4	17.6	8.7	2.8	24.4	5.1
Zinc	1.5	3.2	1.2	1.7	2.3	3.4	3.0	18.5	5.1	14.8	27.4	17.9	0.0
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	53.5	23.6	20.2	0.0
Selenium	1.3	0.3	0.1	1.5	3.8	4.6	0.5	17.5	9.9	38.1	12.0	10.3	0.1
Vitamin B6	3.6	5.7	6.0	1.9	2.6	19.6	11.5	15.4	2.5	12.2	6.8	12.1	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	3.2	20.5	18.9	55.9	0.0

[1] "Women 31 - 50"

```
 [1]  5  7  7  2  2 14 14 28 14  7  7  0  3  0 14 14  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.5	1.1	1.6	1.2	2.8	2.5	8.8	23.1	15.0	8.5	7.7	17.8	7.4
Energy	2.5	1.3	1.8	1.3	2.8	2.8	9.3	23.3	14.8	8.3	7.4	17.2	7.1
Protein	1.5	2.3	1.1	1.9	1.8	2.2	2.3	16.0	7.6	21.1	19.7	22.4	0.1
Fat	0.3	0.4	0.4	1.1	8.3	3.4	0.9	12.0	3.2	11.5	11.1	20.0	27.4
Carbohydrate	4.0	0.9	2.5	0.8	0.4	2.2	16.5	32.5	24.7	0.8	0.0	14.7	0.0
Sugars	0.8	1.5	4.7	0.2	0.5	4.5	36.8	14.1	1.4	0.3	0.0	35.2	0.0
Starch	6.3	0.5	0.9	1.3	0.3	0.5	1.5	45.9	41.4	1.2	0.0	0.2	0.0
Fibre	7.6	7.7	7.8	3.9	2.1	10.3	20.0	29.0	8.3	3.1	0.0	0.2	0.0
Saturated fat	0.1	0.2	0.2	0.5	3.2	2.2	0.4	9.9	1.5	10.3	13.1	38.9	19.5
Monounsaturated fat	0.1	0.0	0.0	0.6	12.9	5.2	0.1	11.2	3.7	13.1	14.4	15.2	23.6
Polyunsaturated fat	0.6	0.9	1.0	2.7	10.4	2.8	1.0	15.0	4.3	8.9	3.5	1.8	47.1
Linoleic acid	0.6	0.9	0.9	2.6	11.3	3.2	0.6	15.3	4.3	6.7	2.1	1.8	49.5
Alpha linolenic acid	0.0	0.0	0.3	4.9	2.3	0.0	7.6	17.8	6.7	8.0	6.4	11.0	34.8
LC n3 fatty acids	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.3	23.0	3.6	0.0
Vitamin A equivs	0.6	4.2	53.2	0.0	0.0	9.0	5.4	1.3	0.0	3.4	0.3	10.5	12.2
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.5	4.4	0.1	13.4	0.8	36.5	44.2
Provitamin A	0.7	5.6	71.5	0.0	0.0	12.1	7.2	0.3	0.0	0.0	0.1	0.9	1.5
Thiamin	3.1	4.5	3.1	1.6	3.6	4.2	6.0	49.9	9.2	5.2	6.3	3.4	0.0
Riboflavin	0.7	3.6	2.0	0.4	1.1	3.4	4.4	22.3	1.6	8.2	5.2	47.1	0.0
Niacin	2.4	1.9	1.6	1.0	2.5	3.8	2.8	23.4	7.6	18.6	16.4	17.9	0.0
Folate (total)	1.9	7.0	2.7	3.2	2.8	6.8	16.5	23.7	4.1	6.1	0.8	24.1	0.2
Folate equivs	1.3	4.6	1.8	2.1	1.9	4.5	10.9	40.6	11.9	4.0	0.5	15.9	0.1
Vitamin C	8.5	24.1	5.7	0.0	0.0	23.1	37.0	0.6	0.1	0.2	0.2	0.4	0.0
Vitamin D	0.1	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.1	24.8	6.2	38.9	26.0
Vitamin E	0.2	1.2	3.5	1.3	9.7	10.8	10.3	13.3	2.4	12.2	4.2	2.4	28.6
Calcium	0.4	2.4	2.3	1.3	0.7	2.3	3.1	19.2	2.9	3.4	0.5	61.5	0.1
Iron	2.9	6.6	2.8	3.6	2.2	5.7	6.7	35.3	8.7	11.3	13.1	1.2	0.0
Iodine	0.2	0.5	0.2	0.1	0.0	0.4	1.1	27.6	9.9	10.4	0.5	48.9	0.1
Magnesium	3.5	4.5	2.9	3.1	4.5	5.3	9.5	30.8	6.5	8.3	4.8	16.2	0.1
Phosphorus	2.4	2.5	1.8	1.7	2.2	3.2	2.8	21.7	6.2	13.2	9.8	32.4	0.1
Potassium	8.2	5.8	6.5	1.8	1.3	9.7	15.5	12.8	2.4	7.8	6.6	21.5	0.1
Sodium	0.7	1.2	1.4	0.4	0.0	2.0	0.7	37.5	13.4	9.7	2.9	24.8	5.2
Zinc	1.5	3.4	1.3	1.7	2.1	3.4	3.1	17.7	5.8	15.5	26.8	17.7	0.0
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.1	57.8	21.8	18.4	0.0
Selenium	1.2	0.3	0.2	1.4	6.1	3.1	0.5	17.5	8.4	39.1	12.2	9.8	0.1
Vitamin B6	3.5	7.3	5.6	1.8	2.6	20.3	10.8	15.4	1.9	11.8	7.0	12.0	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	4.3	23.0	17.8	53.4	0.0

[1] "Women 51 - 70"

```
 [1]  5  7  7  3  3 14 14 21  8  7  3  0  3  0 25 14  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.6	1.2	1.7	1.8	4.3	2.3	9.3	18.0	8.4	8.9	3.4	30.3	7.7
Energy	2.7	1.4	1.9	2.0	4.2	2.6	9.8	18.2	8.3	8.7	3.3	29.4	7.5
Protein	1.6	2.3	1.1	2.8	2.6	2.2	2.4	13.1	4.1	22.0	8.5	37.2	0.1
Fat	0.3	0.4	0.4	1.4	11.6	2.1	0.9	9.7	1.9	11.3	4.7	28.1	27.3
Carbohydrate	4.4	1.0	2.8	1.5	0.7	2.5	18.0	25.5	14.5	0.6	0.0	28.4	0.0
Sugars	0.6	1.3	3.8	0.2	0.5	3.6	29.1	9.9	0.9	0.2	0.0	49.9	0.0
Starch	9.5	0.7	1.5	3.2	1.0	0.9	2.0	46.7	32.7	1.2	0.0	0.5	0.0
Fibre	7.0	8.7	8.6	6.7	3.4	11.5	23.7	22.7	4.8	2.5	0.0	0.4	0.0
Saturated fat	0.1	0.2	0.2	0.6	4.3	1.2	0.3	8.5	1.0	9.3	5.2	51.0	18.0
Monounsaturated fat	0.0	0.0	0.0	0.7	18.8	3.0	0.1	9.5	2.1	13.3	6.3	21.8	24.2
Polyunsaturated fat	0.5	0.9	1.1	3.6	14.5	2.3	1.0	11.7	2.5	8.9	1.6	2.2	49.2
Linoleic acid	0.6	0.9	1.0	3.5	15.8	2.5	0.6	11.7	2.5	6.1	1.0	2.7	51.1
Alpha linolenic acid	0.0	0.0	0.4	7.4	1.9	0.0	8.0	14.1	3.9	7.6	3.1	16.3	37.3
LC n3 fatty acids	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.7	9.5	3.8	0.0
Vitamin A equivs	0.8	3.7	50.1	0.0	0.0	8.0	5.2	1.6	0.0	3.0	0.1	15.5	11.8
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.4	4.8	0.1	10.3	0.3	47.0	37.0
Provitamin A	1.2	5.3	71.4	0.0	0.0	11.4	7.3	0.2	0.0	0.0	0.0	1.5	1.6
Thiamin	3.7	5.5	3.7	3.0	6.6	5.0	7.3	41.4	7.9	5.8	3.3	6.8	0.0
Riboflavin	0.6	2.8	1.6	0.5	1.3	2.7	3.5	14.9	0.8	6.1	1.8	63.6	0.0
Niacin	2.5	1.9	1.7	1.6	3.5	3.8	3.2	18.2	4.7	19.6	7.2	32.1	0.0
Folate (total)	1.7	6.2	2.4	4.9	3.3	6.6	13.5	15.9	2.5	4.5	0.3	38.0	0.2
Folate equivs	1.3	4.6	1.8	3.7	2.5	4.9	10.1	30.0	8.8	3.4	0.3	28.5	0.1
Vitamin C	8.4	23.4	5.7	0.0	0.0	20.8	40.3	0.4	0.1	0.2	0.1	0.7	0.0
Vitamin D	0.1	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	26.0	2.1	46.5	21.1
Vitamin E	0.2	1.2	3.7	2.2	14.3	10.3	11.0	8.5	1.1	12.5	1.8	3.3	29.8
Calcium	0.3	1.9	1.6	0.9	0.7	1.7	2.5	13.3	1.4	2.3	0.2	73.2	0.1
Iron	3.6	8.3	3.5	6.2	4.4	6.9	8.5	30.1	6.5	12.9	6.9	2.2	0.0
Iodine	0.2	0.4	0.1	0.1	0.0	0.3	0.9	18.4	4.9	8.4	0.2	66.0	0.1
Magnesium	3.4	4.4	2.8	4.3	6.9	5.2	9.5	22.4	3.7	8.0	2.0	27.4	0.1
Phosphorus	2.1	2.2	1.6	2.1	3.0	2.8	2.7	16.0	2.9	12.4	3.8	48.3	0.0
Potassium	7.4	5.1	5.8	2.5	1.8	8.5	14.2	9.7	1.3	7.2	2.5	33.8	0.1
Sodium	0.7	1.5	1.3	0.4	0.0	2.2	0.9	28.2	9.9	10.3	1.3	37.9	5.4
Zinc	1.7	3.7	1.4	2.8	3.8	3.7	3.6	14.8	3.6	16.8	12.6	31.4	0.0
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.1	57.8	9.8	29.6	0.0
Selenium	1.3	0.2	0.2	2.2	9.2	3.2	0.5	12.5	5.0	44.1	5.6	15.6	0.1
Vitamin B6	3.3	8.0	5.2	2.8	3.3	22.2	9.7	9.3	1.2	11.7	2.9	20.4	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.1	18.9	6.2	72.8	0.0

[1] "Women 70plus"

```
 [1]  3  7  7  3  3 14 14 17  8  7  3  0  3  0 25 14  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	1.6	1.2	1.9	2.0	4.7	2.4	10.0	15.0	8.6	9.5	3.6	31.5	8.1
Energy	1.7	1.4	2.1	2.1	4.7	2.7	10.6	15.2	8.5	9.3	3.5	30.4	7.8
Protein	1.0	2.3	1.3	2.9	2.8	2.1	2.6	11.2	4.4	22.5	8.7	38.1	0.1
Fat	0.1	0.4	0.5	1.5	12.7	2.2	0.8	7.8	1.9	12.4	4.7	28.0	27.1
Carbohydrate	2.9	1.1	3.2	1.7	0.6	2.7	20.2	21.7	15.0	0.5	0.0	30.4	0.0
Sugars	0.4	1.2	3.8	0.2	0.5	3.8	30.3	8.6	0.9	0.2	0.0	50.0	0.0
Starch	6.9	0.8	2.2	4.0	0.7	0.9	3.0	42.6	37.3	1.0	0.0	0.6	0.0
Fibre	3.7	9.5	8.8	7.7	3.8	11.8	26.7	20.3	5.5	1.8	0.0	0.5	0.0
Saturated fat	0.1	0.2	0.2	0.6	4.6	1.3	0.3	7.0	1.1	10.4	5.2	51.2	17.9
Monounsaturated fat	0.0	0.0	0.0	0.7	18.5	3.4	0.1	7.7	2.1	14.8	6.3	22.1	24.2
Polyunsaturated fat	0.3	0.8	1.2	3.6	18.8	2.2	1.0	9.0	2.4	9.1	1.6	2.0	47.9
Linoleic acid	0.3	0.9	1.1	3.5	19.9	2.4	0.6	9.1	2.5	6.0	0.9	2.6	50.2
Alpha linolenic acid	0.0	0.0	0.5	7.0	11.5	0.0	7.4	10.6	3.3	6.7	3.0	15.3	34.9
LC n3 fatty acids	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	88.8	8.1	3.1	0.0
Vitamin A equivs	0.8	4.5	47.6	0.0	0.0	7.5	4.9	1.5	0.0	3.8	0.1	16.5	12.7
Retinol	0.0	0.0	0.0	0.0	0.0	0.0	0.3	4.3	0.1	12.1	0.3	46.5	36.4
Provitamin A	1.2	6.6	70.3	0.0	0.0	11.0	7.2	0.2	0.0	0.0	0.0	1.7	1.7
Thiamin	2.5	5.8	3.8	3.4	7.7	5.4	8.4	36.2	10.1	6.3	3.7	6.6	0.0
Riboflavin	0.4	2.9	1.7	0.4	0.8	2.5	3.9	13.0	1.0	6.6	1.9	65.0	0.0
Niacin	1.6	1.9	1.8	1.7	4.2	3.5	3.3	16.0	5.2	19.9	7.5	33.5	0.0
Folate (total)	1.0	6.3	2.5	5.3	4.5	6.7	13.6	13.3	2.9	4.5	0.4	39.0	0.2
Folate equivs	0.8	4.8	1.9	4.1	3.4	5.1	10.4	25.4	10.5	3.4	0.3	29.9	0.2
Vitamin C	5.5	23.7	6.7	0.0	0.0	22.5	40.2	0.3	0.1	0.2	0.1	0.7	0.0
Vitamin D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.0	30.2	1.9	44.3	19.9
Vitamin E	0.2	1.3	3.8	2.7	13.2	10.1	10.9	6.1	1.2	14.3	1.8	3.2	31.1
Calcium	0.2	2.0	1.7	0.8	0.6	1.9	2.5	11.6	1.6	2.4	0.2	74.5	0.1
Iron	2.3	9.5	4.1	6.6	3.8	7.4	9.1	26.0	7.4	14.2	7.5	2.0	0.0
Iodine	0.1	0.4	0.1	0.1	0.0	0.3	0.9	15.7	5.2	9.3	0.2	67.5	0.1
Magnesium	2.2	4.6	3.1	4.6	6.3	5.8	11.1	19.2	3.9	7.9	2.2	29.1	0.1
Phosphorus	1.3	2.2	1.7	2.2	2.8	2.8	2.8	13.7	3.0	12.9	3.9	50.4	0.0
Potassium	4.7	5.3	6.2	2.7	1.7	8.9	15.5	8.5	1.4	7.3	2.6	35.0	0.1
Sodium	0.4	2.1	1.1	0.6	0.0	2.5	0.9	23.9	11.7	9.4	1.4	40.2	5.7
Zinc	1.1	3.9	1.5	2.9	3.3	3.7	3.7	12.4	3.6	18.1	13.0	32.6	0.0
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.1	61.3	9.2	27.3	0.0
Selenium	0.8	0.2	0.2	2.2	10.0	2.3	0.6	10.5	5.5	45.1	6.0	16.4	0.1
Vitamin B6	2.1	9.2	5.0	3.0	4.1	19.2	11.6	7.3	1.3	12.5	3.2	21.4	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.1	20.2	6.2	71.8	0.0

[1] "Pregnant women 19 - 30"

```
 [1]  5  7  7  2  2 14 14 41 19 12 12  0  3  0 14 14  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.0	0.9	1.2	1.0	2.3	1.9	7.1	27.0	14.8	11.4	10.6	14.2	5.9
Energy	2.0	1.1	1.4	1.0	2.2	2.2	7.4	27.3	14.6	11.1	10.2	13.7	5.7
Protein	1.1	1.6	0.7	1.3	1.3	1.7	1.6	16.9	7.4	26.1	24.2	16.0	0.1
Fat	0.3	0.3	0.3	0.9	6.8	2.4	0.7	15.1	3.7	14.8	15.7	16.6	22.5
Carbohydrate	3.3	0.8	1.9	0.8	0.3	1.9	13.8	39.2	24.9	1.1	0.0	11.9	0.0
Sugars	0.7	1.4	4.2	0.1	0.4	3.9	33.3	22.0	2.4	0.4	0.0	31.1	0.0
Starch	5.0	0.4	0.5	1.2	0.3	0.5	1.2	50.2	39.1	1.5	0.0	0.1	0.0
Fibre	6.9	6.4	6.8	3.1	1.6	8.9	16.4	36.6	9.0	4.2	0.0	0.1	0.0
Saturated fat	0.1	0.2	0.1	0.4	2.8	1.6	0.3	13.0	1.8	13.1	18.5	32.4	15.9
Monounsaturated fat	0.1	0.0	0.0	0.5	10.6	3.4	0.1	13.6	4.1	17.0	19.8	12.2	18.7
Polyunsaturated fat	0.5	0.7	0.8	2.2	8.0	2.3	0.9	19.2	5.3	12.5	5.2	1.3	41.1
Linoleic acid	0.6	0.8	0.7	2.2	8.9	2.6	0.5	19.9	5.4	10.1	3.1	1.4	43.7
Alpha linolenic acid	0.0	0.0	0.2	3.6	0.9	0.0	6.4	21.0	8.2	11.6	9.1	9.1	29.6
LC n3 fatty acids	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.1	29.2	2.7	0.0
Vitamin A equivs	0.2	3.6	54.0	0.0	0.0	9.3	4.3	2.3	0.0	4.2	0.4	10.1	11.6
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.3	7.6	0.0	16.1	1.2	34.2	40.5
Provitamin A	0.2	4.9	73.5	0.0	0.0	12.6	5.7	0.4	0.0	0.0	0.2	0.9	1.5
Thiamin	2.2	3.2	2.3	0.9	2.8	3.0	4.5	53.2	13.0	6.4	6.6	2.0	0.0
Riboflavin	0.6	2.8	1.5	0.3	0.7	3.2	3.5	31.7	1.6	10.6	6.6	37.1	0.0
Niacin	1.7	1.3	1.1	0.7	1.7	2.8	1.8	24.7	8.2	23.7	19.5	12.7	0.0
Folate (total)	1.6	6.0	2.2	2.5	2.2	5.3	13.7	31.9	5.7	7.3	0.9	20.5	0.2
Folate equivs	1.0	3.6	1.3	1.5	1.3	3.2	8.2	44.5	18.0	4.4	0.6	12.4	0.1
Vitamin C	8.3	24.7	5.1	0.0	0.0	22.7	36.9	1.3	0.1	0.2	0.4	0.4	0.0
Vitamin D	0.1	0.0	0.0	0.0	0.0	0.0	0.0	6.5	0.0	27.6	9.1	34.4	22.3
Vitamin E	0.1	1.1	3.1	1.6	7.3	9.0	8.7	16.2	2.3	15.9	6.8	1.9	25.9
Calcium	0.3	1.9	2.0	1.1	0.5	2.0	2.6	27.1	4.1	4.4	0.8	53.2	0.1
Iron	2.1	4.4	1.9	2.6	1.6	4.1	4.8	39.9	8.7	12.8	16.5	0.6	0.0
Iodine	0.2	0.4	0.1	0.1	0.0	0.3	0.8	31.4	14.1	11.4	0.8	40.3	0.1
Magnesium	2.8	3.4	2.3	2.2	3.5	4.2	7.7	36.9	6.6	11.0	6.6	12.7	0.0
Phosphorus	1.9	1.9	1.4	1.2	1.7	2.6	2.2	26.0	5.8	17.1	13.1	25.1	0.0
Potassium	7.0	4.9	5.5	1.3	1.1	8.1	12.9	17.3	2.9	11.2	9.6	18.0	0.1
Sodium	0.6	0.9	1.2	0.8	0.0	1.4	0.5	38.6	18.3	11.5	3.7	18.7	3.9
Zinc	1.1	2.3	0.9	1.2	1.6	2.4	2.1	19.3	4.9	18.0	33.4	12.7	0.0
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	58.6	25.9	12.9	0.0
Selenium	0.9	0.2	0.1	1.0	2.6	3.1	0.3	17.4	9.1	44.3	14.0	6.9	0.1
Vitamin B6	2.9	4.7	5.0	1.5	2.2	16.2	9.5	18.6	2.8	17.2	9.5	9.9	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	3.4	27.1	24.9	43.0	0.0

[1] "Lactating women 19 - 30"

```
 [1]  7  7  7  3  4 14 14 42 21  7  7  0  3  0 14 14  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.8	0.9	1.2	1.5	4.7	2.0	7.3	28.6	16.9	6.9	6.4	14.6	6.1
Energy	2.9	1.1	1.4	1.6	4.6	2.3	7.7	28.9	16.7	6.7	6.1	14.1	5.9
Protein	1.9	2.0	0.9	2.4	3.1	2.0	1.9	21.0	9.9	18.4	17.1	19.4	0.1
Fat	0.4	0.3	0.3	1.4	14.2	2.5	0.8	16.2	4.3	9.1	9.6	17.4	23.6
Carbohydrate	4.4	0.7	1.8	1.1	0.6	1.8	13.2	38.2	26.1	0.6	0.0	11.3	0.0
Sugars	0.9	1.4	4.2	0.2	0.8	3.9	32.8	22.3	2.6	0.2	0.0	30.7	0.0
Starch	6.5	0.4	0.5	1.7	0.5	0.5	1.2	47.8	40.2	0.8	0.0	0.0	0.0
Fibre	9.1	6.0	6.4	4.4	3.1	8.4	15.5	35.4	9.4	2.3	0.0	0.1	0.0
Saturated fat	0.2	0.2	0.1	0.6	6.2	1.8	0.3	14.7	2.2	8.4	11.9	35.8	17.5
Monounsaturated fat	0.1	0.0	0.0	0.7	22.0	3.6	0.1	14.4	4.7	10.3	12.0	12.7	19.4
Polyunsaturated fat	0.7	0.7	0.8	3.2	15.5	2.2	0.9	19.1	5.7	7.1	2.9	1.3	39.9
Linoleic acid	0.8	0.7	0.7	3.1	16.8	2.5	0.5	19.2	5.7	5.6	1.7	1.3	41.3
Alpha linolenic acid	0.1	0.0	0.3	5.6	2.0	0.0	6.7	22.5	9.5	7.1	5.6	9.6	31.0
LC n3 fatty acids	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.7	28.6	4.4	0.0
Vitamin A equivs	0.3	3.6	55.0	0.0	0.0	9.4	4.3	2.4	0.0	2.5	0.3	10.2	11.8
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.4	8.4	0.0	10.1	0.7	36.7	43.5
Provitamin A	0.3	4.9	73.5	0.0	0.0	12.6	5.7	0.4	0.0	0.0	0.1	0.9	1.5
Thiamin	3.1	3.2	2.3	1.4	5.5	2.9	4.4	53.8	14.1	3.7	3.8	1.9	0.0
Riboflavin	0.9	2.9	1.5	0.4	1.4	3.4	3.7	34.2	1.9	6.5	4.1	39.1	0.0
Niacin	2.7	1.5	1.3	1.2	3.9	3.3	2.1	29.4	10.5	16.1	13.2	14.9	0.0
Folate (total)	2.2	5.8	2.2	3.7	4.2	5.2	13.4	32.1	6.2	4.2	0.5	20.1	0.2
Folate equivs	1.3	3.5	1.3	2.2	2.5	3.1	8.0	44.1	19.2	2.5	0.3	11.9	0.1
Vitamin C	11.3	23.9	4.9	0.0	0.0	22.0	35.8	1.3	0.1	0.1	0.2	0.4	0.0
Vitamin D	0.1	0.0	0.0	0.0	0.0	0.0	0.0	7.8	0.0	19.0	6.3	40.5	26.3
Vitamin E	0.1	1.1	3.1	2.5	14.7	9.1	8.8	16.7	2.6	9.3	4.0	1.9	26.1
Calcium	0.4	1.9	2.0	1.6	0.9	2.0	2.6	27.8	4.5	2.6	0.4	53.2	0.1
Iron	3.1	4.8	2.0	4.1	3.5	4.4	5.1	43.8	10.3	8.0	10.3	0.7	0.0
Iodine	0.3	0.4	0.1	0.2	0.0	0.4	0.8	33.1	16.0	6.8	0.5	41.4	0.1
Magnesium	3.9	3.4	2.3	3.3	7.1	4.2	7.7	37.8	7.3	6.4	3.8	12.7	0.0
Phosphorus	2.8	2.1	1.5	2.0	3.7	2.9	2.3	29.0	7.0	10.9	8.3	27.4	0.0
Potassium	10.1	5.0	5.7	2.1	2.2	8.4	13.4	18.4	3.3	6.8	5.8	18.6	0.1
Sodium	0.8	0.9	1.2	1.2	0.0	1.5	0.5	40.7	20.8	6.9	2.2	19.2	4.0
Zinc	1.8	2.8	1.1	2.2	3.9	3.0	2.6	24.0	6.6	12.8	23.7	15.4	0.0
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	0.1	52.8	23.3	19.9	0.0
Selenium	1.5	0.2	0.1	1.9	6.4	3.9	0.4	22.1	12.5	32.1	10.1	8.7	0.1
Vitamin B6	4.4	5.0	5.3	2.4	4.6	17.2	10.1	20.3	3.3	10.7	5.9	10.7	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	4.7	20.1	18.5	54.6	0.0

[1] "Pregnant women 31 - 50"

```
 [1]  5  7  7  2  2 14 14 41 19 12 12  0  3  0 14 14  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	1.9	0.9	1.2	0.9	2.2	2.0	6.9	26.5	16.0	11.4	10.3	14.0	5.8
Energy	2.0	1.1	1.4	1.0	2.2	2.2	7.3	26.8	15.8	11.2	10.0	13.6	5.6
Protein	1.1	1.7	0.8	1.4	1.3	1.5	1.6	16.8	7.4	25.9	24.3	16.1	0.1
Fat	0.2	0.3	0.3	0.9	6.8	2.7	0.7	14.3	3.6	16.1	15.4	16.2	22.3
Carbohydrate	3.2	0.8	2.0	0.7	0.3	1.8	13.2	38.2	26.9	1.1	0.0	11.8	0.0
Sugars	0.7	1.4	4.4	0.2	0.4	4.2	34.4	19.2	1.8	0.4	0.0	32.8	0.0
Starch	4.6	0.4	0.7	0.9	0.2	0.4	1.1	49.1	41.1	1.5	0.0	0.1	0.0
Fibre	6.4	6.5	6.6	3.3	1.7	8.7	16.9	35.8	9.5	4.5	0.0	0.2	0.0
Saturated fat	0.1	0.2	0.1	0.4	2.6	1.8	0.3	11.9	1.7	14.4	18.4	32.0	16.0
Monounsaturated fat	0.1	0.0	0.0	0.5	10.3	4.1	0.1	13.0	3.9	17.7	19.6	12.0	18.7
Polyunsaturated fat	0.5	0.7	0.9	2.3	8.8	2.4	0.9	18.7	5.0	13.0	5.1	1.5	40.2
Linoleic acid	0.5	0.8	0.8	2.3	9.8	2.8	0.5	19.5	5.1	10.0	3.2	1.6	43.1
Alpha linolenic acid	0.0	0.0	0.3	4.1	1.9	0.0	6.3	21.6	7.5	11.4	9.1	9.2	28.8
LC n3 fatty acids	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.4	23.4	2.1	0.0
Vitamin A equivs	0.5	4.0	51.6	0.0	0.0	8.7	5.2	1.9	0.1	5.6	0.5	10.2	11.8
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.4	5.8	0.2	20.4	1.2	32.5	39.4
Provitamin A	0.7	5.6	71.4	0.0	0.0	12.1	7.1	0.4	0.0	0.0	0.2	0.9	1.5
Thiamin	2.3	3.4	2.3	1.2	2.7	3.1	4.4	54.3	9.3	6.6	8.0	2.5	0.0
Riboflavin	0.6	3.0	1.6	0.4	0.9	2.8	3.6	27.2	1.8	11.6	7.3	39.0	0.0
Niacin	1.8	1.4	1.2	0.8	1.8	2.7	2.0	24.8	7.5	23.0	20.3	13.0	0.0
Folate (total)	1.6	5.9	2.3	2.7	2.4	5.8	14.1	29.6	4.7	8.9	1.2	20.5	0.2
Folate equivs	1.0	3.6	1.4	1.7	1.5	3.5	8.6	47.0	12.8	5.4	0.7	12.6	0.1
Vitamin C	8.4	24.0	5.6	0.0	0.0	23.0	36.8	0.9	0.1	0.3	0.3	0.4	0.0
Vitamin D	0.1	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.1	34.3	8.5	31.4	20.9
Vitamin E	0.1	1.0	3.0	1.1	8.1	9.1	8.7	16.4	2.7	17.6	6.1	2.0	24.1
Calcium	0.3	2.2	2.0	1.1	0.6	2.1	2.7	24.9	3.5	5.2	0.8	54.5	0.1
Iron	2.1	4.8	2.0	2.6	1.6	4.1	4.9	37.7	8.6	14.2	16.4	0.9	0.0
Iodine	0.2	0.4	0.1	0.1	0.0	0.4	0.9	32.6	10.8	14.4	0.7	39.4	0.1
Magnesium	2.8	3.6	2.3	2.4	3.6	4.2	7.5	35.8	7.0	11.3	6.6	12.9	0.0
Phosphorus	1.8	2.0	1.4	1.3	1.7	2.5	2.2	24.7	6.6	17.6	13.1	25.1	0.0
Potassium	7.0	4.9	5.6	1.5	1.1	8.3	13.3	16.0	2.8	11.4	9.7	18.3	0.1
Sodium	0.5	0.9	1.0	0.3	0.0	1.6	0.6	41.9	13.9	12.7	3.7	19.0	3.9
Zinc	1.1	2.4	0.9	1.2	1.5	2.4	2.2	18.4	5.6	18.9	32.7	12.6	0.0
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.1	62.8	23.7	11.7	0.0
Selenium	0.8	0.2	0.1	0.9	4.1	2.1	0.3	17.3	7.7	45.4	14.2	6.7	0.1
Vitamin B6	2.9	6.0	4.6	1.5	2.1	16.8	8.9	18.5	2.1	16.7	9.9	9.9	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	4.5	30.0	23.2	40.7	0.0

[1] "Lactating women 31 - 50"

```
 [1]  7  7  7  3  4 14 14 42 21  7  7  0  3  0 14 14  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.8	0.9	1.3	1.4	4.6	2.0	7.2	28.0	18.2	6.9	6.2	14.5	6.0
Energy	2.9	1.1	1.5	1.6	4.6	2.2	7.5	28.3	17.9	6.7	6.0	14.0	5.8
Protein	1.9	2.0	0.9	2.5	3.2	1.9	2.0	20.8	9.9	18.3	17.1	19.5	0.1
Fat	0.4	0.3	0.3	1.5	14.3	2.9	0.8	15.4	4.2	9.9	9.5	17.1	23.5
Carbohydrate	4.3	0.7	1.9	1.0	0.5	1.7	12.6	37.2	28.3	0.6	0.0	11.2	0.0
Sugars	1.0	1.4	4.3	0.2	0.8	4.1	33.9	19.4	2.0	0.2	0.0	32.4	0.0
Starch	6.0	0.3	0.6	1.3	0.4	0.4	1.0	46.8	42.2	0.8	0.0	0.1	0.0
Fibre	8.5	6.1	6.2	4.6	3.3	8.2	15.9	34.6	9.9	2.5	0.0	0.2	0.0
Saturated fat	0.2	0.2	0.2	0.7	5.8	2.1	0.3	13.5	2.1	9.4	12.0	35.6	17.8
Monounsaturated fat	0.1	0.0	0.0	0.7	21.5	4.3	0.1	13.9	4.5	10.8	11.9	12.6	19.5
Polyunsaturated fat	0.7	0.7	0.9	3.3	17.0	2.3	0.9	18.4	5.4	7.3	2.9	1.5	38.8
Linoleic acid	0.7	0.7	0.8	3.2	18.4	2.6	0.5	18.7	5.3	5.5	1.7	1.5	40.4
Alpha linolenic acid	0.0	0.0	0.3	6.3	3.9	0.0	6.5	22.8	8.6	6.9	5.5	9.4	29.8
LC n3 fatty acids	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.2	23.0	3.6	0.0
Vitamin A equivs	0.8	4.1	52.7	0.0	0.0	8.9	5.3	2.0	0.1	3.3	0.3	10.4	12.1
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.5	6.5	0.2	13.1	0.8	35.7	43.2
Provitamin A	1.0	5.5	71.2	0.0	0.0	12.0	7.1	0.4	0.0	0.0	0.1	0.9	1.5
Thiamin	3.2	3.4	2.3	1.8	5.3	3.1	4.4	55.4	10.2	3.8	4.6	2.5	0.0
Riboflavin	0.9	3.2	1.7	0.6	2.0	3.0	3.8	29.5	2.1	7.2	4.5	41.4	0.0
Niacin	2.9	1.6	1.4	1.3	4.1	3.1	2.3	29.4	9.6	15.6	13.7	15.0	0.0
Folate (total)	2.3	5.8	2.3	4.1	4.7	5.7	13.9	29.9	5.1	5.1	0.7	20.3	0.2
Folate equivs	1.4	3.5	1.4	2.5	2.9	3.4	8.4	47.0	13.8	3.1	0.4	12.3	0.1
Vitamin C	11.4	23.3	5.5	0.0	0.0	22.3	35.7	0.9	0.1	0.1	0.2	0.4	0.0
Vitamin D	0.1	0.0	0.0	0.0	0.0	0.0	0.0	5.9	0.1	24.3	6.0	38.1	25.4
Vitamin E	0.2	1.0	3.0	1.6	16.3	9.2	8.7	16.8	3.0	10.3	3.6	2.0	24.2
Calcium	0.5	2.2	2.0	1.7	1.2	2.1	2.7	25.6	3.9	3.0	0.5	54.7	0.1
Iron	3.2	5.2	2.2	4.2	3.5	4.4	5.2	41.6	10.3	8.9	10.3	1.0	0.0
Iodine	0.3	0.4	0.1	0.2	0.0	0.4	0.9	34.8	12.4	8.8	0.5	41.1	0.1
Magnesium	3.9	3.6	2.3	3.7	7.1	4.2	7.5	36.6	7.8	6.6	3.8	12.9	0.0
Phosphorus	2.8	2.2	1.5	2.2	3.7	2.7	2.4	27.6	7.9	11.2	8.3	27.5	0.0
Potassium	10.2	5.1	5.7	2.3	2.4	8.6	13.7	17.0	3.2	6.9	5.8	18.9	0.1
Sodium	0.8	0.9	1.1	0.4	0.0	1.6	0.6	44.7	16.0	7.7	2.3	19.7	4.1
Zinc	1.8	2.9	1.1	2.2	3.7	2.9	2.7	23.0	7.6	13.4	23.2	15.4	0.0
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.2	57.2	21.5	18.2	0.0
Selenium	1.4	0.2	0.1	1.7	10.2	2.6	0.4	21.8	10.5	32.5	10.1	8.2	0.1
Vitamin B6	4.3	6.4	4.9	2.4	4.5	17.9	9.5	20.3	2.5	10.4	6.2	10.6	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	6.3	22.3	17.3	51.9	0.0

[1] "Men 19 - 30"

```
 [1]  7  7  7  2  4 14 14 28 14  7  7  0  3  0 14 14  0  0  0
                    StarchyV GreenV OrangeV Legumes Nuts/Seeds OtherV Fruit WGcereal Refcereal WMeat RMeat Dairy PolyMarg
  Energy excl fibre      3.3    1.2     1.4     1.1        5.3    2.4   8.6     23.3      14.2   8.0   7.4  16.9     7.1
             Energy      3.4    1.4     1.6     1.2        5.2    2.6   8.9     23.6      14.0   7.8   7.1  16.3     6.8
            Protein      2.1    2.4     1.0     1.8        3.5    2.3   2.2     14.7       7.7  20.8  19.4  21.9     0.1
                Fat      0.4    0.4     0.3     0.8       15.0    2.5   0.8     10.3       3.2  10.5  10.6  19.2    26.0
      Carbohydrate       5.3    1.0     2.2     0.9        0.8    2.3  16.0     34.4      23.0   0.6   0.0  13.4     0.0
            Sugars       1.0    1.6     4.7     0.2        1.0    4.8  36.7     14.7       1.5   0.2   0.0  33.7     0.0
            Starch       8.2    0.6     0.6     1.4        0.7    0.6   1.6     47.8      37.6   0.8   0.0   0.0     0.0
             Fibre       9.2    7.7     7.6     3.6        3.8   10.3  17.9     29.8       8.0   2.0   0.0   0.0     0.0
     Saturated fat       0.2    0.2     0.1     0.4        6.4    1.7   0.3      7.8       1.6   9.8  13.1  39.1    19.2
Monounsaturated fat      0.1    0.0     0.0     0.4       23.3    3.4   0.1      8.9       3.4  12.0  13.2  13.9    21.3
Polyunsaturated fat      0.7    0.9     0.9     2.0       16.6    2.4   1.0     13.7       4.3   7.7   3.4   1.3    45.2
     Linoleic acid       0.8    0.9     0.8     1.9       18.0    2.6   0.5     13.9       4.2   6.2   2.0   1.4    46.7
Alpha linolenic acid     0.0    0.0     0.3     4.4        0.2    0.0   7.6     17.2       7.5   7.6   6.8  11.3    37.2
  LC n3 fatty acids      0.2    0.0     0.0     0.0        0.0    0.0   0.0      0.0       0.0  63.1  31.9   4.8     0.0
   Vitamin A equivs      0.3    3.8    56.1     0.0        0.0    9.9   3.6      0.9       0.0   3.0   0.3  10.3    11.9
            Retinol      0.1    0.0     0.0     0.0        0.0    0.0   0.5      2.9       0.1  12.4   0.8  38.2    45.1
      Provitamin A       0.3    5.0    74.1     0.0        0.0   13.1   4.7      0.2       0.0   0.0   0.1   0.9     1.5
           Thiamin       3.8    4.5     2.9     1.3        6.4    3.8   5.5     50.9       9.0   4.5   5.3   2.0     0.0
         Riboflavin      1.0    3.4     1.7     0.4        1.8    3.4   4.2     25.5       1.5   8.0   4.8  44.4     0.0
            Niacin       3.2    1.9     1.5     0.9        4.4    3.8   2.2     23.0       7.5  18.8  15.3  17.5     0.0
     Folate (total)      2.5    6.2     2.5     3.1        5.2    6.1  14.9     26.4       4.0   4.6   0.7  23.7     0.2
      Folate equivs      1.7    4.2     1.7     2.1        3.5    4.2  10.1     40.1      12.8   3.1   0.5  16.1     0.1
          Vitamin C     11.2   22.1     4.8     0.0        0.0   24.5  35.4      1.1       0.1   0.1   0.2   0.4     0.0
          Vitamin D      0.1    0.0     0.0     0.0        0.0    0.0   0.0      2.8       0.0  18.4   6.8  43.6    28.2
          Vitamin E      0.1    0.9     3.3     1.5       14.7   10.7   8.2     14.2       2.4  10.3   4.2   1.9    27.6
            Calcium      0.5    2.5     2.4     0.7        1.2    2.5   3.0     17.6       3.2   2.8   0.5  62.9     0.1
               Iron      3.7    6.1     2.4     3.1        3.9    5.3   6.0     39.0       8.2   9.4  12.2   0.5     0.0
             Iodine      0.4    0.6     0.2     0.1        0.0    0.5   0.9     22.9      11.1   8.7   0.6  54.0     0.1
          Magnesium      4.5    4.1     2.7     2.5        7.5    4.9   9.3     32.4       6.0   6.9   4.5  14.9     0.0
         Phosphorus      3.2    2.6     1.7     1.5        4.0    3.3   2.7     21.8       6.0  12.2   9.6  31.4     0.0
          Potassium     11.2    5.3     6.3     1.8        2.7    9.4  14.6     12.3       2.4   7.1   6.4  20.4     0.1
             Sodium      1.0    1.1     1.7     0.5        0.1    2.1   0.8     35.2      15.1   8.0   3.0  26.0     5.4
               Zinc      2.0    3.5     1.2     1.6        3.9    3.2   2.9     19.2       5.4  13.9  26.1  17.1     0.0
        Cholesterol      0.0    0.0     0.0     0.0        0.0    0.0   0.0      1.3       0.1  57.4  22.3  18.9     0.0
           Selenium      1.7    0.3     0.1     1.4        9.3    3.7   0.4     17.2       8.7  35.2  11.8   9.8     0.1
         Vitamin B6      4.7    7.0     5.8     1.9        5.7   13.2  11.5     19.9       1.8  11.0   6.1  11.5     0.0
        Vitamin B12      0.0    0.0     0.0     0.0        0.0    0.0   0.0      1.3       4.6  20.4  18.4  55.3     0.0
```

```
[1] "Men 19 - 30.found"
 [1]  7  7  7  7  7 14 14 28 14  7  7  0  3  0 14 28  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.9	1.0	1.2	3.4	8.1	2.1	7.5	20.5	12.5	7.0	6.5	14.9	12.4
Energy	3.0	1.2	1.5	3.7	8.0	2.3	7.9	20.7	12.3	6.8	6.3	14.3	12.0
Protein	2.0	2.3	0.9	5.8	5.7	2.1	2.1	13.7	7.2	19.4	18.1	20.5	0.2
Fat	0.3	0.3	0.2	2.1	18.8	1.8	0.6	7.4	2.3	7.5	7.6	13.8	37.4
Carbohydrate	5.2	1.0	2.2	3.1	1.4	2.2	15.5	33.4	22.4	0.5	0.0	13.0	0.0
Sugars	1.0	1.6	4.6	0.6	1.7	4.7	36.3	14.5	1.5	0.2	0.0	33.3	0.1
Starch	7.9	0.6	0.6	4.8	1.2	0.6	1.5	46.0	36.1	0.7	0.0	0.0	0.0
Fibre	8.3	6.8	6.8	11.1	5.9	9.2	16.0	26.7	7.1	1.8	0.0	0.0	0.0
Saturated fat	0.2	0.2	0.1	1.1	9.0	1.3	0.3	6.2	1.2	7.9	10.5	31.3	30.7
Monounsaturated fat	0.1	0.0	0.0	1.0	29.2	2.4	0.1	6.4	2.4	8.6	9.5	10.0	30.5
Polyunsaturated fat	0.5	0.5	0.6	4.4	17.8	1.5	0.6	8.4	2.6	4.8	2.1	0.8	55.5
Linoleic acid	0.5	0.5	0.5	4.1	19.1	1.6	0.3	8.4	2.6	3.7	1.2	0.8	56.6
Alpha linolenic acid	0.0	0.0	0.2	10.3	0.2	0.0	5.1	11.6	5.1	5.1	4.6	7.6	50.2
LC n3 fatty acids	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.1	31.9	4.8	0.0
Vitamin A equivs	0.2	3.4	50.1	0.0	0.1	8.8	3.2	0.8	0.0	2.7	0.2	9.2	21.3
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.3	2.0	0.1	8.5	0.6	26.4	62.1
Provitamin A	0.3	4.9	73.0	0.0	0.1	12.9	4.7	0.2	0.0	0.0	0.1	0.9	2.9
Thiamin	3.5	4.2	2.7	4.3	10.3	3.5	5.1	47.1	8.3	4.2	4.9	1.8	0.0
Riboflavin	0.9	3.3	1.7	1.3	3.0	3.3	4.1	25.0	1.5	7.8	4.7	43.4	0.0
Niacin	3.0	1.8	1.4	3.1	7.3	3.6	2.1	21.8	7.1	17.7	14.5	16.6	0.0
Folate (total)	2.2	5.5	2.2	9.8	8.1	5.5	13.3	23.6	3.6	4.1	0.6	21.2	0.4
Folate equivs	1.5	3.9	1.6	6.8	5.7	3.8	9.3	37.1	11.8	2.9	0.4	14.8	0.2
Vitamin C	11.2	22.1	4.8	0.0	0.0	24.5	35.4	1.1	0.1	0.1	0.2	0.4	0.0
Vitamin D	0.1	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0	14.3	5.3	34.1	44.0
Vitamin E	0.1	0.7	2.4	3.7	18.1	7.5	5.8	9.9	1.7	7.2	2.9	1.3	38.7
Calcium	0.5	2.4	2.3	2.5	2.1	2.4	2.9	17.1	3.1	2.8	0.5	61.2	0.2
Iron	3.3	5.5	2.2	9.8	6.2	4.8	5.4	35.2	7.4	8.5	11.1	0.5	0.0
Iodine	0.4	0.6	0.2	0.4	0.1	0.5	0.9	22.8	11.0	8.6	0.6	53.8	0.2
Magnesium	4.0	3.6	2.4	7.8	11.7	4.4	8.3	28.9	5.3	6.1	4.0	13.2	0.1
Phosphorus	3.0	2.4	1.6	4.8	6.5	3.1	2.5	20.4	5.7	11.5	9.0	29.4	0.1
Potassium	10.5	5.0	5.9	5.8	4.4	8.8	13.7	11.6	2.3	6.6	6.0	19.1	0.2
Sodium	1.0	1.1	1.5	1.6	0.1	2.0	0.7	33.0	14.2	7.5	2.8	24.3	10.2
Zinc	1.9	3.3	1.1	5.2	6.5	3.0	2.7	17.9	5.0	13.0	24.4	16.0	0.1
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.1	57.4	22.3	18.9	0.0
Selenium	1.6	0.3	0.1	4.5	14.7	3.4	0.4	15.6	7.8	31.9	10.7	8.8	0.2
Vitamin B6	4.3	6.4	5.3	6.1	9.1	12.1	10.6	18.3	1.7	10.1	5.6	10.5	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	4.6	20.4	18.4	55.3	0.0

[1] "Men 31 - 50"

```
 [1]  7  7  7  2  4 14 14 28 14  7  7  0  3  0 14 14  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	3.3	1.1	1.5	1.1	5.4	2.2	8.6	22.7	14.2	8.3	7.4	17.0	7.1
Energy	3.4	1.4	1.7	1.2	5.4	2.5	9.0	22.9	14.0	8.2	7.2	16.3	6.9
Protein	2.1	2.3	1.0	1.8	3.7	2.2	2.1	15.5	7.5	20.3	19.4	21.9	0.1
Fat	0.4	0.3	0.3	0.9	15.0	2.1	0.7	11.6	2.8	11.3	10.3	18.7	25.5
Carbohydrate	5.5	1.0	2.3	0.9	0.8	2.2	16.3	32.5	23.7	0.9	0.0	13.8	0.0
Sugars	1.0	1.6	4.6	0.2	0.9	4.6	36.4	15.3	1.5	0.3	0.0	33.5	0.0
Starch	8.7	0.6	0.8	1.4	0.7	0.5	1.4	44.9	39.6	1.3	0.0	0.2	0.0
Fibre	8.9	7.6	7.6	3.4	3.9	9.9	19.4	28.1	7.8	3.3	0.0	0.2	0.0
Saturated fat	0.2	0.2	0.2	0.4	6.6	1.4	0.2	10.0	1.5	10.4	12.6	37.7	18.7
Monounsaturated fat	0.1	0.0	0.0	0.5	22.3	2.8	0.1	10.5	3.0	12.4	13.1	13.9	21.3
Polyunsaturated fat	0.7	0.8	0.9	2.1	18.2	2.1	0.8	14.1	3.8	8.6	3.2	1.5	43.3
Linoleic acid	0.7	0.8	0.8	2.0	19.9	2.3	0.5	14.3	3.8	6.4	1.9	1.7	44.9
Alpha linolenic acid	0.0	0.0	0.3	4.3	1.5	0.0	6.9	18.0	5.9	8.8	6.4	11.4	36.4
LC n3 fatty acids	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.5	22.0	3.4	0.0
Vitamin A equivs	0.8	3.9	55.1	0.0	0.0	9.2	3.3	1.4	0.0	3.7	0.3	10.2	12.1
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.4	4.7	0.1	14.4	0.7	36.2	43.3
Provitamin A	1.0	5.2	74.2	0.0	0.0	12.3	4.4	0.3	0.0	0.0	0.1	0.9	1.5
Thiamin	4.0	4.5	3.0	1.3	7.3	3.8	5.7	48.2	9.3	5.0	5.3	2.5	0.0
Riboflavin	1.0	3.5	1.8	0.4	1.6	3.4	4.2	24.6	1.6	8.1	4.8	45.1	0.0
Niacin	3.3	1.9	1.6	0.9	5.2	3.7	2.6	22.6	7.5	17.5	15.6	17.7	0.0
Folate (total)	2.5	6.4	2.5	2.7	6.1	6.4	15.0	24.0	4.1	6.2	0.6	23.3	0.2
Folate equivs	1.7	4.3	1.7	1.8	4.2	4.3	10.1	38.7	12.6	4.2	0.4	15.9	0.1
Vitamin C	11.6	23.0	5.2	0.0	0.0	24.6	33.8	0.8	0.1	0.1	0.2	0.4	0.0
Vitamin D	0.1	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	25.8	6.1	38.5	25.3
Vitamin E	0.2	1.1	3.2	1.3	15.5	10.2	8.8	13.3	2.0	11.9	4.1	2.0	26.4
Calcium	0.5	2.4	2.3	1.1	1.1	2.2	2.9	19.7	3.0	3.4	0.5	60.7	0.1
Iron	3.8	6.3	2.5	3.4	4.0	5.4	5.9	35.5	8.5	11.1	12.7	0.9	0.0
Iodine	0.3	0.5	0.2	0.1	0.0	0.4	1.0	26.0	10.3	10.4	0.6	50.1	0.1
Magnesium	4.6	4.2	2.7	2.6	8.1	4.8	8.7	30.5	6.1	7.8	4.5	15.3	0.1
Phosphorus	3.2	2.5	1.7	1.5	4.1	3.1	2.6	21.9	5.9	12.7	9.5	31.2	0.0
Potassium	11.2	5.4	6.2	1.6	2.5	9.1	14.3	12.9	2.4	7.4	6.4	20.4	0.1
Sodium	1.0	1.2	1.5	0.6	0.0	2.0	0.7	36.0	14.1	9.4	2.9	25.3	5.3
Zinc	2.1	3.4	1.2	1.6	4.1	3.2	2.8	18.0	5.6	14.4	26.4	17.2	0.0
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.1	59.3	21.0	17.6	0.0
Selenium	1.7	0.3	0.1	1.4	10.8	3.3	0.5	16.3	8.1	36.7	11.3	9.4	0.1
Vitamin B6	4.8	7.3	5.8	1.9	5.5	15.5	10.8	16.3	1.7	11.7	6.8	11.8	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	4.0	23.2	17.8	53.5	0.0

[1] "Men 31 - 50.found"

```
 [1]  7  7  7  7  7 14 14 28 14  7  7  0  3  0 14 28  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.9	1.0	1.3	3.4	8.3	1.9	7.5	19.9	12.5	7.3	6.5	14.9	12.5
Energy	3.0	1.2	1.5	3.7	8.2	2.2	7.9	20.2	12.3	7.2	6.3	14.4	12.1
Protein	2.0	2.2	0.9	5.8	6.0	2.0	2.0	14.5	7.0	19.0	18.1	20.3	0.2
Fat	0.3	0.2	0.2	2.3	18.9	1.5	0.5	8.4	2.0	8.1	7.4	13.5	36.7
Carbohydrate	5.3	0.9	2.3	3.0	1.3	2.2	15.9	31.6	23.1	0.9	0.0	13.5	0.0
Sugars	1.0	1.5	4.6	0.6	1.6	4.5	36.0	15.1	1.5	0.3	0.0	33.2	0.1
Starch	8.3	0.5	0.7	4.6	1.1	0.5	1.4	43.2	38.1	1.2	0.0	0.2	0.0
Fibre	8.0	6.8	6.8	10.8	6.1	8.9	17.4	25.2	7.0	2.9	0.0	0.2	0.0
Saturated fat	0.2	0.2	0.1	1.2	9.2	1.1	0.2	8.0	1.2	8.3	10.1	30.2	30.0
Monounsaturated fat	0.1	0.0	0.0	1.2	28.0	2.0	0.1	7.6	2.1	8.9	9.4	10.0	30.6
Polyunsaturated fat	0.4	0.5	0.6	4.5	19.7	1.3	0.5	8.7	2.3	5.3	1.9	0.9	53.4
Linoleic acid	0.5	0.5	0.5	4.3	21.1	1.4	0.3	8.7	2.3	3.9	1.1	1.0	54.5
Alpha linolenic acid	0.0	0.0	0.2	10.1	1.8	0.0	4.7	12.1	4.0	6.0	4.3	7.8	49.1
LC n3 fatty acids	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.5	22.0	3.4	0.0
Vitamin A equivs	0.7	3.5	49.2	0.0	0.0	8.2	2.9	1.3	0.0	3.3	0.2	9.2	21.5
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.3	3.3	0.1	10.0	0.5	25.2	60.5
Provitamin A	1.0	5.1	73.0	0.1	0.0	12.1	4.3	0.3	0.0	0.0	0.1	0.9	3.0
Thiamin	3.7	4.1	2.7	4.2	11.8	3.5	5.3	44.3	8.5	4.6	4.9	2.2	0.0
Riboflavin	1.0	3.4	1.8	1.4	2.7	3.3	4.1	24.1	1.5	7.9	4.7	44.2	0.0
Niacin	3.1	1.8	1.5	3.0	8.6	3.4	2.4	21.2	7.1	16.5	14.7	16.6	0.0
Folate (total)	2.2	5.7	2.2	8.3	9.6	5.8	13.4	21.6	3.7	5.5	0.6	21.0	0.4
Folate equivs	1.6	4.0	1.6	5.9	6.7	4.0	9.4	35.9	11.7	3.9	0.4	14.7	0.3
Vitamin C	11.6	23.0	5.2	0.0	0.0	24.6	33.8	0.8	0.1	0.1	0.2	0.4	0.0
Vitamin D	0.1	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	20.6	4.9	30.7	40.3
Vitamin E	0.1	0.8	2.3	3.1	19.3	7.2	6.2	9.4	1.4	8.5	2.9	1.4	37.4
Calcium	0.5	2.3	2.2	3.8	1.9	2.1	2.8	19.0	2.9	3.3	0.5	58.5	0.2
Iron	3.4	5.6	2.3	10.7	6.2	4.8	5.3	31.9	7.6	10.0	11.4	0.8	0.0
Iodine	0.3	0.5	0.2	0.4	0.1	0.4	1.0	25.9	10.2	10.3	0.6	49.9	0.2
Magnesium	4.1	3.7	2.4	8.0	12.6	4.3	7.8	27.0	5.4	7.0	4.0	13.5	0.1
Phosphorus	3.0	2.3	1.6	5.0	6.7	2.9	2.4	20.5	5.5	11.9	8.9	29.2	0.1
Potassium	10.5	5.1	5.9	5.2	4.1	8.6	13.5	12.2	2.2	7.0	6.0	19.3	0.2
Sodium	0.9	1.1	1.4	1.9	0.1	1.9	0.7	33.7	13.2	8.8	2.7	23.7	9.9
Zinc	1.9	3.1	1.1	5.3	6.7	3.0	2.6	16.8	5.2	13.4	24.6	16.1	0.1
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.1	59.3	21.0	17.6	0.0
Selenium	1.5	0.2	0.1	4.3	16.9	3.0	0.4	14.6	7.3	32.8	10.1	8.5	0.2
Vitamin B6	4.4	6.8	5.3	6.0	8.8	14.3	9.9	15.0	1.6	10.8	6.3	10.9	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	4.0	23.2	17.8	53.5	0.0

[1] "Men 51 - 70"

```
 [1]  7  7  7  2  4 14 14 28 14  7  7  0  3  0 14 14  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	3.4	1.1	1.5	1.2	5.3	2.1	8.4	22.3	14.4	8.4	7.5	17.3	7.2
Energy	3.4	1.4	1.8	1.3	5.3	2.4	8.8	22.4	14.2	8.2	7.2	16.8	6.9
Protein	2.1	2.3	1.1	1.7	3.5	2.1	2.2	16.4	7.7	20.5	18.9	21.5	0.1
Fat	0.3	0.3	0.4	0.9	14.6	1.5	0.8	12.1	3.4	10.8	10.3	18.9	25.6
Carbohydrate	5.6	1.0	2.5	1.0	0.9	2.4	16.0	31.1	23.9	0.9	0.0	14.5	0.0
Sugars	1.0	1.6	4.6	0.2	0.9	4.7	34.9	16.1	1.6	0.3	0.0	34.1	0.0
Starch	9.1	0.6	1.0	1.7	0.9	0.6	1.3	42.6	40.8	1.2	0.0	0.2	0.0
Fibre	8.1	7.8	7.6	3.8	3.9	10.0	19.9	26.7	8.8	3.2	0.0	0.2	0.0
Saturated fat	0.2	0.2	0.2	0.4	6.3	1.0	0.3	11.3	1.7	9.7	12.5	37.6	18.6
Monounsaturated fat	0.1	0.0	0.0	0.5	22.1	2.0	0.1	11.2	3.8	11.7	13.1	14.0	21.5
Polyunsaturated fat	0.7	0.8	1.0	2.2	17.1	1.8	0.9	14.0	4.4	8.4	3.3	1.6	43.9
Linoleic acid	0.7	0.8	0.9	2.1	18.7	2.0	0.5	14.2	4.3	6.1	2.0	1.7	46.0
Alpha linolenic acid	0.0	0.0	0.3	4.1	2.7	0.0	7.1	17.5	8.2	8.0	6.5	11.0	34.7
LC n3 fatty acids	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.7	20.9	3.3	0.0
Vitamin A equivs	0.9	4.1	53.4	0.0	0.0	8.5	4.1	2.1	0.0	3.5	0.3	10.6	12.4
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.5	7.0	0.1	13.1	0.8	35.6	42.8
Provitamin A	1.1	5.6	72.9	0.0	0.0	11.6	5.6	0.3	0.0	0.0	0.1	1.1	1.6
Thiamin	4.2	4.7	3.0	1.3	7.3	4.0	6.0	44.8	10.7	4.9	6.0	3.1	0.0
Riboflavin	1.0	3.4	1.9	0.3	1.6	3.4	4.2	24.5	2.0	7.6	5.0	45.0	0.0
Niacin	3.3	1.9	1.6	1.0	5.0	3.6	2.8	22.9	7.8	17.4	15.6	17.3	0.0
Folate (total)	2.5	6.8	2.6	3.5	6.0	6.6	13.6	23.2	4.5	6.0	0.8	23.6	0.2
Folate equivs	1.7	4.5	1.7	2.3	4.0	4.4	9.0	38.6	13.6	4.0	0.5	15.6	0.1
Vitamin C	11.7	22.3	5.6	0.0	0.0	23.3	35.6	0.5	0.1	0.2	0.2	0.4	0.0
Vitamin D	0.1	0.0	0.0	0.0	0.0	0.0	0.0	6.1	0.0	27.8	5.6	36.4	23.9
Vitamin E	0.2	1.2	3.4	1.9	14.8	9.6	9.4	10.8	2.7	12.3	4.0	2.2	27.4
Calcium	0.5	2.4	2.1	0.8	1.0	2.3	3.1	22.6	3.1	3.3	0.5	58.1	0.1
Iron	4.0	6.9	2.7	3.2	4.4	5.4	6.5	32.6	9.2	11.1	12.9	1.0	0.0
Iodine	0.3	0.5	0.2	0.1	0.0	0.4	1.1	29.6	9.9	10.5	0.5	46.8	0.1
Magnesium	4.6	4.3	2.8	2.6	8.3	5.0	8.9	29.1	6.2	8.2	4.6	15.5	0.1
Phosphorus	3.1	2.4	1.7	1.5	4.0	3.1	2.7	22.3	6.0	13.0	9.3	30.7	0.0
Potassium	11.0	5.3	6.1	1.6	2.5	9.1	14.3	13.5	2.4	7.7	6.2	20.0	0.1
Sodium	0.9	1.3	1.3	0.9	0.0	2.0	0.7	35.7	15.9	9.0	2.8	24.3	5.0
Zinc	2.1	3.5	1.3	1.6	4.2	3.3	3.0	17.4	5.4	14.6	26.2	17.5	0.0
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	0.1	57.3	21.4	18.1	0.0
Selenium	1.6	0.3	0.2	1.3	9.7	3.3	0.4	15.2	8.4	38.6	11.5	9.3	0.1
Vitamin B6	4.9	8.1	5.6	1.9	5.5	17.6	10.0	13.2	2.1	11.9	7.1	12.1	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	4.4	23.2	17.8	53.1	0.0

[1] "Men 51 - 70.found"

```
 [1]  7  7  7  2  4 14 14 28 14  7  7  0  3  0 14 28  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	3.1	1.1	1.4	1.1	5.0	2.0	7.8	20.8	13.4	7.8	7.0	16.2	13.4
Energy	3.2	1.3	1.6	1.2	4.9	2.2	8.3	21.0	13.3	7.6	6.7	15.7	13.0
Protein	2.1	2.3	1.1	1.7	3.5	2.1	2.2	16.4	7.6	20.4	18.9	21.5	0.2
Fat	0.3	0.3	0.3	0.7	11.6	1.2	0.6	9.6	2.7	8.6	8.2	15.0	40.8
Carbohydrate	5.6	1.0	2.5	1.0	0.9	2.4	16.0	31.1	23.9	0.9	0.0	14.5	0.0
Sugars	1.0	1.6	4.6	0.2	0.9	4.7	34.9	16.1	1.6	0.3	0.0	34.1	0.1
Starch	9.1	0.6	1.0	1.7	0.9	0.6	1.3	42.6	40.8	1.2	0.0	0.2	0.0
Fibre	8.1	7.8	7.6	3.8	3.9	10.0	19.9	26.7	8.8	3.2	0.0	0.2	0.0
Saturated fat	0.2	0.2	0.1	0.3	5.3	0.8	0.3	9.6	1.4	8.2	10.6	31.6	31.3
Monounsaturated fat	0.0	0.0	0.0	0.4	18.2	1.6	0.1	9.2	3.1	9.6	10.8	11.5	35.3
Polyunsaturated fat	0.5	0.6	0.7	1.5	11.9	1.3	0.6	9.7	3.1	5.8	2.3	1.1	61.0
Linoleic acid	0.5	0.6	0.6	1.5	12.8	1.4	0.4	9.7	2.9	4.2	1.4	1.2	63.0
Alpha linolenic acid	0.0	0.0	0.3	3.1	2.0	0.0	5.3	13.0	6.1	5.9	4.8	8.2	51.5
LC n3 fatty acids	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.7	20.9	3.3	0.0
Vitamin A equivs	0.8	3.7	47.5	0.0	0.0	7.6	3.7	1.9	0.0	3.1	0.3	9.5	22.0
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.3	4.9	0.1	9.2	0.5	24.9	59.9
Provitamin A	1.1	5.5	71.8	0.0	0.0	11.4	5.5	0.3	0.0	0.0	0.1	1.0	3.1
Thiamin	4.2	4.7	3.0	1.3	7.3	4.0	6.0	44.8	10.7	4.9	6.0	3.1	0.0
Riboflavin	1.0	3.4	1.9	0.3	1.6	3.4	4.2	24.5	2.0	7.6	5.0	45.0	0.0
Niacin	3.3	1.9	1.6	1.0	5.0	3.6	2.8	22.9	7.8	17.4	15.6	17.3	0.0
Folate (total)	2.5	6.8	2.6	3.5	6.0	6.6	13.5	23.2	4.5	6.0	0.8	23.5	0.4
Folate equivs	1.7	4.5	1.7	2.3	4.0	4.4	9.0	38.5	13.6	4.0	0.5	15.5	0.3
Vitamin C	11.7	22.3	5.6	0.0	0.0	23.3	35.6	0.5	0.1	0.2	0.2	0.4	0.0
Vitamin D	0.1	0.0	0.0	0.0	0.0	0.0	0.0	4.9	0.0	22.4	4.5	29.3	38.6
Vitamin E	0.2	1.0	2.6	1.5	11.6	7.6	7.4	8.5	2.1	9.6	3.1	1.7	43.1
Calcium	0.5	2.4	2.1	0.8	1.0	2.3	3.1	22.6	3.1	3.3	0.5	58.1	0.2
Iron	4.0	6.9	2.7	3.2	4.4	5.4	6.5	32.6	9.2	11.1	12.9	1.0	0.0
Iodine	0.3	0.5	0.2	0.1	0.0	0.4	1.1	29.6	9.9	10.4	0.5	46.8	0.2
Magnesium	4.6	4.3	2.8	2.6	8.3	5.0	8.9	29.1	6.2	8.2	4.6	15.5	0.1
Phosphorus	3.1	2.4	1.7	1.5	4.0	3.1	2.7	22.3	6.0	13.0	9.3	30.6	0.1
Potassium	11.0	5.3	6.1	1.6	2.5	9.1	14.3	13.5	2.4	7.7	6.2	20.0	0.2
Sodium	0.8	1.3	1.2	0.9	0.0	1.9	0.7	34.0	15.2	8.6	2.7	23.1	9.6
Zinc	2.1	3.5	1.3	1.6	4.2	3.3	3.0	17.4	5.4	14.6	26.2	17.5	0.1
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	0.1	57.3	21.4	18.1	0.0
Selenium	1.6	0.3	0.2	1.3	9.7	3.3	0.4	15.2	8.4	38.5	11.5	9.3	0.2
Vitamin B6	4.9	8.1	5.6	1.9	5.5	17.6	10.0	13.2	2.1	11.9	7.1	12.1	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	4.4	23.2	17.8	53.1	0.0

[1] "Men 70plus"

```
 [1]  5  7  7  2  4 14 14 21 10  7  7  0  3  0 21 14  0  0  0
```

	StarchyV	GreenV	OrangeV	Legumes	Nuts/Seeds	OtherV	Fruit	WGcereal	Refcereal	WMeat	RMeat	Dairy	PolyMarg
Energy excl fibre	2.5	1.2	1.7	1.2	5.8	2.0	9.1	17.4	10.0	8.7	7.8	24.9	7.5
Energy	2.6	1.4	1.9	1.4	5.7	2.3	9.6	17.5	9.9	8.6	7.6	24.2	7.3
Protein	1.5	2.2	1.2	1.9	3.6	2.0	2.2	12.4	4.9	19.9	18.6	29.6	0.1
Fat	0.2	0.3	0.4	1.0	15.2	0.9	0.8	9.1	1.9	10.9	10.4	23.5	25.4
Carbohydrate	4.5	1.1	3.0	1.0	0.9	2.7	18.6	25.6	18.1	0.9	0.0	23.6	0.0
Sugars	0.7	1.4	4.1	0.2	0.8	4.5	31.7	10.7	1.5	0.2	0.0	44.3	0.0
Starch	9.1	0.8	1.7	2.0	0.9	0.7	2.1	43.3	37.6	1.6	0.0	0.3	0.0
Fibre	5.7	9.2	8.3	5.0	4.7	11.6	24.3	21.5	6.0	3.4	0.0	0.2	0.0
Saturated fat	0.1	0.2	0.2	0.4	6.1	0.4	0.2	8.4	1.0	9.3	11.8	44.3	17.3
Monounsaturated fat	0.0	0.0	0.0	0.4	23.1	0.8	0.1	8.4	2.0	12.3	13.4	17.7	21.7
Polyunsaturated fat	0.5	0.8	1.1	2.5	19.5	1.5	0.9	10.9	2.7	8.8	3.5	1.5	45.8
Linoleic acid	0.5	0.8	1.0	2.4	21.2	1.8	0.5	10.9	2.8	6.3	2.1	2.0	47.6
Alpha linolenic acid	0.0	0.0	0.5	5.6	1.9	0.0	7.4	14.4	3.8	8.4	7.0	14.2	36.9
LC n3 fatty acids	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.4	20.5	3.1	0.0
Vitamin A equivs	1.0	3.6	50.0	0.0	0.0	7.7	4.2	2.0	0.1	3.6	0.3	14.6	12.9
Retinol	0.1	0.0	0.0	0.0	0.0	0.0	0.3	5.8	0.1	11.8	0.7	43.1	38.2
Provitamin A	1.3	5.2	72.5	0.0	0.0	11.2	6.1	0.3	0.1	0.0	0.1	1.4	1.7
Thiamin	3.4	5.2	3.2	2.0	8.4	4.5	6.7	38.9	11.6	5.6	6.9	3.6	0.0
Riboflavin	0.6	3.1	1.8	0.3	1.3	2.3	3.8	15.8	2.4	6.8	4.4	57.5	0.0
Niacin	2.4	1.8	1.6	1.1	5.3	3.2	3.0	15.3	6.1	17.7	15.8	26.5	0.0
Folate (total)	1.7	6.0	2.5	3.8	6.0	6.9	13.3	14.8	4.7	5.5	0.8	34.0	0.2
Folate equivs	1.2	4.3	1.8	2.7	4.3	5.0	9.6	29.3	12.6	3.9	0.6	24.6	0.1
Vitamin C	8.3	23.1	6.1	0.0	0.0	23.9	37.1	0.3	0.4	0.2	0.2	0.6	0.0
Vitamin D	0.1	0.0	0.0	0.0	0.0	0.0	0.0	5.1	0.0	25.0	5.1	43.0	21.6
Vitamin E	0.2	1.0	3.5	1.6	17.0	10.8	9.8	7.8	1.2	12.4	4.1	2.4	28.3
Calcium	0.3	2.1	1.8	0.6	0.9	1.9	2.7	16.1	2.3	2.7	0.4	68.2	0.1
Iron	3.2	7.4	3.4	3.7	5.0	6.2	7.3	26.0	9.3	12.8	14.7	1.0	0.0
Iodine	0.2	0.4	0.1	0.1	0.0	0.4	1.1	21.3	6.4	9.1	0.4	60.5	0.1
Magnesium	3.4	4.3	2.9	3.2	8.8	5.1	9.8	21.4	4.6	8.3	4.8	23.3	0.1
Phosphorus	2.1	2.3	1.6	1.5	3.9	2.7	2.6	16.5	3.6	12.2	8.9	41.8	0.0
Potassium	7.7	5.1	6.0	1.9	2.4	8.5	14.6	10.2	1.7	7.2	6.0	28.6	0.1
Sodium	0.6	1.4	1.1	0.1	0.0	2.4	0.8	29.9	13.5	8.9	3.0	32.9	5.4
Zinc	1.4	3.5	1.3	1.7	4.1	3.1	3.0	12.5	4.2	15.8	25.9	23.6	0.0
Cholesterol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	54.8	20.1	22.3	0.0
Selenium	1.2	0.2	0.2	1.3	13.6	1.9	0.5	11.8	5.6	38.5	12.2	12.9	0.1
Vitamin B6	3.5	8.4	5.1	2.1	5.4	16.9	10.8	9.3	1.4	12.3	6.7	18.1	0.0
Vitamin B12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.3	19.8	14.7	63.4	0.0

Appendix 14: Samples of serve patterns for *Total Diets*

Summary of sample serve patterns for *Total Diets* for average height or age and light to moderate activity (PAL 1.7) and high end energy needs (tallest or oldest; high activity PAL 2.0)

The Tables show **serves per week** of the various food groups and other categories

Many variations of these *Total Diets* are possible; these diets show some examples that build on the relevant *Foundation Diets* patterns. The *Total Diets* can include the 'Discretionary Choices' category.

Details of the nutrient composition of these patterns assessed through 7-day modelling with individual foods are shown in Appendix 15.

Table A14.1. Sample *Total Diets* for Men 19–30yrs; about 12400kJ Average height (175cm) and light–medium activity (PAL 1.7)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy Vegetable	14	14	21	14	14	14
Green and Brassicas vegetables	7	7	7	7	14	7
Orange Vegetables	7	7	7	7	7	14
Legumes	7	7	14	7	7	7
NutsSeeds	7	7	14	7	7	7
Other Veg	21	21	14	21	14	21
Total Fruit	14	14	2	14	21	28
Wholegrain Cereals	42	42	35	49	42	42
Refined Cereals	21	21	14	28	18	14
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red Meats	7	7	7	7	7	7
Dairy foods	17	17	17	17	21	24
Unsaturated oils and spreads*	28	28	28	28	28	28
'Discretionary Choices' (600 kJ equivalents)	17.5	17.5	10.5	7	14	7

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.2. Sample *Total Diets* for Men 19–30yrs; about 15800kJ Tallest (190cm) and highest activity (PAL 2)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy Vegetable	28	14	35	35	28	21
Green and Brassicas vegetables	14	21	21	7	14	21
Orange Vegetables	14	14	14	7	21	14
Legumes	7	7	21	7	7	7
NutsSeeds	7	21	21	7	7	14
Other Veg	28	21	28	28	14	21
Total Fruit	21	21	28	14	28	14
Wholegrain Cereals	56	28	42	70	56	38
Refined Cereals	35	42	17	42	21	42
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red Meats	7	7	7	7	7	7
Dairy foods	17	31	17	17	17	17
Unsaturated oils and spreads*	28	28	28	28	28	28
'Discretionary Choices' (600kJ equivalents)	21	7	14	7	21	21

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.3 Sample *Total Diets* for Men 31–50yrs; about 11700kJ Average height (175cm) and light–medium activity (PAL 1.7)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy Vegetable	14	7	7	14	7	14
Green and Brassicas vegetables	7	14	7	14	7	7
Orange Vegetables	7	14	7	7	7	14
Legumes	7	7	14	7	7	7
NutsSeeds	7	14	14	7	7	7
Other Veg	21	14	14	14	14	21
Total Fruit	14	14	21	21	14	28
Wholegrain Cereals	42	28	35	35	28	42
Refined Cereals	14	21	14	18	21	14
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red Meats	7	7	7	7	7	7
Dairy foods	17	24	17	17	24	17
Unsaturated oils and spreads*	28	28	28	28	28	28
Discretionary Choices' (600kJ equivalents)	17.5	7	10.5	14	14	7

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.4. Sample *Total Diets* for Men 31–50yrs; about 14800kJ Tallest (190cm) and highest activity (PAL 2)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy Vegetable	28	14	21	28	28	28
Green and Brassicas vegetables	14	14	21	7	14	14
Orange Vegetables	14	14	14	7	14	21
Legumes	7	7	21	7	7	7
NutsSeeds	7	14	18	7	7	7
Other Veg	28	21	28	21	14	35
Total Fruit	21	21	28	14	28	42
Wholegrain Cereals	49	28	42	63	56	56
Refined Cereals	28	42	17	42	21	14
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red Meats	7	7	7	7	7	7
Dairy foods	17	31	17	17	17	21
Unsaturated oils and spreads*	28	28	28	28	28	28
'Discretionary Choices' (600kJ equivalents)	21	7	14	7	21	10.5

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.5. Sample *Total Diets* for Men 51–70yrs; about 10700kJ Average height (175cm) and light–medium activity (PAL 1.7)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy Vegetable	14	7	21	7	7	7
Green and Brassicas vegetables	7	14	7	14	7	7
Orange Vegetables	7	14	7	7	7	7
Legumes	7	7	14	7	7	7
NutsSeeds	7	7	7	7	7	7
Other Veg	21	14	14	14	14	21
Total Fruit	14	14	21	14	14	21
Wholegrain Cereals	42	28	28	42	28	35
Refined Cereals	14	28	14	18	21	14
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red Meats	7	7	7	7	7	7
Dairy foods	17	17	17	17	21	21
Unsaturated oils and spreads*	28	28	28	28	28	28
'Discretionary Choices' (600kJ equivalents)	7	7	7	7	10.5	7

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.6. Sample *Total Diets* for Men 51–70yrs; about 13800kJ Tallest (190cm) and highest activity (PAL 2)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy Vegetable	28	14	28	35	21	28
Green and Brassicas vegetables	14	21	7	7	21	14
Orange Vegetables	14	14	7	14	14	21
Legumes	7	21	7	7	7	7
NutsSeeds	7	11	7	7	18	7
Other Veg	35	28	21	14	21	35
Total Fruit	21	28	14	28	28	35
Wholegrain Cereals	42	42	49	49	28	49
Refined Cereals	28	17	42	21	14	17
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red Meats	7	7	7	7	7	7
Dairy foods	17	17	17	17	34	18
Unsaturated oils and spreads*	28	28	28	28	28	28
'Discretionary Choices' (600kJ equivalents)	14	14	7	14	7	10.5

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.7. Sample *Total Diets* for Men 70+yrs; about 9800kJ Average height (175cm) and light–medium activity (PAL 1.7)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy Vegetable	5	5	12	12	5	5
Green and Brassicas vegetables	7	7	7	14	7	7
Orange Vegetables	14	7	7	7	7	7
Legumes	2	9	9	2	2	2
NutsSeeds	7	11	4	4	4	11
Other Veg	21	28	14	14	21	14
Total Fruit	14	21	21	14	14	14
Wholegrain Cereals	21	21	28	28	35	28
Refined Cereals	17	10	10	17	31	17
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red Meats	7	7	7	7	7	7
Dairy foods	24	24	24	24	24	28
Unsaturated oils and spreads*	28	28	28	28	14	25
'Discretionary Choices' (600kJ equivalents)	10.5	3.5	7	7	0	0

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.8. Sample *Total Diets* for Men 70+yrs; about 12700kJ Tallest (190cm) and highest activity (PAL 2)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy Vegetable	28	14	14	28	25	7
Green and Brassicas vegetables	14	7	21	7	7	21
Orange Vegetables	14	14	21	7	14	14
Legumes	10	7	14	7	7	7
NutsSeeds	7	7	11	7	7	18
Other Veg	28	14	28	21	14	21
Total Fruit	21	21	25	11	21	21
Wholegrain Cereals	42	32	28	35	35	28
Refined Cereals	18	21	14	32	18	14
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red Meats	7	7	7	7	7	7
Dairy foods	24	34	24	24	24	34
Unsaturated oils and spreads*	28	28	28	28	28	28
'Discretionary Choices' (600kJ equivalents)	7	10.5	14	10.5	14	7

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.9. Sample *Total Diets*; Women 19–30yrs; about 9800kJ Average height 165cms; low to moderate exercice (PAL 1.7)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy Vegetable	5	5	5	12	5	12
Green and Brassicas vegetables	7	7	7	14	7	14
Orange Vegetables	7	7	7	7	7	7
Legumes	2	2	9	2	2	9
NutsSeeds	7	7	4	4	4	4
Other Veg	14	28	14	14	14	21
Total Fruit	14	21	21	14	14	17
Wholegrain Cereals	28	28	28	28	35	28
Refined Cereals	17	14	14	17	31	17
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red Meats	7	7	7	7	7	7
Dairy foods	24	24	21	24	21	24
Unsaturated oils and spreads*	28	28	28	28	14	28
'Discretionary Choices' (600kJ equivalents)	7	3.5	7	7	3.5	0

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.10 Sample *Total Diets* women 19–30yrs; about 12900kJ Tallest (180cms); highest exercise level (PAL 2.0)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy Vegetable	14	14	21	14	14	14
Green and Brassicas vegetables	7	7	7	14	7	14
Orange Vegetables	14	7	7	7	7	14
Legumes	7	14	14	14	7	7
NutsSeeds	14	14	7	7	7	7
Other Veg	21	21	21	21	21	28
Total Fruit	14	21	14	21	14	28
Wholegrain Cereals	42	35	49	49	35	49
Refined Cereals	14	21	21	18	28	21
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red Meats	7	7	7	7	7	7
Dairy foods	17	17	17	17	24	17
Unsaturated oils and spreads*	28	28	28	28	28	28
'Discretionary Choices' (600kJ equivalents)	21	14	14	14	17.5	10.5

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.11. Sample *Total Diet* Women 31–50yrs; about 9500kJ Average height 165cm; low to moderate exercise (PAL 1.7)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
StarchyVegetables	5	5	5	12	5	5
Green and Brassica veg	7	7	7	7	7	14
OrangeVegetables	7	7	7	7	7	7
Legumes as vegetables	2	2	2	2	2	9
Nuts/Seeds	4	4	4	3	4	4
OtherVegetables	14	28	14	14	14	21
Fruit	14	21	21	14	14	17
Wholegrain Cereals	28	28	28	28	35	28
Refined Cereals	17	14	14	17	24	17
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red Meats	7	7	7	7	7	7
Dairy foods	21	21	21	21	20	21
Unsaturated oils and spreads*	28	28	28	28	14	28
'Discretionary Choices' (600kJ equivalents)	7	3.5	7	7	3.5	0

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.12. Sample *Total Diet* Women 31–50yrs; about 12000kJ Tallest (180cms); highest exercise level (PAL 2.0)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy Vegetable	14	7	14	21	14	14
Green and Brassicas vegetables	7	14	7	7	14	14
Orange Vegetables	14	14	7	7	7	7
Legumes	7	7	14	14	14	7
NutsSeeds	14	11	7	7	7	14
Other Veg	21	14	21	21	21	21
Total Fruit	14	14	14	14	21	21
Wholegrain Cereals	35	28	35	42	35	28
Refined Cereals	14	21	2	14	18	14
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red Meats	7	7	7	7	7	7
Dairy foods	17	24	17	17	17	24
Unsaturated oils and spreads*	28	28	28	28	28	28
'Discretionary Choices' (600kJ equivalents)	14	14	14	14	10.5	10.5

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.13. Sample *Total Diet* Women 51–70yrs; about 9000kJ Average height 165cms; low to moderate exercise PAL 1.7

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
StarchyVegetables	5	5	5	12	5	5
Green and Brassica veg	7	7	7	14	7	14
OrangeVegetables	7	7	7	7	7	7
Legumes as vegetables	3	10	3	3	3	10
Nuts/Seeds	3	10	3	3	10	3
OtherVegetables	14	28	14	21	28	21
Fruit	14	21	14	21	14	14
Wholegrain Cereals	28	21	35	28	21	21
Refined Cereals	15	8	8	8	8	8
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red Meats	7	3	3	7	3	3
Dairy foods	28	28	38	28	28	32
Unsaturated oils and spreads*	14	14	21	14	21	21
'Discretionary Choices' (600kJ equivalents)	7	3.5	0	3.5	7	7

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.14. Sample *Total Diet* Women 51–70yrs; about 11500kJ Tallest 180cms; heavy exercise PAL 2.0

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
StarchyVegetables	14	5	7	14	5	5
Green and Brassica veg	7	7	7	14	7	14
OrangeVegetables	7	7	7	7	7	7
Legumes as vegetables	3	10	3	10	3	10
Nuts/Seeds	3	10	10	3	17	3
OtherVegetables	14	28	14	21	28	21
Fruit	21	21	14	28	21	14
Wholegrain Cereals	42	39	42	35	28	28
Refined Cereals	28	21	14	8	8	25
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red Meats	7	3	3	7	3	3
Dairy foods	28	28	35	28	28	32
Unsaturated oils and spreads*	14	21	21	28	28	28
'Discretionary Choices' (600kJ equivalents)	7	3.5	7	10.5	14	14

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.15. Sample *Total Diet* Women 70+yrs; about 8600kJ Average height 165cm; low to moderate exercise (PAL 1.7)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
StarchyVegetables	5	5	5	10	5	7
Green and Brassica veg	7	7	7	14	7	14
OrangeVegetables	7	7	7	7	7	7
Legumes as vegetables	3	7	3	3	3	10
Nuts/Seeds	3	7	3	3	7	3
OtherVegetables	14	28	14	21	14	21
Fruit	14	21	14	14	14	14
Wholegrain Cereals	25	21	32	28	21	21
Refined Cereals	15	8	8	8	8	8
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red Meats	7	3	3	7	3	3
Dairy foods	28	28	32	28	28	28
Unsaturated oils and spreads*	14	14	21	14	21	21
'Discretionary Choices' (600kJ equivalents)	3.5	3.5	0	3.5	7	7

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.16. Sample *Total Diet* women 70+yrs; about 10900kJ Tallest 180cm; heavy exercise (PAL 1.7)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
StarchyVegetables	5	14	5	10	11	7
Green and Brassica veg	7	7	7	14	7	14
OrangeVegetables	7	14	7	7	7	7
Legumes as vegetables	3	7	3	3	3	10
Nuts/Seeds	14	7	7	3	7	3
OtherVegetables	14	21	14	21	14	21
Fruit	14	21	21	21	14	14
Wholegrain Cereals	31	21	35	35	21	21
Refined Cereals	14	21	8	10	28	28
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red Meats	7	7	3	7	7	3
Dairy foods	28	28	35	28	28	28
Unsaturated oils and spreads*	21	14	28	28	21	28
'Discretionary Choices' (600kJ equivalents)	10.5	10.5	10.5	14	10.5	14

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.17. Sample *Total Diet* Women 19–50yrs Pregnant; about 11500kJ Average height 165 cms; low to moderate activity (PAL 1.7)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
StarchyVegetables	7	7	7	7	7	7
Green and Brassica vegetables	7	7	7	7	14	7
OrangeVegetables	10	7	7	7	7	7
Legumes as vegetables	7	7	7	7	7	7
Nuts/Seeds	10	7	5	7	4	2
OtherVegetables	21	18	14	14	14	14
Fruit	14	14	14	14	14	14
Wholegrain Cereals	42	49	42	42	42	42
Refined Cereals	24	21	21	21	21	21
Poultry fish seafood eggs legumes	12	12	12	12	12	12
Red Meats	12	12	12	12	12	12
Dairy foods	17	20	20	17	17	24
Unsaturated oils and spreads*	17	17	17	21	17	17
'Discretionary Choices' (600kJ equivalents)	0	0	7	7	10.5	10.5

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.18. Sample *Total Diet* women 19–50yrs Pregnant
Tallest 180 cms; heavy activity (PAL 2.0); about 14400kJ

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
StarchyVegetables	7	7	14	7	21	7
Green and Brassica vegetables	7	7	7	7	14	7
OrangeVegetables	7	7	7	7	7	7
Legumes as vegetables	14	14	7	7	7	7
Nuts/Seeds	14	7	21	14	9	9
OtherVegetables	21	14	14	21	14	14
Fruit	28	21	21	21	21	21
Wholegrain Cereals	49	49	49	49	49	49
Refined Cereals	28	35	28	28	28	35
Poultry fish seafood eggs legumes	12	12	12	12	12	12
Red Meats	12	12	12	12	12	12
Dairy foods	17	17	17	17	17	17
Unsaturated oils and spreads*	28	21	17	21	28	24
'Discretionary Choices' (600kJ equivalents)	3.5	14	7	14	10.5	14

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.19. Sample *Total Diet* women 19–50yrs Lactating
Average height 165 cms; light to moderate activity (PAL 1.7) about 11600kJ

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
StarchyVegetables	14	14	7	14	7	14
Green and Brassica vegetables	7	7	7	7	14	7
OrangeVegetables	10	7	7	7	7	7
Legumes as vegetables	7	7	7	7	5	5
Nuts/Seeds	10	7	10	7	12	7
OtherVegetables	21	18	14	21	14	14
Fruit	14	14	21	14	14	14
Wholegrain Cereals	49	49	42	42	42	42
Refined Cereals	24	21	21	28	21	21
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red Meats	7	7	7	7	7	7
Dairy foods	17	20	20	17	17	17
Unsaturated oils and spreads*	21	21	21	21	21	21
'Discretionary Choices' (600kJ equivalents)	0	7	7	7	10.5	14

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.20.Sample *Total Diet* women 19–50yrs Lactating Tallest 180 cms; heavy activity (PAL 2.0) about 14600kJ

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
StarchyVegetables	14	11	7	7	14	14
Green and Brassica vegetables	7	7	7	14	14	14
OrangeVegetables	7	7	7	7	7	14
Legumes as vegetables	14	14	7	7	7	14
Nuts/Seeds	21	14	18	14	17	12
OtherVegetables	28	14	14	11	21	14
Fruit	28	21	21	28	24	21
Wholegrain Cereals	49	56	49	56	49	56
Refined Cereals	28	35	35	33	28	28
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red Meats	7	7	7	7	7	7
Dairy foods	17	17	17	17	17	17
Unsaturated oils and spreads*	28	21	21	21	28	24
'Discretionary Choices' (600kJ equivalents)	3.5	10.5	14	14	14	14

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.21. Boys 2–3yrs Sample *Total Diets*
Average age at 2.5y; light to moderate activity, PAL 1.7; about 5650kJ)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	3.5	2.5	7	3.5	2.5	7
Green and brassica vegetables	3.5	3.5	3.5	3.5	3.5	3.5
Orange vegetables	3.5	3.5	3.5	3.5	3.5	3.5
Legumes as vegetables	3	2	3	2	4	2
Nuts/seeds	0	0	0	0	0	0
Other vegetables	10	7	21	14	10	7
Fruit	14	7	12	7	21	21
Wholegrain cereals/grains	21	21	19	21	19	19
Refined cereals/grains	14	21	9	14	9	9
Poultry fish seafood eggs legumes	3.5	3.5	3.5	3.5	3.5	3.5
Red meats	3.5	3.5	3.5	3.5	3.5	3.5
Dairy foods	11.5	10.5	10.5	10.5	10.5	10.5
Unsaturated oils and spreads*	10	10	14	14	10	10
'Discretionary Choices' (600kJ equivalents)	0	0	3.5	3.5	3.5	3.5

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Higher level *Total diet* (Age 3yrs PAL 2; about 6900kJ)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	7	3.5	7	7	2.5	7
Green and brassica vegetables	7	3.5	4.5	7	4.5	8
Orange vegetables	7	3.5	3.5	7	3.5	7
Legumes as vegetables	7	3	3.5	7	2	7
Nuts/seeds	0	0	0	0	0	0
Other vegetables	10	7	14	14	14	14
Fruit	10	7	14	14	22	17
Wholegrain cereals/grains	28	28	22	28	21	26
Refined cereals/grains	14	28	21	14	21	14
Poultry fish seafood eggs legumes	3.5	3.5	3.5	3.5	3.5	3.5
Red meats	3.5	3.5	3.5	3.5	3.5	3.5
Dairy foods	17	10.5	10.5	10.5	10.5	10.5
Unsaturated oils and spreads*	14	14	14	14	14	14
'Discretionary Choices' (600kJ equivalents)	0	0	3.5	3.5	3.5	3.5

*Including *Foundation Diets* amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).

Table A14.22. Boys 4–8y
Average *Total Diet* (age 6 at PAL 1.7; about 7000kJ)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	3.5	7	7	8	7	7
Darker Green vegetables	7	14	7	7	7	7
Orange vegetables	7	7	7	7	7	7
Legumes as vegetables	2	2	2	7	9	7
Nuts/seeds	0	0	0	0	0	0
Other vegetables	10.5	21	21	21	14	10.5
Fruit	10.5	21	7	21	21	25
Wholegrain cereals/grains	28	21	21	20	19	19
Refined cereals/grains	21	14	21	10	10	9
Poultry fish seafood eggs legumes	5.5	5.5	5.5	5.5	5.5	5.5
Red meats	5	5	5	5	5	5
Dairy foods	14	14	14	14	14	14
Unsaturated oils and spreads*	14	14	14	14	14	14
'Discretionary Choices' (600kJ equivalents)	0	0	3.5	3.5	3.5	3.5

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Higher *Total Diet* (aged 8yrs PAL 2; about 9200kJ)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	7	7	14	14	14	14
Green and brassica vegetables	14	7	14	14	14	14
Orange vegetables	14	7	14	14	14	14
Legumes as vegetables	7	7	7	10	10	14
Nuts/seeds	0	0	0	0	0	0
Other vegetables	21	14	21	14	14	21
Fruit	21	14	21	14	14	21
Wholegrain cereals/grains	35	35	28	28	28	22.5
Refined cereals/grains	17	35	14	28	21	19
Poultry fish seafood eggs legumes	11	5.5	11	5.5	5.5	5.5
Red meats	10	5	10	5	5	5
Dairy foods	14	14	14	14	14	14
Unsaturated oils and spreads*	10	14	14	14	17	21
'Discretionary Choices' (600kJ equivalents)	0	0	3.5	3.5	7	7

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.23. Boys 9–11 y
Average *Total Diet* (age 10, PAL 1.7; about 8800kJ)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	7	14	7	14	10	7
Green and brassica vegetables	7	7	7	7	7	7
Orange vegetables	7	7	7	7	7	7
Legumes as vegetables	2	2	5	4	2	4
Nuts/seeds	7	5	7	7	4	7
Other vegetables	14	21	21	21	21	21
Fruit	14	21	14	21	21	14
Wholegrain cereals/grains	28	28	28	23	26.5	25
Refined cereals/grains	21	14	14	12	16	14
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red meats	7	7	7	7	7	7
Dairy foods	17	17	17	17	17	17
Unsaturated oils and spreads*	14	14	14	14	7	7
'Discretionary Choices' (600kJ equivalents)	0	0	3.5	3.5	7	7

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Higher *Total Diet* (aged 11, PAL 2; about 11000kJ)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	14	14	7	7	10	14
Green and brassica vegetables	7	7	7	7	7	7
Orange vegetables	7	7	7	7	7	7
Legumes as vegetables	5	7	7	7	3	7
Nuts/seeds	7	10	7	10	4	7
Other vegetables	21	28	21	21	21	21
Fruit	21	21	14	14	21	28
Wholegrain cereals/grains	35	35	35	35	35	23
Refined cereals/grains	28	14	28	12	21	12
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red meats	7	7	7	7	7	7
Dairy foods	17	24	17	29	24	21
Unsaturated oils and spreads*	21	21	21	21	7	28
'Discretionary Choices' (600kJ equivalents)	0	0	7	7	14	10.5

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.24. Boys12–13y
Average *Total Diet* (age12.5y, PAL 1.7; about 10200kJ

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	7	7	7	14	10	7
Green and brassica vegetables	7	7	7	7	7	7
Orange vegetables	7	7	7	7	7	7
Legumes as vegetables	4	7	7	7	2	2
Nuts/seeds	2	7	7	7	4	4
Other vegetables	14	28	21	14	14	14
Fruit	14	21	14	14	14	14
Wholegrain cereals/grains	35	28	28	28	28	28
Refined cereals/grains	28	14	14	14	14	14
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red meats	7	7	7	7	7	7
Dairy foods	25	28	25	25	29	25
Unsaturated oils and spreads*	21	21	21	21	28	28
'Discretionary Choices' (600kJ equivalents)	0	0.	7	7	7	14

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Higher *Total Diet* (Age 13yrs, PAL2; about 12400kJ)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	14	10	7	14	14	14
Green and brassica vegetables	7	7	7	7	14	7
Orange vegetables	7	7	7	7	14	7
Legumes as vegetables	7	7	7	7	14	7
Nuts/seeds	7	7	7	11	7	10
Other vegetables	14	14	14	21	28	28
Fruit	14	14	14	21	14	14
Wholegrain cereals/grains	42	42	35	28	35	29.5
Refined cereals/grains	35	28	31	14	14	16
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red meats	7	7	7	7	7	7
Dairy foods	25	29	29	29	26	21
Unsaturated oils and spreads*	28	21	28	28	28	28
'Discretionary Choices' (600kJ equivalents)	0	7	8	14	14	17.5

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.25. Boys14–18yrs
Average *Total Diet* (Age 16yrs PAL 1.7; about 12500kJ)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	7	7	14	14	14	7
Green and brassica vegetables	7	7	7	7	10	7
Orange vegetables	7	7	7	7	7	7
Legumes as vegetables	7	7	7	7	9	7
Nuts/seeds	7	7	7	7	10	10
Other vegetables	14	14	28	28	28	28
Fruit	14	21	21	21	21	14
Wholegrain cereals/grains	42	35	35	35	35	35
Refined cereals/grains	35	35	24	21	17	21
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red meats	7	7	7	7	7	7
Dairy foods	29	25	28	25	29	25
Unsaturated oils and spreads*	28	28	28	28	28	28
'Discretionary Choices' (600kJ equivalents)	0	7	7	14	7	17.5

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Higher *Total Diet* (age 18yrs PAL 20; about 15600kJ)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	14	14	7	14	14	10
Green and brassica vegetables	7	7	7	7	7	7
Orange vegetables	7	7	7	7	7	7
Legumes as vegetables	14	14	14	14	14	14
Nuts/seeds	14	17	17	14	14	14
Other vegetables	28	28	28	28	35	28
Fruit	21	28	14	21	21	28
Wholegrain cereals/grains	42	42	42	42	35	35
Refined cereals/grains	42	28	42	35	35	35
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red meats	7	7	7	7	7	7
Dairy foods	29	29	25	29	29	29
Unsaturated oils and spreads*	28	28	28	28	28	28
'Discretionary Choices' (600kJ equivalents)	7	14	14	14	17.5	17.5

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.26. Girls 2–3yrs
Average *Total Diet* (age 2.5yrs, PAL 1.7; about 4900 kJ)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	2.5	4	4	2.5	4	5
Green and brassica vegetables	3.5	3.5	4	3.5	3.5	3.5
Orange vegetables	3.5	4	4	3.5	3.5	3.5
Legumes as vegetables	2	2	2	3	3.5	2
Nuts/seeds	0	0	0	0	0	0
Other vegetables	7	10	14	7	7	7
Fruit	7	14	7	7	10	10
Wholegrain cereals/grains	21	21	19	21	19	19
Refined cereals/grains	14	9	9	9	9	9
Poultry fish seafood eggs legumes	3.5	3.5	3.5	3.5	3.5	3.5
Red meats	3.5	3.5	3.5	3.5	3.5	3.5
Dairy foods	10.5	10.5	10.5	10.5	10.5	10.5
Unsaturated oils and spreads*	10	7	7	7	10	10
'Discretionary Choices' (600kJ equivalents)	0	0	3.5	3.5	0	0

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Higher *Total Diet* (age 3yrs PAL 2; about 6400kJ)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	7	7	7	3.5	3.5	7
Green and brassica vegetables	3.5	3.5	3.5	3.5	3.5	3.5
Orange vegetables	3.5	3.5	3.5	3.5	3.5	3.5
Legumes as vegetables	7	3.5	3.5	3.5	3.5	3.5
Nuts/seeds	0	0	0	0	0	0
Other vegetables	7	21	21	21	21	21
Fruit	14	14	21	14	17	21
Wholegrain cereals/grains	21	21	21	28	21	19
Refined cereals/grains	21	18	12	13	15	13
Poultry fish seafood eggs legumes	3.5	3.5	3.5	3.5	3.5	3.5
Red meats	3.5	3.5	3.5	3.5	3.5	3.5
Dairy foods	10.5	11.5	10.5	10.5	10.5	10.5
Unsaturated oils and spreads*	10	10	10	10	10	10
'Discretionary Choices' (600kJ equivalents)	0	0	33.5	3.5	3.5	3.5

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

A14.27 Girls 4–8yrs
Average *Total Diet* (Age 6; PAL 1.7; about 6500kJ)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	5	7	7	7	7	14
Green and brassica vegetables	7	7	7	7	28	7
Orange vegetables	7	7	7	7	7	7
Legumes as vegetables	2	7	7	7	7	7
Nuts/seeds	0	0	0	0	0	0
Other vegetables	10.5	28	21	10.5	10.5	10.5
Fruit	10.5	21	17	10.5	10.5	17
Wholegrain cereals/grains	28	19	19	21	21	19
Refined cereals/grains	17	9	10	15	14	9
Poultry fish seafood eggs legumes	5.5	5.5	5.5	5.5	5.5	5.5
Red meats	5	5	5	5	5	5
Dairy foods	11.5	12.5	11.5	11.5	11.5	11.5
Unsaturated oils and spreads*	10	10	10	10	10	10
'Discretionary Choices' (600kJ equivalents)	0	0	3.5	3.5	3.5	3.5

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Higher *Total Diet* (age 8; PAL 2; about 8600kJ)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	14	14	7	14	14	14
Green and brassica vegetables	7	7	7	7	7	7
Orange vegetables	7	7	7	7	7	7
Legumes as vegetables	7	7	7	7	7	7
Nuts/seeds	0	0	0	0	0	0
Other vegetables	14	28	21	28	21	28
Fruit	21	28	28	14	28	21
Wholegrain cereals/grains	35	21	35	31	28	32
Refined cereals/grains	21	21	17	18	14	14
Poultry fish seafood eggs legumes	5.5	5.5	5.5	5.5	5.5	5.5
Red meats	5	5	5	5	5	5
Dairy foods	12.5	14.5	11.5	14.5	12.5	12.5
Unsaturated oils and spreads*	12	15	10	15	12	10
'Discretionary Choices' (600kJ equivalents)	0	0	3.5	3.5	7	7

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.28 Girls 9–11yrs
Average *Total Diet* (Age 10 PAL 1.7 about 8000kJ)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	5	10	7	7	7	5
Green and brassica vegetables	7	7	7	7	7	7
Orange vegetables	7	7	7	7	7	7
Legumes as vegetables	2	7	7	3	3	2
Nuts/seeds	7	10	7	7	7	5
Other vegetables	14	14	14	14	14	14
Fruit	14	14	14	21	14	14
Wholegrain cereals/grains	21	19	21	19	19	19
Refined cereals/grains	14	9	9	9	9	14
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red meats	7	7	7	7	7	7
Dairy foods	20.5	20.5	20.5	21	21	20.5
Unsaturated oils and spreads*	15	12	12	10	10	10
'Discretionary Choices' (600kJ equivalents)	0	0	3.5	3.5	7	7

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Higher *Total Diet* (Age 11; PAL 2.0; about 10000kJ

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	10	10	7	7	7	14
Green and brassica vegetables	7	7	7	7	7	7
Orange vegetables	7	7	7	7	7	7
Legumes as vegetables	2	2	7	7	7	7
Nuts/seeds	10	14	12	12	7	10
Other vegetables	14	17	28	14	14	28
Fruit	14	21	21	14	14	28
Wholegrain cereals/grains	35	21	21	28	28	19
Refined cereals/grains	21	21	14	14	24	9
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red meats	7	7	7	7	7	7
Dairy foods	23.5	24.5	24.5	24.5	20.5	22.5
Unsaturated oils and spreads*	12	12	15	15	12	15
'Discretionary Choices' (600kJ equivalents)	0	0	3.5	3.5	7	7

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.29. Girls12–13yrs
Average *Total Diet* (Age 12.5y; PAL1.7; about 9200kJ)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	5	7	5	10	5	5
Green and brassica vegetables	7	14	7	7	7	7
Orange vegetables	7	7	7	7	7	7
Legumes as vegetables	2	7	7	2	2	2
Nuts/seeds	10	7	14	5	10	2
Other vegetables	14	14	14	14	28	14
All Fruit	14	21	14	14	14	21
All Wholegrain cereals/grains	24	19	19	19	19	19
All Refined cereals/grains	14	9	9	14	9	12
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red meats	7	7	7	7	7	7
Dairy foods	28.5	28.5	28.5	28.5	28.5	25.5
Unsaturated oils and spreads*	20	25	15	20	17	20
'Discretionary Choices' (600kJ equivalents)	0	0	3.5	7	7	14

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Higher *Total Diet* (Age 13yrs PAL2.0; about 11100kJ)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	7	5	5	7	5	7
Green and brassica vegetables	7	7	7	7	7	7
Orange vegetables	7	7	7	7	7	7
Legumes as vegetables	2	2	2	2	2	2
Nuts/seeds	14	5	5	5	5	7
Other vegetables	14	14	28	14	28	14
Fruit	21	14	28	28	17	14
Wholegrain cereals/grains	35	35	35	32	28	24
Refined cereals/grains	18	35	21	21	21	24
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red meats	7	7	7	7	7	7
Dairy foods	28.5	28.5	28.5	28.5	28.5	25.5
Unsaturated oils and spreads*	20	20	20	20	20	20
'Discretionary Choices' (600kJ equivalents)	0	0	3.5	7	14	17.5

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.30 Girls 14-18yrs
Average *Total Diet* (age 16; PAL 1.7; about 10100kJ

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	6	6	5	5	5	5
Green and brassica vegetables	7	7	7	7	7	7
Orange vegetables	7	7	7	7	7	7
Legumes as vegetables	7	7	3	3	2	2
Nuts/seeds	14	14	7	7	2	2
Other vegetables	14	14	14	14	21	14
Fruit	21	14	21	21	14	17
Wholegrain cereals/grains	35	35	35	35	35	35
Refined cereals/grains	14	14	14	18	18	14
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red meats	7	7	7	7	7	7
Dairy foods	24.5	24.5	24.5	24.5	24.5	24.5
Unsaturated oils and spreads*	14	14	14	15	15	25
'Discretionary Choices' (600kJ equivalents)	0	3.5	7	7	13.5	13.5

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Higher *Total Diets* (age 18yrs PAL2.0; about 12100kJ)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	6	9	9	6	5	9
Green and brassica vegetables	7	7	7	7	7	7
Orange vegetables	7	7	7	7	7	7
Legumes as vegetables	7	7	2	7	2	2
Nuts/seeds	7	10	14	7	2	7
Other vegetables	21	21	28	28	21	21
Fruit	21	21	14	21	14	14
Wholegrain cereals/grains	42	35	42	35	42	35
Refined cereals/grains	35	32	28	28	35	28
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red meats	7	7	7	7	7	7
Dairy foods	24.5	24.5	24.5	24.5	24.5	24.5
Unsaturated oils and spreads*	20	15	15	15	20	20
'Discretionary Choices' (600kJ equivalents)	3.5	7	10.5	14	13.5	17.5

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.31. Pregnancy adolescents
Average *Total Diet* (age 16yrs; PAL 1.7; about 12000kJ)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	7	7	7	14	14	7
Green and brassica vegetables	7	7	7	7	14	7
Orange vegetables	7	7	7	7	7	7
Legumes as vegetables	7	7	7	7	7	7
Nuts/seeds	14	14	11	4	2	2
Other vegetables	21	14	14	14	14	14
Fruit	14	14	14	14	14	14
Wholegrain cereals/grains	49	49	42	42	42	42
Refined cereals/grains	24.5	21	21	21	21	21
Poultry fish seafood eggs legumes	12	12	12	12	12	12
Red meats	12	12	12	12	12	12
Dairy foods	24.5	24.5	24.5	24.5	24.5	24.5
Unsaturated oils and spreads*	17	21	17	17	28	24
'Discretionary Choices' (600kJ equivalents)	0	0	7	14	10.5	14

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

High *Total Diets* (aged 18; PAL 2; about 14000kJ)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	7	7	7	7	7	7
Green and brassica vegetables	7	7	7	7	14	7
Orange vegetables	7	7	7	7	7	7
Legumes as vegetables	14	14	7	7	7	7
Nuts/seeds	21	14	18	11	9	9
Other vegetables	21	14	14	14	14	14
Fruit	28	21	21	21	21	21
Wholegrain cereals/grains	49	49	49	49	49	49
Refined cereals/grains	28	35	28	28	28	28
Poultry fish seafood eggs legumes	12	12	12	12	12	12
Red meats	12	12	12	12	12	12
Dairy foods	24.5	24.5	24.5	24.5	24.5	24.5
Unsaturated oils and spreads*	28	21	17	17	28	24
'Discretionary Choices' (600kJ equivalents)	0	0	7	14	10.5	14

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Table A14.32. Lactation adolescents
Average *Total Diet* (age 16yrs; PAL 1.7; about 12100kJ

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	7	7	7	14	14	7
Green and brassica vegetables	7	7	7	7	14	7
Orange vegetables	7	7	7	7	7	7
Legumes as vegetables	7	7	7	7	7	7
Nuts/seeds	14	14	11	4	2	2
Other vegetables	21	14	14	14	14	14
Fruit	14	14	14	14	14	14
Wholegrain cereals/grains	49	49	42	42	42	42
Refined cereals/grains	30	26.5	26.5	26.5	26.5	26.5
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red meats	7	7	7	7	7	7
Dairy foods	28.5	28.5	28.5	28.5	28.5	28.5
Unsaturated oils and spreads*	17	21	17	17	28	24
'Discretionary Choices' (600kJ equivalents)	0	0	7	14	10.5	14

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

High *Total Diet* (aged 18yrs; PAL 2; about 14100kJ)

	Diet 1	Diet 2	Diet 3	Diet 4	Diet 5	Diet 6
Starchy vegetables	7	7	7	7	7	7
Green and brassica vegetables	7	7	7	7	14	7
Orange vegetables	7	7	7	7	7	7
Legumes as vegetables	14	14	7	7	7	7
Nuts/seeds	21	14	18	11	9	9
Other vegetables	21	14	14	14	14	14
Fruit	28	21	21	21	21	21
Wholegrain cereals/grains	49	49	49	49	49	49
Refined cereals/grains	33.5	40.5	33.5	33.5	33.5	33.5
Poultry fish seafood eggs legumes	7	7	7	7	7	7
Red meats	7	7	7	7	7	7
Dairy foods	28.5	28.5	28.5	28.5	28.5	28.5
Unsaturated oils and spreads*	28	21	17	17	28	24
'Discretionary Choices' (600kJ equivalents)	0	0	7	14	10.5	14

**Including Foundation Diets amounts for unsaturated fats and oils. Modelled with serves of polyunsaturated margarine (10g/serve) but could be replaced with oil (7g/serve) or seeds or nuts (10g/serve).*

Appendix 15: Samples of 7-day *Total Diets*

Individual sample *7-day Total Diets* for average height/age and light to moderate activity (PAL 1.7) and high end height/age and heavy activity (PAL 2.0), for men and women including pregnancy and lactation and for boys and girls were modelled.

The *Total Diets* are examples of the various ways the *Foundation Diets* can be built on according to food preferences using the food group patterns shown in the previous Appendix.

For each age/gender group 6–8 samples of 7-day *Total Diets* were developed for the average person in the group (mid height for adults or mid age range for children and PAL 1.7) and for the tallest or oldest (children) and most active (upper end of energy need).

For the smallest and most sedentary members of each group, the *Foundation Diets* becomes their *Total Diet* as for most there were few kilojoules available for additional foods.

A15.1 Sample *7-day Total Diet* for Men 19-30 years mid energy level

Average height (175cm) and light-moderate activity (PAL 1.7)

Men19to30.avtot1

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               17.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12086.5 11655.8 12606.0      NA         NA
             Energy (kJ)      12492.4 12054.9 13014.9      NA         NA
             Protein (g)        134.1   126.5   142.6     100        100
                 Fat (g)         94.4    85.0   104.4      NA         NA
        Carbohydrate (g)        364.4   340.1   411.4      NA         NA
              Sugars (g)        138.4   119.1   163.0      NA         NA
              Starch (g)        221.8   201.1   253.9      NA         NA
               Fibre (g)         54.1    48.0    69.5      NA        100
             Alcohol (g)          7.2     1.1    17.7      NA         NA
       Saturated fat (g)         29.3    25.9    33.6      NA         NA
 Monounsaturated fat (g)         33.1    29.0    39.0      NA         NA
 Polyunsaturated fat (g)         25.2    23.3    27.5      NA         NA
       Linoleic acid (g)         23.4    21.0    25.4      NA        100
Alpha linolenic acid (g)          1.5     1.3     1.8      NA        100
  LC n3 fatty acids (mg)        213.2    77.7   799.6      NA         51
  Vitamin A equivs (mcg)       1770.1  1490.1  2075.3     100        100
           Retinol (mcg)        558.3   498.7   684.4      NA         NA
      Provitamin A (mcg)       7239.5  5469.7  9135.1      NA         NA
             Thiamin (mg)          2.6     2.3     3.0     100        100
          Riboflavin (mg)          3.2     2.8     3.7     100        100
             Niacin (mg)         71.7    66.2    77.1     100        100
      Folate (mcg total)        687.7   592.9   824.1      NA         NA
     Folate equivs (mcg)       1044.9   892.1  1220.9     100        100
          Vitamin C (mg)        186.3   129.1   242.0     100        100
          Vitamin D (mcg)          4.4     3.5     6.7      NA         24
          Vitamin E (mg)         16.7    13.3    21.8      NA        100
            Calcium (mg)       1261.4  1161.2  1380.5     100        100
               Iron (mg)         19.3    17.2    22.1     100        100
            Iodine (mcg)        239.9   207.6   273.6     100        100
          Magnesium (mg)        594.4   551.0   647.8     100        100
          Phosphorus (mg)       2375.8  2221.9  2533.5     100        100
          Potassium (mg)        5191.3  4893.0  5501.9      NA        100
             Sodium (mg)        2184.1  1603.8  3098.6      NA        100
               Zinc (mg)         18.7    16.7    29.4     100        100
        Cholesterol (mg)        280.3   179.4   451.2      NA         NA
          Selenium (mcg)        109.1    89.1   152.4     100        100
          Vitamin B6 (mg)         2.5     2.1     3.3     100        100
        Vitamin B12 (mcg)         6.4     5.2     8.7     100        100

         Percent energy from fat 28.6
     Percent energy from protein 18.7
Percent energy from carbohydrate 51.0
     Percent energy from alcohol  1.7
```

Men19to30.avtot2:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            14
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          7
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11981.9 11553.7 12298.9      NA         NA
             Energy (kJ)      12383.8 11940.7 12705.2      NA         NA
             Protein (g)        140.6   133.0   147.8     100        100
                 Fat (g)        107.1    98.3   114.5      NA         NA
        Carbohydrate (g)        331.1   314.9   348.5      NA         NA
              Sugars (g)        129.6   108.4   148.7      NA         NA
              Starch (g)        199.0   183.8   217.2      NA         NA
               Fibre (g)         52.0    44.8    60.1      NA        100
             Alcohol (g)          2.9     0.0     8.3      NA         NA
       Saturated fat (g)         32.5    29.8    35.3      NA         NA
 Monounsaturated fat (g)         39.3    35.0    44.0      NA         NA
 Polyunsaturated fat (g)         27.9    24.7    30.8      NA         NA
       Linoleic acid (g)         26.2    23.1    28.8      NA        100
Alpha linolenic acid (g)          1.4     1.2     1.7      NA         90
  LC n3 fatty acids (mg)        179.7    72.0   524.9      NA         45
  Vitamin A equivs (mcg)       2631.3  2002.9  3158.0     100        100
           Retinol (mcg)        638.7   550.9   708.0      NA         NA
      Provitamin A (mcg)      11915.8  8287.8 15115.4      NA         NA
            Thiamin (mg)          2.4     2.2     2.7     100        100
         Riboflavin (mg)          3.4     3.1     3.8     100        100
             Niacin (mg)         71.2    64.0    79.7     100        100
      Folate (mcg total)        713.2   618.8   795.3      NA         NA
     Folate equivs (mcg)       1024.2   917.4  1149.0     100        100
          Vitamin C (mg)        173.4   125.7   231.2     100        100
         Vitamin D (mcg)          5.4     4.6     7.5      NA         76
          Vitamin E (mg)         17.8    14.2    21.6      NA        100
            Calcium (mg)       1434.3  1329.0  1552.0     100        100
               Iron (mg)         17.9    16.5    21.2     100        100
            Iodine (mcg)        273.8   224.4   306.1     100        100
          Magnesium (mg)        596.4   557.2   645.0     100        100
         Phosphorus (mg)       2472.6  2349.9  2632.1     100        100
          Potassium (mg)       5202.1  4916.0  5648.9      NA        100
             Sodium (mg)       1893.3  1634.4  2148.4      NA        100
               Zinc (mg)         19.1    17.1    30.1     100        100
        Cholesterol (mg)        272.7   197.0   380.3      NA         NA
          Selenium (mcg)        119.8    89.6   176.3     100        100
         Vitamin B6 (mg)          2.7     2.1     3.3     100        100
       Vitamin B12 (mcg)          7.7     6.7    12.2     100        100

         Percent energy from fat 32.7
     Percent energy from protein 19.7
Percent energy from carbohydrate 47.0
     Percent energy from alcohol  0.7
```

Men19to30.avtot3:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           21
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            14
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11867.5 11452.9 12216.7      NA         NA
             Energy (kJ)      12319.6 11897.6 12711.7      NA         NA
             Protein (g)        138.0   130.7   147.4     100        100
                 Fat (g)        103.0    95.4   113.8      NA         NA
        Carbohydrate (g)        334.3   312.3   362.6      NA         NA
              Sugars (g)        136.7   121.2   156.3      NA         NA
              Starch (g)        194.4   174.2   219.2      NA         NA
               Fibre (g)         61.0    52.9    74.1      NA        100
             Alcohol (g)          3.6     0.0    10.6      NA         NA
       Saturated fat (g)         28.6    25.9    31.5      NA         NA
 Monounsaturated fat (g)         38.3    33.2    43.4      NA         NA
 Polyunsaturated fat (g)         28.9    26.8    31.8      NA         NA
       Linoleic acid (g)         27.0    25.0    29.7      NA        100
Alpha linolenic acid (g)          1.6     1.3     1.9      NA        100
  LC n3 fatty acids (mg)        197.0    71.0   507.1      NA         54
  Vitamin A equivs (mcg)       1700.1  1399.0  1990.9     100        100
           Retinol (mcg)        532.2   477.4   645.3      NA         NA
      Provitamin A (mcg)       6979.4  5166.7  8794.4      NA         NA
            Thiamin (mg)          2.6     2.3     3.0     100        100
         Riboflavin (mg)          3.1     2.7     3.5     100        100
             Niacin (mg)         71.7    65.7    78.0     100        100
      Folate (mcg total)        772.6   631.7   943.1      NA         NA
     Folate equivs (mcg)       1059.2   903.3  1254.4     100        100
          Vitamin C (mg)        198.6   138.4   257.8     100        100
         Vitamin D (mcg)          4.3     3.5     7.6      NA         18
          Vitamin E (mg)         18.9    15.2    23.3      NA        100
            Calcium (mg)       1234.1  1088.8  1330.1     100        100
               Iron (mg)         20.1    17.7    22.6     100        100
            Iodine (mcg)        217.5   188.9   260.3     100        100
          Magnesium (mg)        648.9   594.2   697.8     100        100
         Phosphorus (mg)       2421.5  2283.8  2559.9     100        100
          Potassium (mg)       5869.2  5482.1  6254.0      NA        100
             Sodium (mg)       1864.6  1610.3  2497.9      NA        100
               Zinc (mg)         19.5    16.7    30.7     100        100
        Cholesterol (mg)        260.8   153.8   494.2      NA         NA
          Selenium (mcg)        116.9    89.0   175.3     100        100
         Vitamin B6 (mg)          2.7     2.4     3.6     100        100
       Vitamin B12 (mcg)          6.3     5.1     9.3     100        100

         Percent energy from fat 31.6
     Percent energy from protein 19.4
Percent energy from carbohydrate 48.1
     Percent energy from alcohol  0.9
```

Men19to30.avtot4:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       28
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12054.4 11710.3 12622.3      NA         NA
             Energy (kJ)      12483.3 12107.4 13040.4      NA         NA
             Protein (g)        137.5   130.8   146.5     100        100
                 Fat (g)         89.3    82.6    97.3      NA         NA
        Carbohydrate (g)        377.2   356.4   401.0      NA         NA
              Sugars (g)        119.9   105.0   136.1      NA         NA
              Starch (g)        255.0   234.1   282.5      NA         NA
               Fibre (g)         57.1    49.8    67.7      NA        100
             Alcohol (g)          2.6     0.0     8.0      NA         NA
       Saturated fat (g)         26.3    23.1    28.9      NA         NA
 Monounsaturated fat (g)         31.3    27.6    36.5      NA         NA
 Polyunsaturated fat (g)         25.1    22.2    27.0      NA         NA
       Linoleic acid (g)         23.3    20.9    25.1      NA        100
Alpha linolenic acid (g)          1.5     1.3     1.7      NA         97
  LC n3 fatty acids (mg)        189.4    75.5   588.1      NA         43
  Vitamin A equivs (mcg)       1698.3  1387.5  2039.4     100        100
           Retinol (mcg)        524.6   466.3   599.5      NA         NA
      Provitamin A (mcg)       7006.4  4977.4  9018.2      NA         NA
            Thiamin (mg)          2.9     2.5     3.2     100        100
         Riboflavin (mg)          3.3     2.9     3.8     100        100
             Niacin (mg)         73.9    67.0    81.9     100        100
      Folate (mcg total)        715.8   632.6   836.1      NA         NA
     Folate equivs (mcg)       1147.2   998.2  1300.8     100        100
          Vitamin C (mg)        170.5   117.6   244.8     100        100
         Vitamin D (mcg)          4.2     3.4     7.1      NA         13
          Vitamin E (mg)         16.2    12.6    19.6      NA        100
            Calcium (mg)       1276.1  1122.5  1399.5     100        100
               Iron (mg)         20.5    18.5    23.1     100        100
            Iodine (mcg)        253.6   212.8   289.2     100        100
          Magnesium (mg)        617.6   569.7   669.2     100        100
         Phosphorus (mg)       2437.6  2303.4  2603.5     100        100
          Potassium (mg)       5178.4  4829.8  5503.8      NA        100
             Sodium (mg)       2149.3  1769.9  2914.2      NA        100
               Zinc (mg)         19.0    17.2    29.8     100        100
        Cholesterol (mg)        253.2   175.7   376.0      NA         NA
          Selenium (mcg)        111.9    91.1   156.8     100        100
         Vitamin B6 (mg)          2.5     2.1     3.5     100        100
       Vitamin B12 (mcg)          6.3     5.2     9.2     100        100

         Percent energy from fat 27.1
     Percent energy from protein 19.2
Percent energy from carbohydrate 53.1
     Percent energy from alcohol  0.6
```

Men19to30.avtot5:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       18
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          3
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12106.9 11598.1 12915.9      NA         NA
             Energy (kJ)      12539.7 12057.1 13317.3      NA         NA
             Protein (g)        137.3   128.9   145.5     100        100
                 Fat (g)         94.3    87.9   103.1      NA         NA
        Carbohydrate (g)        365.2   343.1   397.8      NA         NA
              Sugars (g)        152.9   137.3   178.2      NA         NA
              Starch (g)        208.1   186.5   230.6      NA         NA
               Fibre (g)         57.2    50.3    68.4      NA        100
             Alcohol (g)          6.0     1.1    13.1      NA         NA
       Saturated fat (g)         30.2    27.7    32.9      NA         NA
 Monounsaturated fat (g)         32.3    28.8    36.3      NA         NA
 Polyunsaturated fat (g)         24.8    22.7    27.4      NA         NA
       Linoleic acid (g)         23.0    20.9    25.3      NA        100
Alpha linolenic acid (g)          1.5     1.3     1.8      NA        100
  LC n3 fatty acids (mg)        220.3    83.1   756.4      NA         65
  Vitamin A equivs (mcg)       1792.9  1475.7  2098.9     100        100
           Retinol (mcg)        593.2   524.7   664.5      NA         NA
      Provitamin A (mcg)       7176.3  5326.1  8868.8      NA         NA
            Thiamin (mg)          2.7     2.4     3.0     100        100
         Riboflavin (mg)          3.4     3.0     3.8     100        100
             Niacin (mg)         71.9    65.1    79.4     100        100
      Folate (mcg total)        748.5   645.6   860.0      NA         NA
     Folate equivs (mcg)       1096.1   975.2  1232.4     100        100
          Vitamin C (mg)        220.1   172.0   272.1     100        100
         Vitamin D (mcg)          4.9     4.0     7.0      NA         31
          Vitamin E (mg)         16.1    12.6    20.0      NA        100
            Calcium (mg)       1380.6  1269.7  1503.0     100        100
               Iron (mg)         19.7    18.1    22.4     100        100
            Iodine (mcg)        260.8   222.3   306.5     100        100
          Magnesium (mg)        614.6   580.0   654.9     100        100
         Phosphorus (mg)       2451.2  2324.0  2636.1     100        100
          Potassium (mg)       5572.1  5240.2  5990.3      NA        100
             Sodium (mg)       2132.5  1830.3  3158.3      NA        100
               Zinc (mg)         19.0    17.2    29.4     100        100
        Cholesterol (mg)        264.8   195.1   461.8      NA         NA
          Selenium (mcg)        106.3    80.9   155.2     100        100
         Vitamin B6 (mg)          2.6     2.1     3.3     100        100
       Vitamin B12 (mcg)          7.1     6.0    11.6     100        100

         Percent energy from fat 28.4
     Percent energy from protein 19.0
Percent energy from carbohydrate 51.1
     Percent energy from alcohol  1.4
```

Men19to30.avtot6:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           28
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           10
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11885.7 11374.5 12741.5      NA         NA
             Energy (kJ)      12349.5 11850.6 13199.7      NA         NA
             Protein (g)        138.5   131.7   145.2     100        100
                 Fat (g)         98.4    91.2   108.5      NA         NA
        Carbohydrate (g)        346.9   315.5   376.5      NA         NA
              Sugars (g)        153.7   138.0   172.3      NA         NA
              Starch (g)        189.9   168.3   212.9      NA         NA
               Fibre (g)         60.5    54.1    71.6      NA        100
             Alcohol (g)          2.8     0.0     8.8      NA         NA
       Saturated fat (g)         33.4    30.2    36.3      NA         NA
 Monounsaturated fat (g)         33.1    29.8    38.7      NA         NA
 Polyunsaturated fat (g)         24.7    22.8    28.0      NA         NA
       Linoleic acid (g)         22.8    21.0    25.9      NA        100
Alpha linolenic acid (g)          1.6     1.4     2.0      NA        100
  LC n3 fatty acids (mg)        219.8    97.0   596.8      NA         57
  Vitamin A equivs (mcg)       2625.8  2182.9  3129.7     100        100
           Retinol (mcg)        616.4   563.7   717.0      NA         NA
      Provitamin A (mcg)      11980.3  9371.3 14789.1      NA         NA
            Thiamin (mg)          2.7     2.4     3.0     100        100
          Riboflavin (mg)         3.4     2.9     3.7     100        100
             Niacin (mg)         69.9    63.9    75.0     100        100
      Folate (mcg total)        765.8   694.4   869.6      NA         NA
     Folate equivs (mcg)       1092.6   969.8  1232.5     100        100
          Vitamin C (mg)        224.1   170.6   311.4     100        100
          Vitamin D (mcg)         5.5     4.4     6.9      NA         81
          Vitamin E (mg)         17.1    14.1    20.4      NA        100
            Calcium (mg)       1537.7  1376.4  1768.5     100        100
               Iron (mg)         19.6    17.3    21.7     100        100
            Iodine (mcg)        230.0   189.4   269.4     100        100
          Magnesium (mg)        621.5   552.8   702.4     100        100
          Phosphorus (mg)       2496.4  2378.4  2723.1     100        100
          Potassium (mg)        5841.0  5500.3  6316.1      NA        100
             Sodium (mg)        2213.0  1858.6  3073.0      NA        100
               Zinc (mg)         20.0    17.7    31.1     100        100
        Cholesterol (mg)        280.6   188.7   470.3      NA         NA
          Selenium (mcg)        108.9    90.0   150.4     100        100
          Vitamin B6 (mg)         2.7     2.2     3.5     100        100
        Vitamin B12 (mcg)         6.8     5.9     9.2     100        100

         Percent energy from fat 30.1
     Percent energy from protein 19.5
Percent energy from carbohydrate 49.8
     Percent energy from alcohol  0.7
```

A15.2. Sample *7-day Total Diets* for Men 19-30 years higher energy level

Tallest (190cm) and highest activity (PAL 2)

Men19to30.hitot1:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           28
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             28
 [7,] TotalFruit           21
 [8,] WholegrainCereals    56
 [9,] RefinedCereals       35
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats              7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               21
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      15448.8 14883.8 16018.0      NA         NA
             Energy (kJ)      16038.5 15461.1 16641.6      NA         NA
             Protein (g)        161.5   153.9   170.7     100        100
                 Fat (g)        103.3    94.2   115.2      NA         NA
        Carbohydrate (g)        516.0   482.5   552.4      NA         NA
              Sugars (g)        179.8   155.6   197.3      NA         NA
              Starch (g)        331.0   307.4   354.1      NA         NA
               Fibre (g)         80.3    70.4    99.5      NA        100
             Alcohol (g)          7.6     2.2    16.1      NA         NA
       Saturated fat (g)         31.9    28.3    35.8      NA         NA
 Monounsaturated fat (g)         35.8    31.8    41.2      NA         NA
 Polyunsaturated fat (g)         27.7    25.6    31.1      NA         NA
       Linoleic acid (g)         25.6    23.8    29.0      NA        100
Alpha linolenic acid (g)          1.7     1.5     2.0      NA        100
  LC n3 fatty acids (mg)        211.7    79.3   776.6      NA         63
  Vitamin A equivs (mcg)       2740.0  2341.3  3300.5     100        100
           Retinol (mcg)        569.5   513.4   651.6      NA         NA
      Provitamin A (mcg)      12994.6 10807.6 16534.2      NA         NA
            Thiamin (mg)          3.6     3.2     4.0     100        100
         Riboflavin (mg)          3.9     3.2     4.6     100        100
             Niacin (mg)         89.3    83.5    95.1     100        100
      Folate (mcg total)        906.0   797.3  1029.0      NA         NA
     Folate equivs (mcg)       1419.7  1255.2  1632.1     100        100
          Vitamin C (mg)        296.0   241.8   356.3     100        100
         Vitamin D (mcg)          4.5     3.4     5.9      NA         24
          Vitamin E (mg)         19.0    15.6    22.4      NA        100
            Calcium (mg)       1488.6  1368.7  1636.3     100        100
               Iron (mg)         26.3    23.6    28.7     100        100
            Iodine (mcg)        289.0   235.1   341.1     100        100
          Magnesium (mg)        783.2   720.1   852.4     100        100
         Phosphorus (mg)       2939.2  2788.3  3081.0     100        100
          Potassium (mg)       7337.1  6964.2  7823.6      NA        100
             Sodium (mg)       2799.3  2373.8  3263.2      NA        100
               Zinc (mg)         22.9    21.0    43.7     100        100
        Cholesterol (mg)        273.1   194.2   396.7      NA         NA
          Selenium (mcg)        129.6   106.6   164.7     100        100
         Vitamin B6 (mg)          3.3     2.8     4.2     100        100
       Vitamin B12 (mcg)          6.9     5.5    11.2     100        100

         Percent energy from fat 24.5
     Percent energy from protein 17.6
Percent energy from carbohydrate 56.6
     Percent energy from alcohol  1.4
```

Men19to30.hitot2:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       21
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            21
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       42
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          14
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      15210.2 14800.3 15583.5      NA         NA
             Energy (kJ)      15731.0 15314.3 16130.0      NA         NA
             Protein (g)        171.1   162.5   180.9     100        100
                 Fat (g)        133.3   122.5   140.5      NA         NA
        Carbohydrate (g)        435.4   412.3   459.5      NA         NA
              Sugars (g)        168.7   154.7   192.2      NA         NA
              Starch (g)        263.7   239.5   286.4      NA         NA
               Fibre (g)         67.9    60.9    83.8      NA        100
             Alcohol (g)          2.6     0.0     8.1      NA         NA
       Saturated fat (g)         40.5    36.8    43.1      NA         NA
 Monounsaturated fat (g)         50.2    44.2    54.8      NA         NA
 Polyunsaturated fat (g)         33.4    30.8    36.0      NA         NA
       Linoleic acid (g)         31.4    28.8    33.7      NA        100
Alpha linolenic acid (g)          1.6     1.4     1.9      NA        100
  LC n3 fatty acids (mg)        216.8    64.8   656.2      NA         53
  Vitamin A equivs (mcg)       2913.4  2253.3  3309.6     100        100
           Retinol (mcg)        765.3   671.9   849.5      NA         NA
      Provitamin A (mcg)      12849.6  9100.4 15117.0      NA         NA
            Thiamin (mg)          3.0     2.7     3.4     100        100
         Riboflavin (mg)          4.3     3.9     4.8     100        100
             Niacin (mg)         87.4    82.3    92.6     100        100
      Folate (mcg total)        905.2   813.3  1001.6      NA         NA
     Folate equivs (mcg)       1295.4  1113.4  1444.2     100        100
          Vitamin C (mg)        255.6   202.4   323.7     100        100
         Vitamin D (mcg)          6.8     5.9     9.5      NA        100
          Vitamin E (mg)         21.8    17.7    25.7      NA        100
            Calcium (mg)       1804.8  1630.7  1929.0     100        100
               Iron (mg)         22.1    19.3    24.9     100        100
            Iodine (mcg)        357.9   321.5   414.3     100        100
          Magnesium (mg)        763.8   712.2   809.0     100        100
         Phosphorus (mg)       3084.2  2935.0  3255.4     100        100
          Potassium (mg)       6933.1  6585.8  7400.6      NA        100
             Sodium (mg)       2277.9  1956.0  3101.5      NA        100
               Zinc (mg)         23.0    20.9    34.7     100        100
        Cholesterol (mg)        315.4   236.6   470.0      NA         NA
          Selenium (mcg)        141.3   100.6   200.4     100        100
         Vitamin B6 (mg)          3.6     3.0     4.4     100        100
       Vitamin B12 (mcg)          9.7     8.5    14.7     100        100

         Percent energy from fat 32.0
     Percent energy from protein 18.9
Percent energy from carbohydrate 48.6
     Percent energy from alcohol  0.5
```

Men19to30.hitot3:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           35
 [2,] GreenBrassicas       21
 [3,] OrangeVeg            14
 [4,] Legumes              21
 [5,] NutsSeeds            21
 [6,] OtherVeg             28
 [7,] TotalFruit           28
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       17
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      15173.4 14663.4 15602.3      NA         NA
             Energy (kJ)      15859.7 15371.4 16296.4      NA         NA
             Protein (g)        172.4   165.4   184.6     100        100
                 Fat (g)        126.4   115.8   137.6      NA         NA
        Carbohydrate (g)        441.9   417.5   468.7      NA         NA
              Sugars (g)        179.7   161.6   197.9      NA         NA
              Starch (g)        257.7   238.2   290.0      NA         NA
               Fibre (g)         94.0    80.6   112.5      NA        100
             Alcohol (g)          5.1     0.0    17.0      NA         NA
       Saturated fat (g)         33.1    30.1    36.4      NA         NA
 Monounsaturated fat (g)         48.8    43.7    54.8      NA         NA
 Polyunsaturated fat (g)         35.8    32.8    38.8      NA         NA
       Linoleic acid (g)         33.7    31.1    36.5      NA        100
Alpha linolenic acid (g)          1.8     1.5     2.2      NA        100
  LC n3 fatty acids (mg)        179.2    69.4   502.7      NA         47
  Vitamin A equivs (mcg)       2774.8  2326.0  3311.7     100        100
           Retinol (mcg)        547.8   490.2   626.8      NA         NA
      Provitamin A (mcg)      13331.3 10794.7 16509.7      NA         NA
            Thiamin (mg)          3.7     3.3     4.1     100        100
          Riboflavin (mg)         3.8     3.5     4.4     100        100
             Niacin (mg)         91.4    84.2    97.1     100        100
      Folate (mcg total)       1083.8   954.7  1217.8      NA         NA
     Folate equivs (mcg)       1418.1  1269.8  1586.6     100        100
          Vitamin C (mg)        348.6   277.2   428.6     100        100
          Vitamin D (mcg)         4.2     3.4     6.4      NA          9
          Vitamin E (mg)         24.2    20.3    28.1      NA        100
            Calcium (mg)       1482.2  1369.2  1617.9     100        100
               Iron (mg)         28.2    26.3    31.5     100        100
            Iodine (mcg)        241.1   207.9   296.9     100        100
          Magnesium (mg)        908.0   842.4   976.8     100        100
          Phosphorus (mg)      3118.8  2949.7  3251.6     100        100
          Potassium (mg)       8619.6  8323.6  9035.3      NA        100
             Sodium (mg)       2270.5  1843.8  3139.8      NA        100
               Zinc (mg)         25.2    21.8    44.2     100        100
        Cholesterol (mg)        263.3   144.2   389.6      NA         NA
          Selenium (mcg)        144.0   108.7   206.4     100        100
          Vitamin B6 (mg)         4.0     3.4     5.0     100        100
        Vitamin B12 (mcg)         6.4     5.3    10.8     100        100

         Percent energy from fat 30.2
     Percent energy from protein 18.9
Percent energy from carbohydrate 50.0
     Percent energy from alcohol  1.0
```

Men19to30.hitot4:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           35
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             28
 [7,] TotalFruit           14
 [8,] WholegrainCereals    70
 [9,] RefinedCereals       42
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      15273.1 14750.8 15831.6      NA         NA
             Energy (kJ)      15846.7 15328.1 16388.3      NA         NA
             Protein (g)        163.9   155.2   170.7     100        100
                 Fat (g)         96.5    87.5   106.4      NA         NA
        Carbohydrate (g)        524.6   495.9   550.0      NA         NA
              Sugars (g)        135.5   122.9   154.4      NA         NA
              Starch (g)        386.7   362.8   414.2      NA         NA
               Fibre (g)         79.8    68.7    99.0      NA        100
             Alcohol (g)          2.8     0.0     9.9      NA         NA
       Saturated fat (g)         27.8    24.6    30.8      NA         NA
 Monounsaturated fat (g)         33.6    28.7    38.8      NA         NA
 Polyunsaturated fat (g)         27.5    25.6    30.2      NA         NA
       Linoleic acid (g)         25.6    23.8    28.0      NA        100
Alpha linolenic acid (g)          1.7     1.5     2.0      NA        100
  LC n3 fatty acids (mg)        196.7    75.5   747.7      NA         53
  Vitamin A equivs (mcg)       1790.7  1418.5  2214.5     100        100
           Retinol (mcg)        533.2   460.0   625.1      NA         NA
      Provitamin A (mcg)       7513.2  5470.3  9874.2      NA         NA
            Thiamin (mg)          3.9     3.6     4.4     100        100
         Riboflavin (mg)          3.9     3.5     4.6     100        100
             Niacin (mg)         92.8    88.0    98.5     100        100
      Folate (mcg total)        892.4   801.7  1031.0      NA         NA
     Folate equivs (mcg)       1529.1  1324.9  1682.0     100        100
          Vitamin C (mg)        232.5   175.1   284.2     100        100
         Vitamin D (mcg)          4.3     3.4     6.6      NA         14
          Vitamin E (mg)         18.1    14.5    21.6      NA        100
            Calcium (mg)       1472.3  1318.1  1621.3     100        100
               Iron (mg)         27.2    24.9    30.0     100        100
            Iodine (mcg)        312.8   280.3   370.9     100        100
          Magnesium (mg)        805.0   756.2   850.0     100        100
         Phosphorus (mg)       3026.4  2879.6  3164.7     100        100
          Potassium (mg)       7096.0  6784.3  7476.2      NA        100
             Sodium (mg)       2772.2  2290.1  3765.8      NA        100
               Zinc (mg)         23.2    21.1    34.6     100        100
        Cholesterol (mg)        252.3   176.1   428.3      NA         NA
          Selenium (mg)         133.1   111.6   183.0     100        100
         Vitamin B6 (mg)          3.2     2.7     4.1     100        100
       Vitamin B12 (mg)           6.8     5.4    12.1     100        100

         Percent energy from fat 23.2
     Percent energy from protein 18.1
Percent energy from carbohydrate 58.2
     Percent energy from alcohol  0.5
```

Men19to30.hitot5:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           28
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           28
 [8,] WholegrainCereals    56
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          7
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               21
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      15202.4 14768.8 15689.2      NA         NA
             Energy (kJ)      15765.8 15353.5 16236.6      NA         NA
             Protein (g)        161.1   152.5   170.3     100        100
                 Fat (g)        108.7   100.6   118.9      NA         NA
        Carbohydrate (g)        490.4   464.5   523.2      NA         NA
              Sugars (g)        205.9   185.4   234.2      NA         NA
              Starch (g)        278.7   257.5   303.5      NA         NA
               Fibre (g)         76.8    67.9   103.5      NA        100
             Alcohol (g)          8.1     1.4    19.3      NA         NA
       Saturated fat (g)         36.9    33.1    41.7      NA         NA
 Monounsaturated fat (g)         36.2    31.7    40.9      NA         NA
 Polyunsaturated fat (g)         27.1    24.6    30.4      NA         NA
       Linoleic acid (g)         25.0    22.7    28.3      NA        100
Alpha linolenic acid (g)          1.7     1.5     2.1      NA        100
  LC n3 fatty acids (mg)        206.3    79.5   526.0      NA         55
  Vitamin A equivs (mcg)       2740.9  2180.9  3163.4     100        100
           Retinol (mcg)        699.0   635.4   789.9      NA         NA
      Provitamin A (mcg)      12215.7  9138.5 14797.9      NA         NA
            Thiamin (mg)          3.4     3.1     3.7     100        100
          Riboflavin (mg)         4.4     4.0     4.9     100        100
             Niacin (mg)         87.9    81.5    94.3     100        100
      Folate (mcg total)        924.5   813.4  1017.0      NA         NA
     Folate equivs (mcg)       1365.0  1243.9  1512.7     100        100
          Vitamin C (mg)        286.5   223.4   353.6     100        100
          Vitamin D (mcg)         5.8     4.9     9.2      NA         97
          Vitamin E (mg)         18.4    14.9    21.7      NA        100
            Calcium (mg)       1705.6  1602.8  1808.6     100        100
               Iron (mg)         24.7    23.2    27.6     100        100
            Iodine (mcg)        324.0   288.7   364.4     100        100
          Magnesium (mg)        781.7   736.6   831.0     100        100
          Phosphorus (mg)      3026.0  2887.8  3167.0     100        100
          Potassium (mg)       7540.2  7187.0  7955.0      NA        100
             Sodium (mg)       2688.7  2190.8  3592.3      NA        100
               Zinc (mg)         22.5    20.4    32.9     100        100
        Cholesterol (mg)        313.9   219.0   497.6      NA         NA
          Selenium (mcg)        124.0   100.1   168.4     100        100
          Vitamin B6 (mg)         3.4     3.0     4.1     100        100
        Vitamin B12 (mcg)         8.0     6.8    10.8     100        100

         Percent energy from fat 26.1
     Percent energy from protein 17.8
Percent energy from carbohydrate 54.6
     Percent energy from alcohol  1.5
```

Men19to30.hitot6:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           21
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            14
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       42
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          14
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               17.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      15304.3 14849.4 15897.8      NA         NA
             Energy (kJ)      15777.6 15316.2 16408.9      NA         NA
             Protein (g)        167.4   160.8   176.7     100        100
                 Fat (g)        125.1   117.8   132.9      NA         NA
        Carbohydrate (g)        455.9   428.0   481.0      NA         NA
              Sugars (g)        172.8   156.8   191.5      NA         NA
              Starch (g)        278.9   249.8   305.1      NA         NA
               Fibre (g)         63.7    55.4    75.6      NA        100
             Alcohol (g)          6.7     0.0    18.8      NA         NA
       Saturated fat (g)         41.9    38.5    44.5      NA         NA
 Monounsaturated fat (g)         44.5    40.4    49.5      NA         NA
 Polyunsaturated fat (g)         29.8    26.3    32.4      NA         NA
       Linoleic acid (g)         27.9    24.5    30.4      NA        100
Alpha linolenic acid (g)          1.6     1.4     2.0      NA        100
  LC n3 fatty acids (mg)        203.8    62.4   515.5      NA         57
  Vitamin A equivs (mcg)       2870.7  2421.1  3281.5     100        100
           Retinol (mcg)        791.0   712.9   858.3      NA         NA
      Provitamin A (mcg)      12425.5 10110.9 14705.4      NA         NA
            Thiamin (mg)          2.8     2.6     3.2     100        100
         Riboflavin (mg)          4.3     3.9     4.9     100        100
             Niacin (mg)         86.1    80.9    93.0     100        100
      Folate (mcg total)        813.6   730.7   911.4      NA         NA
     Folate equivs (mcg)       1203.5  1089.1  1303.5     100        100
          Vitamin C (mg)        238.7   173.2   283.0     100        100
         Vitamin D (mcg)          6.8     5.8     9.3      NA        100
          Vitamin E (mg)         19.1    14.6    23.2      NA        100
            Calcium (mg)       1784.3  1654.8  1893.8     100        100
               Iron (mg)         21.1    18.9    23.3     100        100
            Iodine (mcg)        363.7   308.3   403.0     100        100
          Magnesium (mg)        713.5   668.4   763.4     100        100
         Phosphorus (mg)       3024.7  2872.9  3153.9     100        100
          Potassium (mg)       6855.2  6541.8  7213.9      NA        100
             Sodium (mg)       2511.8  2150.3  3026.1      NA        100
               Zinc (mg)         22.5    20.1    32.5     100        100
        Cholesterol (mg)        324.0   239.2   467.2      NA         NA
          Selenium (mg)         134.5   102.2   191.5     100        100
         Vitamin B6 (mg)          3.3     2.9     4.0     100        100
       Vitamin B12 (mg)           9.9     8.3    13.1     100        100

         Percent energy from fat 30.0
     Percent energy from protein 18.4
Percent energy from carbohydrate 50.3
     Percent energy from alcohol  1.3
```

A15.3 Sample *7-day Total Diets* for Men 31-50 years mid energy level

Average height (175cm) and light-moderate activity (PAL 1.7)

Men31to50.avtot1:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               17.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11353.0 11068.3 11834.3      NA         NA
             Energy (kJ)      11733.7 11438.7 12233.8      NA         NA
             Protein (g)        131.0   122.1   138.4     100        100
                 Fat (g)         95.3    89.3   106.9      NA         NA
        Carbohydrate (g)        319.1   293.1   342.4      NA         NA
              Sugars (g)        130.8   109.4   151.2      NA         NA
              Starch (g)        183.2   166.9   203.6      NA         NA
               Fibre (g)         50.7    42.5    65.1      NA        100
             Alcohol (g)          8.8     3.4    17.7      NA         NA
       Saturated fat (g)         30.1    27.5    33.5      NA         NA
 Monounsaturated fat (g)         32.6    30.1    36.4      NA         NA
 Polyunsaturated fat (g)         25.7    23.7    29.4      NA         NA
       Linoleic acid (g)         23.8    21.7    26.8      NA        100
Alpha linolenic acid (g)          1.5     1.4     2.0      NA        100
  LC n3 fatty acids (mg)        311.4    87.5   941.8      NA         81
  Vitamin A equivs (mcg)       1742.4  1370.1  2230.2     100        100
           Retinol (mcg)        579.2   503.9   672.6      NA         NA
      Provitamin A (mcg)       6939.7  4851.2  9400.7      NA         NA
            Thiamin (mg)          2.4     2.1     2.6     100        100
         Riboflavin (mg)          3.0     2.7     3.5     100        100
             Niacin (mg)         67.8    62.2    73.8     100        100
      Folate (mcg total)        662.5   546.5   752.8      NA         NA
     Folate equivs (mcg)        989.2   775.8  1107.5     100        100
          Vitamin C (mg)        176.8   139.8   256.2     100        100
         Vitamin D (mcg)          4.9     3.6     7.7      NA         47
          Vitamin E (mg)         16.9    13.5    20.0      NA        100
            Calcium (mg)       1300.9  1196.6  1448.4     100        100
               Iron (mg)         18.1    16.3    21.6     100        100
            Iodine (mcg)        246.3   212.2   288.1     100        100
          Magnesium (mg)        568.9   529.7   622.8     100        100
         Phosphorus (mg)       2318.8  2203.8  2470.2     100        100
          Potassium (mg)       5147.8  4898.7  5650.7      NA        100
             Sodium (mg)       2180.3  1829.1  2921.9      NA        100
               Zinc (mg)         17.9    16.1    28.3     100        100
        Cholesterol (mg)        287.1   192.1   489.9      NA         NA
          Selenium (mcg)        106.2    85.0   166.6     100        100
         Vitamin B6 (mg)          2.3     1.8     3.2     100        100
       Vitamin B12 (mcg)          6.7     5.2    11.3     100        100

         Percent energy from fat 30.7
     Percent energy from protein 19.4
Percent energy from carbohydrate 47.7
     Percent energy from alcohol  2.2
```

Men31to50.avtot2:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            14
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          7
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11398.4 10925.3 11800.8      NA         NA
             Energy (kJ)      11780.6 11309.1 12190.2      NA         NA
             Protein (g)        137.5   128.3   145.8     100        100
                 Fat (g)        108.5    99.4   115.8      NA         NA
        Carbohydrate (g)        295.2   270.4   315.2      NA         NA
              Sugars (g)        125.8   113.4   141.5      NA         NA
              Starch (g)        166.5   144.2   182.3      NA         NA
               Fibre (g)         49.5    44.3    58.9      NA        100
             Alcohol (g)          3.6     0.0    10.2      NA         NA
       Saturated fat (g)         33.1    29.8    36.2      NA         NA
 Monounsaturated fat (g)         38.7    34.6    42.3      NA         NA
 Polyunsaturated fat (g)         29.3    26.4    32.4      NA         NA
       Linoleic acid (g)         27.4    24.7    30.5      NA        100
Alpha linolenic acid (g)          1.5     1.2     2.0      NA         91
  LC n3 fatty acids (mg)        298.4    60.2   770.0      NA         73
  Vitamin A equivs (mcg)       2584.8  2123.7  3065.5     100        100
           Retinol (mcg)        658.1   567.5   729.1      NA         NA
      Provitamin A (mcg)      11513.6  8991.8 14840.4      NA         NA
            Thiamin (mg)          2.3     2.0     2.5     100        100
          Riboflavin (mg)         3.3     2.9     3.8     100        100
              Niacin (mg)        68.6    62.3    74.2     100        100
      Folate (mcg total)        705.9   595.7   811.8      NA         NA
     Folate equivs (mcg)        977.1   836.4  1087.3     100        100
          Vitamin C (mg)        171.4   121.2   220.7     100        100
          Vitamin D (mcg)         5.9     4.6     9.2      NA         87
           Vitamin E (mg)        18.5    14.5    22.0      NA        100
             Calcium (mg)       1473.6  1355.2  1608.6     100        100
                Iron (mg)        17.1    15.2    19.4     100        100
             Iodine (mcg)        276.7   238.2   322.0     100        100
           Magnesium (mg)        587.4   548.1   632.3     100        100
          Phosphorus (mg)       2441.5  2309.4  2588.9     100        100
           Potassium (mg)       5166.0  4869.6  5625.8      NA        100
              Sodium (mg)       1862.6  1585.2  2749.6      NA        100
                Zinc (mg)        18.5    16.7    29.4     100        100
        Cholesterol (mg)        302.1   170.6   448.8      NA         NA
           Selenium (mcg)       120.7    80.3   200.3     100        100
          Vitamin B6 (mg)         2.6     2.1     3.3     100        100
       Vitamin B12 (mcg)          8.0     6.7    10.7     100        100

         Percent energy from fat 34.7
     Percent energy from protein 20.2
Percent energy from carbohydrate 44.2
     Percent energy from alcohol  0.9
```

Men31to50.avtot3:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            14
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11329.6 10862.1 11805.3      NA         NA
             Energy (kJ)      11740.3 11285.3 12213.5      NA         NA
             Protein (g)        134.7   125.5   145.7     100        100
                 Fat (g)        104.9    95.2   112.6      NA         NA
        Carbohydrate (g)        298.4   271.4   322.3      NA         NA
              Sugars (g)        131.4   116.2   147.0      NA         NA
              Starch (g)        162.8   145.3   182.6      NA         NA
               Fibre (g)         52.8    45.6    62.7      NA        100
             Alcohol (g)          5.5     1.1    11.3      NA         NA
       Saturated fat (g)         29.5    25.5    32.9      NA         NA
 Monounsaturated fat (g)         37.9    33.8    41.7      NA         NA
 Polyunsaturated fat (g)         30.3    26.0    35.5      NA         NA
       Linoleic acid (g)         28.3    24.5    32.7      NA        100
Alpha linolenic acid (g)          1.6     1.3     2.3      NA        100
  LC n3 fatty acids (mg)        285.8    87.0   847.5      NA         76
  Vitamin A equivs (mcg)       1666.4  1284.0  2054.2     100        100
           Retinol (mcg)        554.5   469.2   670.4      NA         NA
      Provitamin A (mcg)       6637.3  4520.0  8519.2      NA         NA
            Thiamin (mg)          2.4     2.1     2.8     100        100
          Riboflavin (mg)         2.9     2.4     3.2     100        100
             Niacin (mg)         67.6    62.4    74.2     100        100
      Folate (mcg total)        736.9   639.6   835.4      NA         NA
     Folate equivs (mcg)       1012.6   886.4  1151.1     100        100
          Vitamin C (mg)        157.4   107.7   213.0     100        100
          Vitamin D (mcg)         4.6     3.7     7.7      NA         28
          Vitamin E (mg)         19.4    16.0    23.4      NA        100
            Calcium (mg)       1291.8  1108.9  1407.1     100        100
               Iron (mg)         18.6    17.2    21.4     100        100
            Iodine (mcg)        229.2   193.2   275.4     100        100
          Magnesium (mg)        612.2   565.3   668.1     100        100
          Phosphorus (mg)       2337.0  2112.7  2517.8     100        100
          Potassium (mg)        4976.9  4659.5  5293.4      NA        100
             Sodium (mg)        1854.0  1615.9  2731.3      NA        100
               Zinc (mg)         19.1    16.7    38.5     100        100
        Cholesterol (mg)        278.0   175.0   451.1      NA         NA
          Selenium (mcg)        117.1    82.2   195.0     100        100
          Vitamin B6 (mg)         2.5     2.0     3.1     100        100
        Vitamin B12 (mcg)         6.4     5.1    10.5     100        100

         Percent energy from fat 33.7
     Percent energy from protein 19.9
Percent energy from carbohydrate 45.0
     Percent energy from alcohol  1.4
```

Men31to50.avtot4:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       18
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11283.2 10924.2 11748.8      NA         NA
             Energy (kJ)      11685.6 11321.7 12187.0      NA         NA
             Protein (g)        130.1   122.2   136.7     100        100
                 Fat (g)         91.5    83.2   102.4      NA         NA
        Carbohydrate (g)        326.3   300.6   348.6      NA         NA
              Sugars (g)        137.5   119.6   160.7      NA         NA
              Starch (g)        183.7   156.6   209.4      NA         NA
               Fibre (g)         52.7    46.4    60.5      NA        100
             Alcohol (g)          7.5     2.2    14.4      NA         NA
       Saturated fat (g)         28.5    25.1    32.3      NA         NA
 Monounsaturated fat (g)         31.1    27.4    34.9      NA         NA
 Polyunsaturated fat (g)         25.3    22.6    29.2      NA         NA
       Linoleic acid (g)         23.4    21.2    26.9      NA        100
Alpha linolenic acid (g)          1.5     1.3     2.1      NA         98
  LC n3 fatty acids (mg)        279.3    88.9   720.2      NA         74
  Vitamin A equivs (mcg)       1716.5  1371.2  2073.2     100        100
           Retinol (mcg)        560.5   496.9   666.1      NA         NA
      Provitamin A (mcg)       6904.2  4858.4  8902.5      NA         NA
            Thiamin (mg)          2.3     2.0     2.7     100        100
         Riboflavin (mg)          3.0     2.6     3.3     100        100
             Niacin (mg)         65.8    61.2    70.4     100        100
      Folate (mcg total)        694.0   575.0   831.0      NA         NA
     Folate equivs (mcg)        991.9   871.1  1111.9     100        100
          Vitamin C (mg)        209.3   166.5   270.2     100        100
         Vitamin D (mcg)          4.5     3.6     7.2      NA         24
          Vitamin E (mg)         16.3    13.3    20.2      NA        100
            Calcium (mg)       1282.1  1147.1  1403.9     100        100
               Iron (mg)         17.9    15.5    20.9     100        100
            Iodine (mcg)        238.7   206.6   307.2     100        100
          Magnesium (mg)        567.5   512.8   622.2     100        100
         Phosphorus (mg)       2278.4  2153.0  2448.2     100        100
          Potassium (mg)       5330.3  5035.1  5746.1      NA        100
             Sodium (mg)       2012.1  1604.0  3454.2      NA        100
               Zinc (mg)         18.1    15.5    28.8     100        100
        Cholesterol (mg)        273.3   167.6   438.7      NA         NA
          Selenium (mg)         104.7    76.4   171.9     100        100
         Vitamin B6 (mg)          2.4     1.9     3.1     100        100
       Vitamin B12 (mg)           6.6     5.3    11.3     100        100

         Percent energy from fat 29.6
     Percent energy from protein 19.3
Percent energy from carbohydrate 49.2
     Percent energy from alcohol  1.9
```

Men31to50.avtot5:

```
             AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          7
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11092.9 10721.5 11402.1      NA         NA
             Energy (kJ)      11416.7 11037.2 11725.4      NA         NA
             Protein (g)        130.2   120.9   140.4     100        100
                 Fat (g)         97.7    89.8   108.3      NA         NA
        Carbohydrate (g)        302.5   283.3   320.8      NA         NA
              Sugars (g)        131.8   119.6   156.0      NA         NA
              Starch (g)        166.4   149.5   181.0      NA         NA
               Fibre (g)         41.8    36.8    50.4      NA        100
             Alcohol (g)          7.2     1.1    16.5      NA         NA
       Saturated fat (g)         33.2    29.8    37.6      NA         NA
 Monounsaturated fat (g)         32.6    29.2    38.7      NA         NA
 Polyunsaturated fat (g)         24.9    22.8    28.5      NA         NA
       Linoleic acid (g)         23.1    21.1    26.1      NA        100
Alpha linolenic acid (g)          1.5     1.2     1.9      NA         97
  LC n3 fatty acids (mg)        267.9    79.3   723.3      NA         75
  Vitamin A equivs (mcg)       1774.2  1402.8  2146.4     100        100
           Retinol (mcg)        671.3   590.1   779.1      NA         NA
      Provitamin A (mcg)       6576.2  4208.6  8964.0      NA         NA
            Thiamin (mg)          2.0     1.7     2.2     100        100
         Riboflavin (mg)          3.2     2.9     3.6     100        100
             Niacin (mg)         63.9    57.8    70.9     100        100
      Folate (mcg total)        609.7   517.8   687.7      NA         NA
     Folate equivs (mcg)        884.9   783.7  1018.3     100        100
          Vitamin C (mg)        143.2   100.2   200.3     100        100
         Vitamin D (mcg)          6.0     4.7     8.0      NA         96
          Vitamin E (mg)         15.5    12.0    18.9      NA        100
            Calcium (mg)       1432.0  1281.7  1620.1     100        100
               Iron (mg)         15.4    13.3    18.5     100        100
            Iodine (mcg)        279.2   238.1   317.7     100        100
          Magnesium (mg)        515.2   471.8   554.8     100        100
         Phosphorus (mg)       2286.1  2115.3  2445.7     100        100
          Potassium (mg)       4667.4  4372.3  4993.3      NA        100
             Sodium (mg)       2040.5  1640.1  3380.5      NA        100
               Zinc (mg)         17.5    15.2    27.8     100        100
        Cholesterol (mg)        304.7   198.3   491.9      NA         NA
          Selenium (mcg)        104.4    76.2   172.7     100        100
         Vitamin B6 (mg)          2.2     1.8     2.9     100        100
       Vitamin B12 (mcg)          8.0     6.9    10.9     100        100

         Percent energy from fat 32.3
     Percent energy from protein 19.8
Percent energy from carbohydrate 46.1
     Percent energy from alcohol  1.9
```

Men31to50.avtot6:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           28
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11172.7 10803.2 11662.4      NA         NA
             Energy (kJ)      11624.7 11256.2 12116.5      NA         NA
             Protein (g)        129.7   120.6   137.8     100        100
                 Fat (g)         88.7    81.0    98.2      NA         NA
        Carbohydrate (g)        332.6   313.9   358.4      NA         NA
              Sugars (g)        149.2   135.8   162.2      NA         NA
              Starch (g)        179.1   165.0   199.3      NA         NA
               Fibre (g)         59.3    52.7    70.6      NA        100
             Alcohol (g)          3.7     0.0     8.3      NA         NA
       Saturated fat (g)         26.6    23.7    30.7      NA         NA
 Monounsaturated fat (g)         30.2    26.8    34.6      NA         NA
 Polyunsaturated fat (g)         25.3    23.7    28.2      NA         NA
       Linoleic acid (g)         23.4    21.8    26.1      NA        100
Alpha linolenic acid (g)          1.5     1.3     1.9      NA        100
  LC n3 fatty acids (mg)        270.3    92.2   711.6      NA         80
  Vitamin A equivs (mcg)       2535.7  2068.2  3067.1     100        100
           Retinol (mcg)        543.8   458.5   625.9      NA         NA
      Provitamin A (mcg)      11920.5  9275.6 15031.7      NA         NA
            Thiamin (mg)          2.5     2.2     2.8     100        100
         Riboflavin (mg)          3.1     2.7     3.5     100        100
             Niacin (mg)         67.3    61.3    73.0     100        100
      Folate (mcg total)        735.7   636.6   830.8      NA         NA
     Folate equivs (mcg)       1056.5   927.5  1164.9     100        100
          Vitamin C (mg)        212.6   157.4   276.8     100        100
         Vitamin D (mcg)          4.5     3.6     6.7      NA         25
          Vitamin E (mg)         17.6    13.9    21.0      NA        100
            Calcium (mg)       1324.8  1188.3  1451.5     100        100
               Iron (mg)         18.6    17.1    21.2     100        100
            Iodine (mcg)        242.8   205.0   282.1     100        100
          Magnesium (mg)        597.5   538.8   643.0     100        100
         Phosphorus (mg)       2322.9  2202.6  2465.9     100        100
          Potassium (mg)       5806.4  5489.8  6141.0      NA        100
             Sodium (mg)       1930.1  1689.4  2707.6      NA        100
               Zinc (mg)         18.2    16.0    28.9     100        100
        Cholesterol (mg)        264.9   164.1   396.6      NA         NA
          Selenium (mcg)        105.1    77.9   156.6     100        100
         Vitamin B6 (mg)          2.6     2.0     3.6     100        100
       Vitamin B12 (mcg)          6.6     5.2     9.6     100        100

         Percent energy from fat 28.9
     Percent energy from protein 19.4
Percent energy from carbohydrate 50.8
     Percent energy from alcohol  1.0
```

A15.4 Sample *7-day Total Diets* for Men 31-50 years higher energy level

Tallest (190cm) and highest activity (PAL 2)

Men31to50.hitot1:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           28
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             28
 [7,] TotalFruit           21
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               21
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      14295.4 13907.7 14984.2      NA         NA
             Energy (kJ)      14833.7 14424.4 15565.8      NA         NA
             Protein (g)        154.2   144.0   170.1     100        100
                 Fat (g)        102.8    93.2   113.3      NA         NA
        Carbohydrate (g)        449.0   420.8   471.0      NA         NA
              Sugars (g)        166.1   147.3   191.6      NA         NA
              Starch (g)        276.2   251.6   297.5      NA         NA
               Fibre (g)         73.5    63.0    93.5      NA        100
             Alcohol (g)         11.5     4.5    20.1      NA         NA
       Saturated fat (g)         32.4    29.0    36.1      NA         NA
 Monounsaturated fat (g)         34.9    31.1    39.2      NA         NA
 Polyunsaturated fat (g)         27.8    24.8    31.1      NA         NA
       Linoleic acid (g)         25.7    23.0    28.7      NA        100
Alpha linolenic acid (g)          1.7     1.4     2.1      NA        100
  LC n3 fatty acids (mg)        307.4    92.1   994.1      NA         76
  Vitamin A equivs (mcg)       2705.5  2237.4  3214.9     100        100
           Retinol (mcg)        595.4   519.5   683.5      NA         NA
      Provitamin A (mcg)      12620.7  9856.1 15509.4      NA         NA
            Thiamin (mg)          3.1     2.8     3.5     100        100
         Riboflavin (mg)          3.6     3.1     4.1     100        100
             Niacin (mg)         82.3    76.2    90.0     100        100
      Folate (mcg total)        842.6   719.6   937.6      NA         NA
     Folate equivs (mcg)       1280.4  1107.0  1420.2     100        100
          Vitamin C (mg)        284.1   215.9   370.4     100        100
         Vitamin D (mcg)          4.9     3.6     7.7      NA         41
          Vitamin E (mg)         19.4    16.9    22.6      NA        100
            Calcium (mg)       1489.3  1335.8  1646.4     100        100
               Iron (mg)         23.5    21.2    25.5     100        100
            Iodine (mcg)        287.4   250.4   319.5     100        100
          Magnesium (mg)        726.4   666.4   776.0     100        100
         Phosphorus (mg)       2800.9  2674.7  2967.2     100        100
          Potassium (mg)       7161.9  6717.6  7595.0      NA        100
             Sodium (mg)       2626.3  2208.2  3413.1      NA        100
               Zinc (mg)         21.2    19.0    41.6     100        100
        Cholesterol (mg)        306.3   190.4   514.0      NA         NA
          Selenium (mcg)        122.9    94.4   197.8     100        100
         Vitamin B6 (mg)          3.2     2.5     4.1     100        100
       Vitamin B12 (mcg)          6.9     5.7    10.6     100        100

         Percent energy from fat 26.3
     Percent energy from protein 18.1
Percent energy from carbohydrate 53.3
     Percent energy from alcohol  2.3
```

Men31to50.hitot2:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            14
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       42
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          14
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      14360.3 13737.9 14819.9      NA         NA
             Energy (kJ)      14832.8 14183.2 15290.2      NA         NA
             Protein (g)        162.7   154.9   173.0     100        100
                 Fat (g)        119.3   110.8   128.9      NA         NA
        Carbohydrate (g)        421.3   398.1   458.0      NA         NA
              Sugars (g)        162.3   146.4   180.3      NA         NA
              Starch (g)        255.0   232.1   291.3      NA         NA
               Fibre (g)         62.5    55.3    71.9      NA        100
             Alcohol (g)          4.0     0.0     8.6      NA         NA
       Saturated fat (g)         38.6    35.1    42.7      NA         NA
 Monounsaturated fat (g)         41.5    37.6    46.7      NA         NA
 Polyunsaturated fat (g)         30.7    27.8    33.8      NA         NA
       Linoleic acid (g)         28.6    26.0    31.2      NA        100
Alpha linolenic acid (g)          1.6     1.4     2.2      NA        100
  LC n3 fatty acids (mg)        290.2    82.3   767.5      NA         73
  Vitamin A equivs (mcg)       2801.8  2349.5  3165.9     100        100
           Retinol (mcg)        765.8   690.1   892.3      NA         NA
      Provitamin A (mcg)      12174.9  9494.3 14452.2      NA         NA
            Thiamin (mg)          2.6     2.3     2.9     100        100
         Riboflavin (mg)          4.1     3.5     4.6     100        100
             Niacin (mg)         81.4    74.5    88.1     100        100
      Folate (mcg total)        832.7   721.7   948.0      NA         NA
     Folate equivs (mcg)       1210.5  1055.5  1393.6     100        100
          Vitamin C (mg)        221.8   180.2   296.7     100        100
         Vitamin D (mcg)          7.0     5.9     8.9      NA        100
          Vitamin E (mg)         19.8    15.5    24.0      NA        100
            Calcium (mg)       1803.4  1661.0  1982.6     100        100
               Iron (mg)         20.1    18.2    22.3     100        100
            Iodine (mcg)        362.5   324.4   428.8     100        100
          Magnesium (mg)        695.1   655.0   749.8     100        100
         Phosphorus (mg)       2934.9  2804.9  3134.4     100        100
          Potassium (mg)       6553.2  6122.6  6891.1      NA        100
             Sodium (mg)       2258.0  1845.6  3079.6      NA        100
               Zinc (mg)         21.9    19.3    42.4     100        100
        Cholesterol (mg)        315.8   210.5   508.1      NA         NA
          Selenium (mcg)        129.3    97.1   209.4     100        100
         Vitamin B6 (mg)          3.2     2.7     4.1     100        100
       Vitamin B12 (mcg)          9.9     8.3    14.0     100        100

         Percent energy from fat 30.4
     Percent energy from protein 19.1
Percent energy from carbohydrate 49.7
     Percent energy from alcohol  0.8
```

Men31to50.hitot3:

```
     AllFoodGroups Nservings
 [1,] StarchyVeg           21
 [2,] GreenBrassicas       21
 [3,] OrangeVeg            14
 [4,] Legumes              21
 [5,] NutsSeeds            18
 [6,] OtherVeg             28
 [7,] TotalFruit           28
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       17
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      14269.4 13805.0 14698.9      NA         NA
             Energy (kJ)      14902.0 14441.7 15351.1      NA         NA
             Protein (g)        166.5   158.5   175.4     100        100
                 Fat (g)        122.6   115.3   135.3      NA         NA
        Carbohydrate (g)        399.5   383.6   428.3      NA         NA
              Sugars (g)        172.3   159.1   191.6      NA         NA
              Starch (g)        221.7   207.4   241.1      NA         NA
               Fibre (g)         83.5    76.2    95.0      NA        100
             Alcohol (g)          6.9     1.1    16.1      NA         NA
       Saturated fat (g)         33.3    29.9    37.7      NA         NA
 Monounsaturated fat (g)         44.9    41.7    49.7      NA         NA
 Polyunsaturated fat (g)         35.9    31.8    41.7      NA         NA
       Linoleic acid (g)         33.7    30.0    39.0      NA        100
Alpha linolenic acid (g)          1.9     1.5     2.5      NA        100
  LC n3 fatty acids (mg)        262.7    85.9   855.6      NA         66
  Vitamin A equivs (mcg)       2752.7  2194.9  3242.1     100        100
           Retinol (mcg)        569.5   494.3   679.5      NA         NA
      Provitamin A (mcg)      13073.6  9810.1 15746.0      NA         NA
            Thiamin (mg)          3.3     2.9     3.6     100        100
         Riboflavin (mg)          3.6     3.2     3.9     100        100
             Niacin (mg)         85.6    77.8    94.3     100        100
      Folate (mcg total)       1027.5   933.3  1176.0      NA         NA
     Folate equivs (mcg)       1364.7  1196.5  1519.2     100        100
         Vitamin C (mg)        308.2   248.8   383.8     100        100
         Vitamin D (mcg)          4.6     3.7     6.8      NA         33
         Vitamin E (mg)          24.4    21.6    27.4      NA        100
           Calcium (mg)       1548.0  1399.4  1697.5     100        100
              Iron (mg)         26.1    23.5    29.0     100        100
           Iodine (mcg)        257.5   229.1   299.6     100        100
         Magnesium (mg)        842.6   777.9   919.7     100        100
         Phosphorus (mg)       2970.5  2806.4  3198.2     100        100
         Potassium (mg)        7672.1  7414.1  8009.1      NA        100
            Sodium (mg)        2266.1  1903.7  3312.0      NA        100
              Zinc (mg)         23.3    21.3    33.5     100        100
        Cholesterol (mg)        282.7   177.7   490.3      NA         NA
         Selenium (mcg)         145.0   105.8   236.1     100        100
         Vitamin B6 (mg)          3.6     3.0     5.0     100        100
       Vitamin B12 (mcg)          6.5     5.3    10.3     100        100

         Percent energy from fat 31.1
     Percent energy from protein 19.4
Percent energy from carbohydrate 48.1
     Percent energy from alcohol  1.4
```

Men31to50.hitot4:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           28
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    63
 [9,] RefinedCereals       42
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      14359.8 13803.6 14952.7      NA         NA
             Energy (kJ)      14865.1 14281.3 15494.0      NA         NA
             Protein (g)        158.7   149.8   167.6     100        100
                 Fat (g)         96.7    88.4   110.0      NA         NA
        Carbohydrate (g)        473.4   448.2   514.3      NA         NA
              Sugars (g)        127.7   113.1   141.3      NA         NA
              Starch (g)        342.7   316.9   369.6      NA         NA
               Fibre (g)         68.9    58.4    81.0      NA        100
             Alcohol (g)          3.7     0.0     8.8      NA         NA
       Saturated fat (g)         28.6    25.5    32.6      NA         NA
 Monounsaturated fat (g)         32.9    28.7    40.0      NA         NA
 Polyunsaturated fat (g)         27.8    25.8    31.1      NA         NA
       Linoleic acid (g)         25.8    23.9    28.6      NA        100
Alpha linolenic acid (g)          1.7     1.4     2.1      NA        100
  LC n3 fatty acids (mg)        294.7    83.2   860.9      NA         74
  Vitamin A equivs (mcg)       1757.0  1392.3  2217.1     100        100
           Retinol (mcg)        562.5   493.5   662.2      NA         NA
      Provitamin A (mcg)       7122.2  4989.4  9910.9      NA         NA
            Thiamin (mg)          3.4     3.0     3.7     100        100
         Riboflavin (mg)          3.5     3.1     4.0     100        100
             Niacin (mg)         84.7    78.9    91.9     100        100
      Folate (mcg total)        812.6   684.3   946.5      NA         NA
     Folate equivs (mcg)       1393.1  1217.5  1540.5     100        100
          Vitamin C (mg)        195.4   142.4   249.0     100        100
         Vitamin D (mcg)          4.9     3.8     6.9      NA         42
          Vitamin E (mg)         17.9    15.2    21.4      NA        100
            Calcium (mg)       1516.0  1351.9  1681.3     100        100
               Iron (mg)         24.1    21.5    26.7     100        100
            Iodine (mcg)        322.5   284.4   370.5     100        100
          Magnesium (mg)        727.8   684.0   774.4     100        100
         Phosphorus (mg)       2867.3  2687.0  3025.4     100        100
          Potassium (mg)       6403.9  6032.8  6828.3      NA        100
             Sodium (mg)       2655.6  2219.0  3357.3      NA        100
               Zinc (mg)         21.5    19.1    32.5     100        100
        Cholesterol (mg)        280.7   174.1   455.6      NA         NA
          Selenium (mcg)        133.5   103.1   181.1     100        100
         Vitamin B6 (mg)          2.8     2.2     3.7     100        100
       Vitamin B12 (mcg)          7.0     5.6    11.7     100        100

         Percent energy from fat 24.7
     Percent energy from protein 18.7
Percent energy from carbohydrate 55.9
     Percent energy from alcohol  0.7
```

Men31to50.hitot5:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           28
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           28
 [8,] WholegrainCereals    56
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               21
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      14358.6 13834.7 14861.3      NA         NA
             Energy (kJ)      14905.8 14367.8 15372.1      NA         NA
             Protein (g)        152.6   144.3   167.9     100        100
                 Fat (g)        102.8    93.8   111.8      NA         NA
        Carbohydrate (g)        455.7   432.4   489.0      NA         NA
              Sugars (g)        182.2   164.8   202.4      NA         NA
              Starch (g)        266.5   243.1   286.5      NA         NA
               Fibre (g)         74.5    64.9    87.9      NA        100
             Alcohol (g)         10.9     3.6    18.3      NA         NA
       Saturated fat (g)         32.5    28.4    36.5      NA         NA
 Monounsaturated fat (g)         34.6    30.5    39.6      NA         NA
 Polyunsaturated fat (g)         27.9    24.7    30.9      NA         NA
       Linoleic acid (g)         25.7    22.8    28.7      NA        100
Alpha linolenic acid (g)          1.7     1.5     2.1      NA        100
  LC n3 fatty acids (mg)        293.4    88.6   870.1      NA         73
  Vitamin A equivs (mcg)       2622.3  2191.9  3020.1     100        100
           Retinol (mcg)        601.2   527.5   687.1      NA         NA
      Provitamin A (mcg)      12089.3  9581.9 14673.1      NA         NA
            Thiamin (mg)          3.2     2.9     3.6     100        100
         Riboflavin (mg)          3.6     3.2     4.0     100        100
             Niacin (mg)         81.8    75.9    88.5     100        100
      Folate (mcg total)        866.6   740.6   954.6      NA         NA
     Folate equivs (mcg)       1310.1  1156.5  1441.3     100        100
          Vitamin C (mg)        267.2   219.8   345.1     100        100
         Vitamin D (mcg)          4.9     3.6     7.7      NA         37
          Vitamin E (mg)         19.1    14.8    22.9      NA        100
            Calcium (mg)       1519.8  1370.7  1748.5     100        100
               Iron (mg)         23.7    22.1    25.7     100        100
            Iodine (mcg)        290.5   257.6   356.1     100        100
          Magnesium (mg)        741.3   698.2   803.2     100        100
         Phosphorus (mg)       2801.7  2626.5  2978.7     100        100
          Potassium (mg)       7152.7  6776.4  7617.3      NA        100
             Sodium (mg)       2652.4  2229.7  3451.1      NA        100
               Zinc (mg)         21.8    19.4    42.1     100        100
        Cholesterol (mg)        298.9   190.9   522.0      NA         NA
          Selenium (mcg)        117.3    90.6   184.1     100        100
         Vitamin B6 (mg)          3.0     2.5     3.6     100        100
       Vitamin B12 (mcg)          6.9     5.5    10.9     100        100

         Percent energy from fat 26.1
     Percent energy from protein 17.8
Percent energy from carbohydrate 53.9
     Percent energy from alcohol  2.2
```

Men31to50.hitot6:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           28
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            21
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             35
 [7,] TotalFruit           42
 [8,] WholegrainCereals    56
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           7
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      14218.7 13782.6 14927.9      NA         NA
             Energy (kJ)      14866.1 14420.3 15578.4      NA         NA
             Protein (g)        157.5   148.3   165.5     100        100
                 Fat (g)        102.9    95.2   114.4      NA         NA
        Carbohydrate (g)        451.0   424.2   481.0      NA         NA
              Sugars (g)        207.0   190.3   234.4      NA         NA
              Starch (g)        237.6   216.8   263.7      NA         NA
               Fibre (g)         86.7    76.3   101.8      NA        100
             Alcohol (g)          5.8     1.1    14.4      NA         NA
       Saturated fat (g)         33.4    29.8    37.0      NA         NA
 Monounsaturated fat (g)         34.0    30.3    40.2      NA         NA
 Polyunsaturated fat (g)         27.6    25.2    31.2      NA         NA
       Linoleic acid (g)         25.5    23.4    29.0      NA        100
Alpha linolenic acid (g)          1.7     1.5     2.2      NA        100
  LC n3 fatty acids (mg)        284.7    81.2   762.8      NA         78
  Vitamin A equivs (mcg)       3683.7  2995.6  4241.4     100        100
           Retinol (mcg)        620.5   548.9   733.6      NA         NA
      Provitamin A (mcg)      18323.0 14141.6 21617.5      NA         NA
            Thiamin (mg)          3.3     3.0     3.7     100        100
         Riboflavin (mg)          3.9     3.3     4.4     100        100
             Niacin (mg)         83.8    77.8    89.1     100        100
      Folate (mcg total)        980.9   895.0  1126.0      NA         NA
     Folate equivs (mcg)       1384.0  1257.7  1569.1     100        100
          Vitamin C (mg)        360.1   281.0   432.2     100        100
         Vitamin D (mcg)          5.5     4.2     8.3      NA         68
          Vitamin E (mg)         21.3    17.6    24.7      NA        100
            Calcium (mg)       1709.7  1530.1  1889.3     100        100
               Iron (mg)         24.6    22.6    27.6     100        100
            Iodine (mcg)        278.7   229.7   321.0     100        100
          Magnesium (mg)        791.7   728.2   844.1     100        100
         Phosphorus (mg)       2954.4  2801.0  3118.8     100        100
          Potassium (mg)       8328.2  7927.8  8754.7      NA        100
             Sodium (mg)       2565.5  2231.6  3508.6      NA        100
               Zinc (mg)         22.5    20.4    33.1     100        100
        Cholesterol (mg)        298.5   185.6   468.8      NA         NA
          Selenium (mg)         123.4    90.2   192.0     100        100
         Vitamin B6 (mg)          3.7     2.9     4.9     100        100
       Vitamin B12 (mg)           6.8     5.6    10.1     100        100

         Percent energy from fat 26.2
     Percent energy from protein 18.4
Percent energy from carbohydrate 54.2
     Percent energy from alcohol  1.2
```

A15.5 Sample *7-day Total Diets* for Men 51-70 years mid energy level

Average height (175cm) and light-moderate activity (PAL 1.7)

Men51to70.avtot1:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10328.6 10050.3 10714.7      NA         NA
             Energy (kJ)      10695.5 10417.3 11094.3      NA         NA
             Protein (g)        128.6   121.1   137.6     100        100
                 Fat (g)         87.3    79.3    96.0      NA         NA
        Carbohydrate (g)        285.2   269.8   307.2      NA         NA
              Sugars (g)        113.6    99.0   130.8      NA         NA
              Starch (g)        168.4   152.0   187.9      NA         NA
               Fibre (g)         48.1    42.5    61.7      NA        100
             Alcohol (g)          4.3     1.1    10.7      NA         NA
       Saturated fat (g)         26.7    23.4    31.5      NA         NA
 Monounsaturated fat (g)         29.8    26.4    33.4      NA         NA
 Polyunsaturated fat (g)         24.4    22.1    27.0      NA         NA
       Linoleic acid (g)         22.5    20.5    24.6      NA        100
Alpha linolenic acid (g)          1.5     1.2     1.9      NA         96
  LC n3 fatty acids (mg)        340.4    80.2   949.1      NA         83
  Vitamin A equivs (mcg)       1674.5  1310.3  2033.9     100        100
           Retinol (mcg)        557.3   496.8   661.7      NA         NA
      Provitamin A (mcg)       6659.7  4562.4  8448.9      NA         NA
            Thiamin (mg)          2.2     1.9     2.6     100        100
          Riboflavin (mg)         2.9     2.6     3.2     100        100
             Niacin (mg)         64.8    58.6    71.9     100        100
      Folate (mcg total)        633.4   529.5   713.7      NA         NA
     Folate equivs (mcg)        966.9   862.2  1081.7     100        100
          Vitamin C (mg)        163.7   128.9   211.8     100        100
          Vitamin D (mcg)         5.0     3.6     7.3      NA          0
          Vitamin E (mg)         15.7    13.0    19.1      NA        100
            Calcium (mg)       1330.4  1157.7  1484.1     100        100
               Iron (mg)         16.8    14.3    18.8     100        100
            Iodine (mcg)        254.2   222.2   298.7     100        100
          Magnesium (mg)        540.6   500.0   588.7     100        100
          Phosphorus (mg)       2275.3  2127.2  2430.6     100        100
          Potassium (mg)        5111.3  4812.5  5413.6      NA        100
             Sodium (mg)        1964.4  1677.6  2617.3      NA        100
               Zinc (mg)         17.2    14.9    27.7     100        100
        Cholesterol (mg)        267.9   173.5   411.6      NA         NA
          Selenium (mcg)        105.4    83.1   152.3     100        100
          Vitamin B6 (mg)         2.3     1.7     3.5     100        100
        Vitamin B12 (mcg)         6.5     5.4     9.2     100        100

         Percent energy from fat 30.8
     Percent energy from protein 20.9
Percent energy from carbohydrate 47.1
     Percent energy from alcohol  1.2
```

Men51to70.avtot2:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10473.4 10037.8 10947.0      NA         NA
             Energy (kJ)      10846.1 10388.8 11329.2      NA         NA
             Protein (g)        128.7   120.1   138.1     100        100
                 Fat (g)         86.1    78.3    98.3      NA         NA
        Carbohydrate (g)        296.6   272.3   320.0      NA         NA
              Sugars (g)        111.5   100.5   124.9      NA         NA
              Starch (g)        182.0   165.4   196.3      NA         NA
               Fibre (g)         48.1    41.6    56.1      NA        100
             Alcohol (g)          4.1     0.0    11.1      NA         NA
       Saturated fat (g)         26.1    23.5    30.5      NA         NA
 Monounsaturated fat (g)         29.3    25.7    35.0      NA         NA
 Polyunsaturated fat (g)         24.4    22.1    26.7      NA         NA
       Linoleic acid (g)         22.5    20.3    24.4      NA        100
Alpha linolenic acid (g)          1.5     1.2     2.0      NA         94
  LC n3 fatty acids (mg)        277.8    94.0   900.5      NA         72
  Vitamin A equivs (mcg)       2387.0  1949.5  2864.9     100        100
           Retinol (mcg)        547.4   480.6   639.6      NA         NA
      Provitamin A (mcg)      10994.8  8263.6 13687.9      NA         NA
            Thiamin (mg)          2.0     1.7     2.3     100        100
         Riboflavin (mg)          2.7     2.3     3.1     100        100
             Niacin (mg)         62.5    57.2    70.2     100        100
      Folate (mcg total)        618.8   546.7   695.3      NA         NA
     Folate equivs (mcg)        942.4   803.2  1094.3     100        100
          Vitamin C (mg)        170.4   124.8   243.6     100        100
         Vitamin D (mcg)          4.6     3.3     7.0      NA          0
          Vitamin E (mg)         15.5    12.2    18.4      NA        100
            Calcium (mg)       1283.3  1153.9  1419.7     100        100
               Iron (mg)         16.2    14.0    18.9     100        100
            Iodine (mcg)        246.6   211.1   314.1     100        100
          Magnesium (mg)        510.5   473.1   551.5     100        100
         Phosphorus (mg)       2178.4  2009.2  2376.8     100        100
          Potassium (mg)       4818.1  4501.4  5115.0      NA        100
             Sodium (mg)       1938.2  1648.0  2746.4      NA        100
               Zinc (mg)         16.9    14.6    27.6     100        100
        Cholesterol (mg)        271.6   169.1   446.5      NA         NA
          Selenium (mg)         102.3    76.5   139.6     100        100
         Vitamin B6 (mg)          2.2     1.8     3.0     100        100
       Vitamin B12 (mg)           6.7     5.5     9.5     100        100

         Percent energy from fat 30.0
     Percent energy from protein 20.6
Percent energy from carbohydrate 48.2
     Percent energy from alcohol  1.1
```

Men51to70.avtot3:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           21
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10299.9  9861.9 10692.9      NA         NA
             Energy (kJ)      10697.9 10267.5 11086.7      NA         NA
             Protein (g)        128.6   120.2   137.8     100        100
                 Fat (g)         85.6    78.2    94.9      NA         NA
        Carbohydrate (g)        287.1   269.2   320.1      NA         NA
              Sugars (g)        122.6   108.6   138.9      NA         NA
              Starch (g)        160.7   147.0   176.2      NA         NA
               Fibre (g)         53.2    46.0    67.4      NA        100
             Alcohol (g)          4.3     0.0     8.5      NA         NA
       Saturated fat (g)         25.8    22.2    28.6      NA         NA
 Monounsaturated fat (g)         28.8    25.3    34.2      NA         NA
 Polyunsaturated fat (g)         24.7    22.3    27.9      NA         NA
       Linoleic acid (g)         22.7    20.5    25.5      NA        100
Alpha linolenic acid (g)          1.6     1.3     1.9      NA        100
  LC n3 fatty acids (mg)        318.6    87.4  1048.6      NA         80
  Vitamin A equivs (mcg)       1615.4  1129.2  1988.4     100        100
           Retinol (mcg)        544.3   488.3   636.6      NA         NA
      Provitamin A (mcg)       6393.4  3311.4  8535.8      NA         NA
            Thiamin (mg)          2.0     1.7     2.3     100        100
          Riboflavin (mg)         2.7     2.3     3.2     100        100
              Niacin (mg)        62.2    57.2    67.7     100        100
      Folate (mcg total)        670.7   581.2   748.5      NA         NA
     Folate equivs (mcg)        921.3   802.0  1042.9     100        100
          Vitamin C (mg)        183.9   136.4   244.2     100        100
          Vitamin D (mcg)         4.9     3.6     8.7      NA          0
           Vitamin E (mg)        15.9    13.7    19.1      NA        100
             Calcium (mg)       1249.2  1062.2  1373.0     100        100
                Iron (mg)        16.9    15.0    18.6     100        100
             Iodine (mcg)        224.8   188.1   282.1     100        100
           Magnesium (mg)        548.2   503.9   597.3     100        100
          Phosphorus (mg)       2225.1  2088.2  2367.1     100        100
           Potassium (mg)       5604.2  5246.5  6039.4      NA        100
              Sodium (mg)       1768.5  1458.2  2552.9      NA        100
                Zinc (mg)        17.1    15.1    27.5     100        100
        Cholesterol (mg)        263.4   161.5   386.7      NA         NA
           Selenium (mcg)       102.6    76.3   129.1     100        100
          Vitamin B6 (mg)         2.3     1.8     3.0     100        100
        Vitamin B12 (mcg)         6.5     5.2     9.7     100        100

         Percent energy from fat 30.2
     Percent energy from protein 20.9
Percent energy from carbohydrate 47.7
     Percent energy from alcohol  1.2
```

Men51to70.avtot4:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       18
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10386.5 10044.5 10742.8      NA         NA
             Energy (kJ)      10755.9 10391.2 11109.1      NA         NA
             Protein (g)        129.7   119.2   143.0     100        100
                 Fat (g)         87.3    80.0   100.7      NA         NA
        Carbohydrate (g)        287.3   266.1   312.0      NA         NA
              Sugars (g)        111.6    96.3   126.6      NA         NA
              Starch (g)        172.7   156.8   190.3      NA         NA
               Fibre (g)         47.6    42.8    59.5      NA        100
             Alcohol (g)          4.4     0.0    12.8      NA         NA
       Saturated fat (g)         26.6    24.2    31.6      NA         NA
 Monounsaturated fat (g)         29.8    26.1    35.5      NA         NA
 Polyunsaturated fat (g)         24.7    22.1    26.9      NA         NA
       Linoleic acid (g)         22.7    20.1    24.7      NA        100
Alpha linolenic acid (g)          1.5     1.3     1.9      NA         96
  LC n3 fatty acids (mg)        319.3    77.3   839.8      NA         80
  Vitamin A equivs (mcg)       1656.5  1235.9  1999.9     100        100
           Retinol (mcg)        548.4   486.6   637.0      NA         NA
      Provitamin A (mcg)       6604.4  3931.8  8673.7      NA         NA
            Thiamin (mg)          2.3     1.9     2.7     100        100
          Riboflavin (mg)         2.9     2.5     3.3     100        100
              Niacin (mg)        64.7    58.9    70.7     100        100
      Folate (mcg total)        646.7   555.3   799.9      NA         NA
     Folate equivs (mcg)       1003.4   858.7  1170.2     100        100
          Vitamin C (mg)        164.6   112.8   227.6     100        100
          Vitamin D (mcg)         4.8     3.5     7.4      NA          0
           Vitamin E (mg)        15.4    12.4    19.1      NA        100
             Calcium (mg)       1344.9  1186.7  1520.8     100        100
                Iron (mg)         17.2    14.5    19.1     100        100
             Iodine (mcg)        259.2   225.7   296.6     100        100
           Magnesium (mg)        540.1   499.2   580.0     100        100
          Phosphorus (mg)       2260.7  2085.4  2418.7     100        100
           Potassium (mg)       4737.5  4498.3  5153.9      NA        100
              Sodium (mg)       2066.1  1619.3  2940.6      NA        100
                Zinc (mg)         17.3    15.3    27.9     100        100
        Cholesterol (mg)        264.8   171.9   431.8      NA         NA
           Selenium (mcg)       102.8    76.4   133.1     100        100
          Vitamin B6 (mg)         2.2     1.7     2.9     100         99
       Vitamin B12 (mcg)          6.5     5.3     9.6     100        100

         Percent energy from fat 30.7
     Percent energy from protein 20.9
Percent energy from carbohydrate 47.2
     Percent energy from alcohol  1.2
```

Men51to70.avtot5:

```
             AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          4
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10427.2  9867.5 10884.4      NA         NA
             Energy (kJ)      10747.0 10192.7 11211.9      NA         NA
             Protein (g)        126.7   120.7   136.9     100        100
                 Fat (g)         91.2    84.6   100.1      NA         NA
        Carbohydrate (g)        281.7   250.7   303.5      NA         NA
              Sugars (g)        119.2   106.7   135.8      NA         NA
              Starch (g)        158.9   138.9   175.2      NA         NA
               Fibre (g)         41.1    35.8    53.8      NA        100
             Alcohol (g)          6.2     0.0    13.3      NA         NA
       Saturated fat (g)         29.9    27.1    34.8      NA         NA
 Monounsaturated fat (g)         30.8    27.4    34.6      NA         NA
 Polyunsaturated fat (g)         24.0    21.5    27.3      NA         NA
       Linoleic acid (g)         22.1    20.1    24.8      NA        100
Alpha linolenic acid (g)          1.5     1.2     2.0      NA         95
  LC n3 fatty acids (mg)        278.1    80.4   797.7      NA         77
  Vitamin A equivs (mcg)       1634.0  1301.5  1945.5     100        100
           Retinol (mcg)        617.3   550.3   754.5      NA         NA
      Provitamin A (mcg)       6054.3  4183.3  7962.6      NA         NA
            Thiamin (mg)          1.9     1.6     2.2     100        100
         Riboflavin (mg)          2.9     2.5     3.3     100        100
             Niacin (mg)         61.4    56.1    67.8     100        100
      Folate (mcg total)        585.5   474.3   673.8      NA         NA
     Folate equivs (mcg)        868.8   696.1  1003.7     100        100
          Vitamin C (mg)        138.5    98.8   208.2     100        100
         Vitamin D (mcg)          5.5     3.9     8.0      NA          0
          Vitamin E (mg)         15.1    11.9    17.8      NA        100
            Calcium (mg)       1361.7  1253.2  1479.2     100        100
               Iron (mg)         14.9    13.1    17.2     100        100
            Iodine (mcg)        266.0   224.8   315.8     100        100
          Magnesium (mg)        494.9   455.7   538.4     100        100
         Phosphorus (mg)       2200.1  2068.1  2338.3     100        100
          Potassium (mg)       4560.2  4242.0  4881.8      NA        100
             Sodium (mg)       1934.1  1504.3  2920.7      NA        100
               Zinc (mg)         16.9    15.0    36.3     100        100
        Cholesterol (mg)        281.6   189.7   504.3      NA         NA
          Selenium (mcg)        102.7    71.8   144.0     100        100
         Vitamin B6 (mg)          2.1     1.7     2.9     100         98
       Vitamin B12 (mcg)          7.4     6.2    11.9     100        100

         Percent energy from fat 32.0
     Percent energy from protein 20.4
Percent energy from carbohydrate 45.8
     Percent energy from alcohol  1.7
```

Men51to70.avtot6:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           7
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10324.3 10022.4 10729.9      NA         NA
             Energy (kJ)      10688.5 10369.8 11108.0      NA         NA
             Protein (g)        128.7   121.9   137.7     100        100
                 Fat (g)         92.5    83.7   102.0      NA         NA
        Carbohydrate (g)        274.3   255.6   300.9      NA         NA
              Sugars (g)        125.6   113.0   137.6      NA         NA
              Starch (g)        145.4   133.8   161.8      NA         NA
               Fibre (g)         46.7    41.1    54.4      NA        100
             Alcohol (g)          3.9     0.0    10.7      NA         NA
       Saturated fat (g)         30.7    27.2    34.3      NA         NA
 Monounsaturated fat (g)         31.0    27.0    36.5      NA         NA
 Polyunsaturated fat (g)         24.3    21.9    26.9      NA         NA
       Linoleic acid (g)         22.3    20.1    24.3      NA        100
Alpha linolenic acid (g)          1.6     1.4     2.0      NA        100
  LC n3 fatty acids (mg)        316.7    99.2   843.5      NA         83
  Vitamin A equivs (mcg)       1735.3  1391.9  2092.2     100        100
           Retinol (mcg)        606.0   514.1   710.9      NA         NA
      Provitamin A (mcg)       6705.8  4808.4  8610.6      NA         NA
            Thiamin (mg)          2.0     1.8     2.3     100        100
         Riboflavin (mg)          2.9     2.4     3.2     100        100
             Niacin (mg)         61.5    54.5    68.9     100        100
      Folate (mcg total)        638.8   566.5   724.0      NA         NA
     Folate equivs (mcg)        928.3   786.1  1057.7     100        100
          Vitamin C (mg)        171.1   116.3   244.1     100        100
         Vitamin D (mcg)          5.6     4.2     8.8      NA          0
          Vitamin E (mg)         16.0    13.5    19.9      NA        100
            Calcium (mg)       1442.4  1304.9  1598.1     100        100
               Iron (mg)         15.8    13.9    18.3     100        100
            Iodine (mcg)        245.1   196.9   292.6     100        100
          Magnesium (mg)        518.7   477.4   558.9     100        100
         Phosphorus (mg)       2257.3  2105.2  2451.7     100        100
          Potassium (mg)       4848.0  4552.4  5166.7      NA        100
             Sodium (mg)       2031.3  1734.2  2849.2      NA        100
               Zinc (mg)         17.7    15.1    27.9     100        100
        Cholesterol (mg)        285.0   184.0   470.0      NA         NA
          Selenium (mcg)        105.7    78.7   143.0     100        100
         Vitamin B6 (mg)          2.2     1.7     3.0     100         99
       Vitamin B12 (mcg)          7.0     5.6     9.7     100        100

         Percent energy from fat 32.7
     Percent energy from protein 20.9
Percent energy from carbohydrate 45.4
     Percent energy from alcohol  1.1
```

A15.6 Sample *7-day Total Diets* for Men 51-70 years higher energy level

Tallest (190cm) and highest activity (PAL 2)

Men51to70.hitot1:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           28
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             35
 [7,] TotalFruit           21
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      13172.4 12666.8 13871.8      NA         NA
             Energy (kJ)      13690.5 13174.2 14430.7      NA         NA
             Protein (g)        150.3   142.8   162.6     100        100
                 Fat (g)         95.8    86.6   104.3      NA         NA
        Carbohydrate (g)        405.4   371.0   435.8      NA         NA
              Sugars (g)        153.3   127.9   168.7      NA         NA
              Starch (g)        246.8   223.6   273.0      NA         NA
               Fibre (g)         69.7    60.6    82.7      NA        100
             Alcohol (g)          8.8     3.3    15.3      NA         NA
       Saturated fat (g)         29.8    26.1    32.5      NA         NA
 Monounsaturated fat (g)         32.4    27.9    37.9      NA         NA
 Polyunsaturated fat (g)         26.5    24.3    29.4      NA         NA
       Linoleic acid (g)         24.4    22.4    26.5      NA        100
Alpha linolenic acid (g)          1.7     1.4     2.2      NA        100
  LC n3 fatty acids (mg)        307.6    64.0   840.1      NA         83
  Vitamin A equivs (mcg)       2638.3  2017.0  3338.6     100        100
           Retinol (mcg)        580.2   506.0   662.8      NA         NA
      Provitamin A (mcg)      12303.0  8767.0 16578.8      NA         NA
            Thiamin (mg)          2.8     2.4     3.2     100        100
         Riboflavin (mg)          3.3     2.8     3.8     100        100
             Niacin (mg)         78.3    69.7    83.6     100        100
      Folate (mcg total)        791.7   705.4   900.5      NA         NA
     Folate equivs (mcg)       1210.3  1070.5  1390.2     100        100
          Vitamin C (mg)        286.0   220.6   355.8     100        100
         Vitamin D (mcg)          5.0     3.4     7.9      NA          0
          Vitamin E (mg)         18.3    15.1    21.2      NA        100
            Calcium (mg)       1490.9  1335.1  1606.9     100        100
               Iron (mg)         21.5    18.8    24.0     100        100
            Iodine (mcg)        285.7   249.8   326.7     100        100
          Magnesium (mg)        677.0   634.1   725.0     100        100
         Phosphorus (mg)       2692.3  2545.6  2910.5     100        100
          Potassium (mg)       7200.4  6822.0  7656.8      NA        100
             Sodium (mg)       2470.8  2092.1  3739.8      NA        100
               Zinc (mg)         20.2    17.6    31.3     100        100
        Cholesterol (mg)        284.2   172.7   453.9      NA         NA
          Selenium (mcg)        119.7    92.6   150.1     100        100
         Vitamin B6 (mg)          3.1     2.4     4.2     100        100
       Vitamin B12 (mcg)          6.9     5.8     9.8     100        100

         Percent energy from fat 26.5
     Percent energy from protein 19.1
Percent energy from carbohydrate 52.4
     Percent energy from alcohol  1.9
```

Men51to70.hitot2:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       21
 [3,] OrangeVeg            14
 [4,] Legumes              21
 [5,] NutsSeeds            11
 [6,] OtherVeg             28
 [7,] TotalFruit           28
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       17
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      13187.9 12731.8 13557.9      NA         NA
             Energy (kJ)      13782.1 13287.0 14183.9      NA         NA
             Protein (g)        158.2   151.6   166.5     100        100
                 Fat (g)        105.7    96.3   115.2      NA         NA
        Carbohydrate (g)        378.3   346.7   408.7      NA         NA
              Sugars (g)        168.8   149.2   189.2      NA         NA
              Starch (g)        203.5   185.2   223.5      NA         NA
               Fibre (g)         77.3    69.5    92.3      NA        100
             Alcohol (g)          8.4     3.3    16.2      NA         NA
       Saturated fat (g)         31.1    26.9    34.4      NA         NA
 Monounsaturated fat (g)         36.6    31.2    41.9      NA         NA
 Polyunsaturated fat (g)         30.3    27.0    33.8      NA         NA
       Linoleic acid (g)         27.9    25.3    31.0      NA        100
Alpha linolenic acid (g)          1.9     1.5     2.4      NA        100
  LC n3 fatty acids (mg)        301.5    88.0   804.9      NA         79
  Vitamin A equivs (mcg)       2633.5  1943.9  3216.2     100        100
           Retinol (mcg)        578.0   496.1   682.9      NA         NA
      Provitamin A (mcg)      12296.2  8497.7 15547.7      NA         NA
            Thiamin (mg)          2.9     2.6     3.3     100        100
          Riboflavin (mg)         3.4     2.9     3.9     100        100
              Niacin (mg)        78.2    73.4    84.7     100        100
      Folate (mcg total)        952.1   864.6  1084.8      NA         NA
     Folate equivs (mcg)       1297.5  1162.1  1487.7     100        100
          Vitamin C (mg)        292.0   237.1   356.6     100        100
          Vitamin D (mcg)         5.0     3.8     8.4      NA          0
          Vitamin E (mg)         21.0    16.7    25.9      NA        100
            Calcium (mg)       1558.9  1374.9  1691.4     100        100
               Iron (mg)         24.0    21.2    26.8     100        100
            Iodine (mcg)        266.8   216.7   301.6     100        100
          Magnesium (mg)        757.2   707.8   830.2     100        100
          Phosphorus (mg)       2799.1  2653.2  2978.1     100        100
          Potassium (mg)        7170.7  6870.7  7436.8      NA        100
             Sodium (mg)        2314.2  1970.3  3404.3      NA        100
               Zinc (mg)         21.8    18.4    33.1     100        100
        Cholesterol (mg)        278.0   186.9   442.5      NA         NA
          Selenium (mcg)        126.5    96.3   170.8     100        100
          Vitamin B6 (mg)         3.4     2.7     4.4     100        100
        Vitamin B12 (mcg)         6.6     5.4     9.6     100        100

         Percent energy from fat 29.0
     Percent energy from protein 19.9
Percent energy from carbohydrate 49.3
     Percent energy from alcohol  1.8
```

Men51to70.hitot3:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           28
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       42
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      13395.7 12912.4 13958.2      NA         NA
             Energy (kJ)      13855.9 13395.7 14421.4      NA         NA
             Protein (g)        153.1   145.1   161.8     100        100
                 Fat (g)         93.1    85.4   105.6      NA         NA
        Carbohydrate (g)        428.4   405.2   448.4      NA         NA
              Sugars (g)        122.0   109.5   135.6      NA         NA
              Starch (g)        303.1   285.1   323.4      NA         NA
               Fibre (g)         62.3    55.6    73.7      NA        100
             Alcohol (g)          4.5     0.0    10.1      NA         NA
       Saturated fat (g)         27.9    24.8    32.0      NA         NA
 Monounsaturated fat (g)         31.8    27.8    37.3      NA         NA
 Polyunsaturated fat (g)         26.3    24.3    29.6      NA         NA
       Linoleic acid (g)         24.3    22.7    27.4      NA        100
Alpha linolenic acid (g)          1.6     1.3     2.1      NA        100
  LC n3 fatty acids (mg)        295.5    68.0   903.2      NA         74
  Vitamin A equivs (mcg)       1699.1  1331.2  2029.7     100        100
           Retinol (mcg)        557.3   492.2   634.4      NA         NA
      Provitamin A (mcg)       6795.2  4186.6  8988.0      NA         NA
            Thiamin (mg)          2.9     2.5     3.2     100        100
         Riboflavin (mg)          3.2     2.8     3.7     100        100
             Niacin (mg)         79.3    74.9    83.8     100        100
      Folate (mcg total)        726.8   609.3   806.8      NA         NA
     Folate equivs (mcg)       1253.9  1067.6  1377.6     100        100
          Vitamin C (mg)        194.6   146.6   256.2     100        100
         Vitamin D (mcg)          4.8     3.6     8.3      NA          0
          Vitamin E (mg)         16.5    12.9    19.7      NA        100
            Calcium (mg)       1469.6  1339.1  1657.4     100        100
               Iron (mg)         20.9    18.9    23.3     100        100
            Iodine (mcg)        313.1   274.2   369.9     100        100
          Magnesium (mg)        654.3   599.4   704.5     100        100
         Phosphorus (mg)       2694.7  2531.5  2905.9     100        100
          Potassium (mg)       6282.2  5908.2  6654.1      NA        100
             Sodium (mg)       2575.6  2103.9  3500.9      NA        100
               Zinc (mg)         20.0    17.7    39.9     100        100
        Cholesterol (mg)        268.9   167.7   452.9      NA         NA
          Selenium (mcg)        126.7   103.0   169.5     100        100
         Vitamin B6 (mg)          2.5     2.0     3.2     100        100
       Vitamin B12 (mcg)          7.1     5.5    10.8     100        100

         Percent energy from fat 25.5
     Percent energy from protein 19.3
Percent energy from carbohydrate 54.2
     Percent energy from alcohol  1.0
```

Men51to70.hitot4:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           35
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           28
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      13284.4 12847.6 13944.6      NA         NA
             Energy (kJ)      13787.5 13333.9 14484.2      NA         NA
             Protein (g)        147.6   139.7   153.1     100        100
                 Fat (g)         95.8    87.9   106.4      NA         NA
        Carbohydrate (g)        415.0   389.4   442.8      NA         NA
              Sugars (g)        166.0   146.5   183.1      NA         NA
              Starch (g)        243.5   220.9   261.8      NA         NA
               Fibre (g)         68.5    59.0    89.1      NA        100
             Alcohol (g)          8.8     2.2    15.8      NA         NA
       Saturated fat (g)         30.0    27.4    33.9      NA         NA
 Monounsaturated fat (g)         32.3    28.6    36.1      NA         NA
 Polyunsaturated fat (g)         26.2    23.8    29.4      NA         NA
       Linoleic acid (g)         24.1    21.8    27.1      NA        100
Alpha linolenic acid (g)          1.7     1.4     2.2      NA        100
  LC n3 fatty acids (mg)        309.2    94.5   762.0      NA         74
  Vitamin A equivs (mcg)       2481.6  2051.1  3036.6     100        100
           Retinol (mcg)        592.2   522.7   716.6      NA         NA
      Provitamin A (mcg)      11295.8  8705.3 14194.6      NA         NA
            Thiamin (mg)          2.8     2.6     3.1     100        100
         Riboflavin (mg)          3.3     2.8     3.7     100        100
             Niacin (mg)         77.5    71.6    82.6     100        100
      Folate (mcg total)        775.8   686.6   858.3      NA         NA
     Folate equivs (mcg)       1189.9  1051.1  1337.4     100        100
          Vitamin C (mg)        254.2   199.2   316.8     100        100
         Vitamin D (mcg)          5.0     3.8     9.2      NA          0
          Vitamin E (mg)         17.5    14.3    20.9      NA        100
            Calcium (mg)       1500.4  1366.4  1674.2     100        100
               Iron (mg)         21.0    18.6    23.3     100        100
            Iodine (mcg)        290.1   255.8   338.8     100        100
          Magnesium (mg)        684.3   628.9   739.9     100        100
         Phosphorus (mg)       2696.3  2527.1  2853.2     100        100
          Potassium (mg)       7258.3  6864.6  7796.9      NA        100
             Sodium (mg)       2423.9  2036.9  3277.4      NA        100
               Zinc (mg)         19.8    17.8    29.5     100        100
        Cholesterol (mg)        292.3   194.3   467.4      NA         NA
          Selenium (mcg)        115.8    88.2   144.8     100        100
         Vitamin B6 (mg)          2.7     2.2     3.4     100        100
       Vitamin B12 (mcg)          6.8     5.6    11.2     100        100

         Percent energy from fat 26.3
     Percent energy from protein 18.6
Percent energy from carbohydrate 53.1
     Percent energy from alcohol  1.9
```

Men51to70.hitot5:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           21
 [2,] GreenBrassicas       21
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            18
 [6,] OtherVeg             21
 [7,] TotalFruit           28
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          7
[15,] LoFatDairy           24
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      13233.5 12777.4 13606.9      NA         NA
             Energy (kJ)      13730.2 13237.6 14147.6      NA         NA
             Protein (g)        162.1   153.5   173.7     100        100
                 Fat (g)        120.2   111.7   127.2      NA         NA
        Carbohydrate (g)        352.2   327.7   368.2      NA         NA
              Sugars (g)        187.1   170.9   200.1      NA         NA
              Starch (g)        160.6   144.0   175.1      NA         NA
               Fibre (g)         64.9    57.5    77.9      NA        100
             Alcohol (g)          4.5     0.0     9.9      NA         NA
       Saturated fat (g)         36.9    34.0    40.1      NA         NA
 Monounsaturated fat (g)         43.5    38.4    47.3      NA         NA
 Polyunsaturated fat (g)         31.5    28.2    34.7      NA         NA
       Linoleic acid (g)         29.5    26.9    32.4      NA        100
Alpha linolenic acid (g)          1.7     1.3     2.4      NA        100
  LC n3 fatty acids (mg)        279.0    89.8   691.7      NA         69
  Vitamin A equivs (mcg)       2749.9  2325.7  3325.5     100        100
           Retinol (mcg)        725.3   654.0   871.2      NA         NA
      Provitamin A (mcg)      12084.6  9662.2 15288.1      NA         NA
            Thiamin (mg)          2.6     2.3     2.9     100        100
          Riboflavin (mg)         4.4     3.9     4.7     100        100
              Niacin (mg)        81.4    70.0    87.5     100        100
      Folate (mcg total)        928.8   820.7  1019.6      NA         NA
     Folate equivs (mcg)       1173.4  1041.6  1302.9     100        100
          Vitamin C (mg)        287.9   204.4   353.5     100        100
          Vitamin D (mcg)         6.5     5.3     9.6      NA          0
          Vitamin E (mg)         21.1    16.6    25.0      NA        100
            Calcium (mg)       1991.4  1842.3  2116.9     100        100
               Iron (mg)         19.9    17.8    22.5     100        100
            Iodine (mcg)        352.1   313.9   409.4     100        100
          Magnesium (mg)        742.1   695.2   791.7     100        100
          Phosphorus (mg)      3055.9  2863.2  3278.1     100        100
          Potassium (mg)       7673.8  7341.2  8271.5      NA        100
             Sodium (mg)       2017.7  1736.5  2945.5      NA        100
               Zinc (mg)         21.5    20.0    33.6     100        100
        Cholesterol (mg)        312.6   208.9   563.6      NA         NA
          Selenium (mcg)        126.1    96.0   182.4     100        100
          Vitamin B6 (mg)         3.4     2.8     4.7     100        100
       Vitamin B12 (mcg)         10.1     8.8    13.2     100        100

         Percent energy from fat 33.0
     Percent energy from protein 20.5
Percent energy from carbohydrate 45.5
     Percent energy from alcohol  1.0
```

Men51to70.hitot6:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           28
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            21
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             35
 [7,] TotalFruit           35
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       17
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      13296.8 12721.8 13882.8      NA         NA
             Energy (kJ)      13891.2 13289.4 14484.9      NA         NA
             Protein (g)        151.7   144.4   162.1     100        100
                 Fat (g)         95.8    85.7   104.4      NA         NA
        Carbohydrate (g)        415.3   393.4   441.2      NA         NA
              Sugars (g)        187.7   169.1   204.8      NA         NA
              Starch (g)        221.6   204.4   243.8      NA         NA
               Fibre (g)         78.9    69.9    94.3      NA        100
             Alcohol (g)          6.7     1.7    14.6      NA         NA
       Saturated fat (g)         30.0    26.3    33.5      NA         NA
 Monounsaturated fat (g)         32.0    28.0    36.1      NA         NA
 Polyunsaturated fat (g)         26.5    23.6    31.0      NA         NA
       Linoleic acid (g)         24.3    21.9    28.1      NA        100
Alpha linolenic acid (g)          1.7     1.4     2.4      NA        100
  LC n3 fatty acids (mg)        296.0    70.8   705.8      NA         86
  Vitamin A equivs (mcg)       3471.4  2785.1  4207.3     100        100
           Retinol (mcg)        591.8   514.5   702.4      NA         NA
      Provitamin A (mcg)      17232.9 13039.0 21281.3      NA         NA
            Thiamin (mg)          3.0     2.7     3.4     100        100
         Riboflavin (mg)          3.6     3.2     4.0     100        100
             Niacin (mg)         79.8    73.8    88.4     100        100
      Folate (mcg total)        884.8   768.9   993.9      NA         NA
     Folate equivs (mcg)       1275.4  1143.5  1465.9     100        100
          Vitamin C (mg)        338.3   247.1   399.7     100        100
         Vitamin D (mcg)          5.1     4.0     8.4      NA          0
          Vitamin E (mg)         19.7    16.3    23.1      NA        100
            Calcium (mg)       1622.0  1481.8  1766.2     100        100
               Iron (mg)         22.8    21.0    25.0     100        100
            Iodine (mcg)        286.4   246.8   338.4     100        100
          Magnesium (mg)        731.7   681.6   784.9     100        100
         Phosphorus (mg)       2803.1  2669.3  2953.7     100        100
          Potassium (mg)       8075.7  7684.0  8442.7      NA        100
             Sodium (mg)       2413.8  1919.7  3181.3      NA        100
               Zinc (mg)         21.2    18.6    42.1     100        100
        Cholesterol (mg)        290.2   177.1   455.0      NA         NA
          Selenium (mg)         118.0    91.8   154.5     100        100
         Vitamin B6 (mg)          3.4     2.8     4.7     100        100
       Vitamin B12 (mg)           6.9     5.5    11.3     100        100

         Percent energy from fat 26.1
     Percent energy from protein 19.0
Percent energy from carbohydrate 53.4
     Percent energy from alcohol  1.4
```

A15.7 Sample *7-day Total Diets* for Men 70+ years mid energy level

Average height (175cm) and light-moderate activity (PAL 1.7)

Men70plus.avtot1:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            14
 [4,] Legumes              2
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       17
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9570.1  9229.7 10115.1      NA         NA
             Energy (kJ)       9854.8  9501.9 10404.9      NA         NA
             Protein (g)        120.7   112.5   129.6     100        100
                 Fat (g)         86.8    80.1    97.1      NA         NA
        Carbohydrate (g)        246.7   228.8   269.7      NA         NA
              Sugars (g)        123.0   107.0   137.3      NA         NA
              Starch (g)        120.0   104.0   144.8      NA         NA
               Fibre (g)         36.8    32.5    49.2      NA        100
             Alcohol (g)          5.9     1.1    12.5      NA         NA
       Saturated fat (g)         28.5    25.8    31.0      NA         NA
 Monounsaturated fat (g)         29.6    26.4    36.7      NA         NA
 Polyunsaturated fat (g)         22.8    21.2    27.0      NA         NA
       Linoleic acid (g)         21.2    19.6    25.1      NA        100
Alpha linolenic acid (g)          1.3     1.2     1.8      NA         35
  LC n3 fatty acids (mg)        268.0    87.9   729.4      NA         68
  Vitamin A equivs (mcg)       2248.7  1846.2  2685.1     100        100
           Retinol (mcg)        606.4   543.1   730.2      NA         NA
      Provitamin A (mcg)       9825.5  7302.6 12357.0      NA         NA
            Thiamin (mg)          1.7     1.4     2.0     100        100
         Riboflavin (mg)          3.1     2.8     3.5     100        100
             Niacin (mg)         59.0    52.6    65.0     100        100
      Folate (mcg total)        601.2   500.3   704.8      NA         NA
     Folate equivs (mcg)        842.0   723.1  1001.7     100        100
          Vitamin C (mg)        162.5   121.4   239.5     100        100
         Vitamin D (mcg)          5.1     3.9     8.0      NA          0
          Vitamin E (mg)         15.0    12.0    18.0      NA        100
            Calcium (mg)       1445.4  1307.5  1584.2     100        100
               Iron (mg)         13.1    11.3    15.0     100        100
            Iodine (mcg)        270.3   237.9   310.0     100        100
          Magnesium (mg)        448.8   406.9   497.5     100         96
         Phosphorus (mg)       2121.0  1974.9  2253.9     100        100
          Potassium (mg)       4683.5  4399.0  4975.1      NA        100
             Sodium (mg)       1767.9  1437.6  2509.8      NA        100
               Zinc (mg)         15.8    13.9    26.3     100         97
        Cholesterol (mg)        293.1   177.2   525.9      NA         NA
          Selenium (mcg)         94.2    64.7   126.5     100         98
         Vitamin B6 (mg)          2.0     1.5     2.7     100         85
       Vitamin B12 (mcg)          7.7     6.5    10.8     100        100

         Percent energy from fat 33.2
     Percent energy from protein 21.2
Percent energy from carbohydrate 43.8
     Percent energy from alcohol  1.8
```

Men70plus.avtot2:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              9
 [5,] NutsSeeds            11
 [6,] OtherVeg             28
 [7,] TotalFruit           21
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       10
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9479.2  9134.0  9842.6      NA         NA
             Energy (kJ)       9822.3  9472.8 10195.9      NA         NA
             Protein (g)        126.6   119.5   135.1     100        100
                 Fat (g)         92.0    86.0   101.6      NA         NA
        Carbohydrate (g)        231.2   215.0   248.8      NA         NA
              Sugars (g)        129.5   117.7   140.3      NA         NA
              Starch (g)         98.5    87.3   112.4      NA         NA
               Fibre (g)         43.6    39.6    51.4      NA        100
             Alcohol (g)          1.7     0.0     4.9      NA         NA
       Saturated fat (g)         27.2    25.3    30.5      NA         NA
 Monounsaturated fat (g)         32.4    28.7    37.5      NA         NA
 Polyunsaturated fat (g)         26.2    23.2    31.6      NA         NA
       Linoleic acid (g)         24.4    21.7    29.2      NA        100
Alpha linolenic acid (g)          1.5     1.2     2.4      NA         86
  LC n3 fatty acids (mg)        321.7    78.8   808.6      NA         79
  Vitamin A equivs (mcg)       1631.3  1261.4  1980.2     100        100
           Retinol (mcg)        573.5   516.5   661.9      NA         NA
      Provitamin A (mcg)       6318.3  3866.7  8618.5      NA         NA
            Thiamin (mg)          1.8     1.5     2.1     100        100
         Riboflavin (mg)          3.1     2.8     3.4     100        100
             Niacin (mg)         61.1    55.4    66.4     100        100
      Folate (mcg total)        704.0   618.2   800.0      NA         NA
     Folate equivs (mcg)        898.8   785.5  1022.1     100        100
          Vitamin C (mg)        187.4   117.8   281.5     100        100
         Vitamin D (mcg)          5.1     3.9     7.7      NA          0
          Vitamin E (mg)         17.8    13.5    22.6      NA        100
            Calcium (mg)       1447.1  1335.7  1555.9     100        100
               Iron (mg)         14.3    12.2    16.4     100        100
            Iodine (mcg)        258.7   230.4   317.0     100        100
          Magnesium (mg)        519.8   475.5   567.1     100        100
         Phosphorus (mg)       2214.9  2083.7  2428.7     100        100
          Potassium (mg)       5163.7  4858.3  5459.0      NA        100
             Sodium (mg)       1506.9  1147.4  2214.2      NA        100
               Zinc (mg)         16.9    15.2    37.1     100        100
        Cholesterol (mg)        272.1   183.3   433.8      NA         NA
          Selenium (mcg)        106.1    71.5   156.2     100        100
         Vitamin B6 (mg)          2.4     1.7     3.2     100         99
       Vitamin B12 (mcg)          7.7     6.4    12.0     100        100

         Percent energy from fat 35.3
     Percent energy from protein 22.3
Percent energy from carbohydrate 41.9
     Percent energy from alcohol  0.5
```

Men70plus.avtot3:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           12
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              9
 [5,] NutsSeeds            4
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       10
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9594.1  9238.0  9945.5      NA         NA
             Energy (kJ)       9929.3  9558.0 10331.5      NA         NA
             Protein (g)        126.5   119.3   132.6     100        100
                 Fat (g)         80.6    74.1    86.9      NA         NA
        Carbohydrate (g)        258.7   235.9   282.7      NA         NA
              Sugars (g)        132.3   117.9   144.9      NA         NA
              Starch (g)        122.3   110.8   136.0      NA         NA
               Fibre (g)         43.1    38.7    50.3      NA        100
             Alcohol (g)          4.2     0.0     9.0      NA         NA
       Saturated fat (g)         26.9    23.7    30.3      NA         NA
 Monounsaturated fat (g)         25.7    22.9    29.0      NA         NA
 Polyunsaturated fat (g)         22.1    20.2    24.8      NA         NA
       Linoleic acid (g)         20.3    18.7    22.4      NA        100
Alpha linolenic acid (g)          1.5     1.3     1.9      NA         99
  LC n3 fatty acids (mg)        301.5    89.4   817.6      NA         75
  Vitamin A equivs (mcg)       1568.9  1214.4  2267.3     100        100
           Retinol (mcg)        592.0   487.0   703.5      NA         NA
      Provitamin A (mcg)       5833.0  3832.7  9966.9      NA         NA
            Thiamin (mg)          1.8     1.4     2.1     100        100
          Riboflavin (mg)         3.1     2.8     3.4     100        100
             Niacin (mg)         60.1    53.9    66.2     100        100
      Folate (mcg total)        655.2   533.1   755.4      NA         NA
     Folate equivs (mcg)        898.9   794.6  1033.7     100        100
          Vitamin C (mg)        172.4   123.9   233.9     100        100
          Vitamin D (mcg)         5.1     4.1     7.7      NA          0
          Vitamin E (mg)         14.1    10.6    17.1      NA        100
            Calcium (mg)       1504.6  1411.1  1628.0     100        100
               Iron (mg)         14.2    12.6    17.1     100        100
            Iodine (mcg)        279.8   252.1   328.0     100        100
          Magnesium (mg)        499.6   464.3   555.0     100        100
          Phosphorus (mg)       2247.2  2090.6  2393.7     100        100
          Potassium (mg)        5279.0  4982.5  5709.2      NA        100
             Sodium (mg)        1724.2  1447.3  2588.7      NA        100
               Zinc (mg)         16.6    14.0    27.4     100        100
        Cholesterol (mg)        267.1   182.4   468.5      NA         NA
          Selenium (mcg)         90.1    69.8   113.5     100         99
          Vitamin B6 (mg)         2.1     1.5     2.8     100         95
        Vitamin B12 (mcg)         7.7     6.1    12.5     100        100

         Percent energy from fat 30.6
     Percent energy from protein 22.1
Percent energy from carbohydrate 46.0
     Percent energy from alcohol  1.3
```

Men70plus.avtot4:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           12
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            4
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       17
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                          Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9546.7  9211.7  9911.3      NA         NA
             Energy (kJ)       9841.9  9518.8 10213.1      NA         NA
             Protein (g)        123.7   117.9   132.6     100        100
                 Fat (g)         79.7    73.9    86.1      NA         NA
        Carbohydrate (g)        260.8   245.1   282.8      NA         NA
              Sugars (g)        117.7   107.1   128.8      NA         NA
              Starch (g)        140.0   128.2   150.6      NA         NA
               Fibre (g)         38.4    34.0    46.6      NA        100
             Alcohol (g)          4.0     0.0     9.9      NA         NA
       Saturated fat (g)         26.9    24.3    29.6      NA         NA
 Monounsaturated fat (g)         26.0    23.4    29.2      NA         NA
 Polyunsaturated fat (g)         21.1    19.9    23.6      NA         NA
       Linoleic acid (g)         19.4    18.4    22.1      NA        100
Alpha linolenic acid (g)          1.3     1.2     1.6      NA         42
  LC n3 fatty acids (mg)        315.7    72.5  1016.6      NA         74
  Vitamin A equivs (mcg)       1585.3  1255.7  1951.4     100        100
           Retinol (mcg)        598.7   521.1   733.8      NA         NA
      Provitamin A (mcg)       5893.6  3911.8  7994.8      NA         NA
            Thiamin (mg)          1.9     1.6     2.2     100        100
         Riboflavin (mg)          3.2     2.9     3.5     100        100
             Niacin (mg)         59.9    55.0    66.2     100        100
      Folate (mcg total)        605.4   521.5   682.3      NA         NA
     Folate equivs (mcg)        883.7   759.4  1003.3     100        100
          Vitamin C (mg)        186.3   133.8   241.5     100        100
         Vitamin D (mcg)          5.2     4.1     8.4      NA          0
          Vitamin E (mg)         13.4    10.0    15.5      NA        100
            Calcium (mg)       1501.8  1378.9  1594.5     100        100
               Iron (mg)         14.1    12.6    16.2     100        100
            Iodine (mcg)        286.5   261.5   334.4     100        100
          Magnesium (mg)        462.2   426.2   499.4     100        100
         Phosphorus (mg)       2200.1  2102.6  2337.6     100        100
          Potassium (mg)       4944.6  4582.3  5361.8      NA        100
             Sodium (mg)       1816.6  1549.9  2714.0      NA        100
               Zinc (mg)         16.4    14.2    37.3     100        100
        Cholesterol (mg)        286.1   179.7   502.2      NA         NA
          Selenium (mcg)         90.9    68.2   119.5     100         97
         Vitamin B6 (mg)          2.0     1.6     2.9     100         88
       Vitamin B12 (mcg)          7.9     6.4    12.5     100        100

         Percent energy from fat 30.6
     Percent energy from protein 21.8
Percent energy from carbohydrate 46.4
     Percent energy from alcohol  1.2
```

Men70plus.avtot5:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            4
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       31
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9514.5  9216.3 10019.9      NA         NA
             Energy (kJ)       9816.2  9519.4 10334.3      NA         NA
             Protein (g)        128.8   120.4   135.8     100        100
                 Fat (g)         62.7    55.5    70.1      NA         NA
        Carbohydrate (g)        297.5   278.4   320.1      NA         NA
              Sugars (g)        113.4   104.3   123.7      NA         NA
              Starch (g)        182.4   166.8   201.1      NA         NA
               Fibre (g)         38.5    35.0    47.6      NA        100
             Alcohol (g)          0.0     0.0     0.0      NA         NA
       Saturated fat (g)         21.3    18.7    23.7      NA         NA
 Monounsaturated fat (g)         21.0    18.6    24.7      NA         NA
 Polyunsaturated fat (g)         15.5    14.1    18.6      NA         NA
       Linoleic acid (g)         14.1    12.8    17.2      NA         96
Alpha linolenic acid (g)          1.0     0.9     1.4      NA          2
  LC n3 fatty acids (mg)        319.8    70.6  1030.0      NA         77
  Vitamin A equivs (mcg)       1398.2  1101.3  1722.2     100        100
           Retinol (mcg)        419.5   357.0   521.6      NA         NA
      Provitamin A (mcg)       5835.0  4108.1  7803.2      NA         NA
            Thiamin (mg)          2.1     1.8     2.5     100        100
         Riboflavin (mg)          3.3     2.9     3.7     100        100
             Niacin (mg)         63.7    59.3    67.9     100        100
      Folate (mcg total)         627.8   529.0   779.9      NA         NA
     Folate equivs (mcg)        1057.8   918.9  1207.8     100        100
          Vitamin C (mg)        144.8    96.1   242.2     100        100
         Vitamin D (mcg)          4.4     2.9     7.4      NA          0
          Vitamin E (mg)         11.0     8.3    13.5      NA         82
            Calcium (mg)        1564.4  1425.7  1729.4     100        100
               Iron (mg)         15.0    13.2    17.4     100        100
            Iodine (mcg)        324.8   287.4   393.7     100        100
          Magnesium (mg)        475.1   439.3   521.9     100        100
         Phosphorus (mg)       2263.3  2097.2  2442.7     100        100
          Potassium (mg)       4591.9  4280.9  4953.1      NA        100
             Sodium (mg)       2024.7  1715.3  2810.6      NA        100
               Zinc (mg)         16.9    14.7    27.8     100        100
        Cholesterol (mg)        268.9   176.2   498.2      NA         NA
          Selenium (mcg)         99.2    74.4   140.3     100        100
         Vitamin B6 (mg)          2.0     1.4     3.2      99         83
       Vitamin B12 (mcg)          7.9     6.6    12.5     100        100

         Percent energy from fat 24.2
     Percent energy from protein 22.9
Percent energy from carbohydrate 52.9
     Percent energy from alcohol  0.0
```

Men70plus.avtot6:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            11
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       17
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           7
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             25
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9527.6  9138.2  9971.3      NA         NA
             Energy (kJ)       9799.0  9398.3 10248.1      NA         NA
             Protein (g)        128.6   121.2   137.1     100        100
                 Fat (g)         92.3    84.4    98.9      NA         NA
        Carbohydrate (g)        233.9   218.5   250.3      NA         NA
              Sugars (g)        107.4    95.4   122.1      NA         NA
              Starch (g)        124.7   113.1   137.2      NA         NA
               Fibre (g)         34.6    29.8    41.7      NA         99
             Alcohol (g)          0.0     0.0     0.0      NA         NA
       Saturated fat (g)         29.8    26.9    32.7      NA         NA
 Monounsaturated fat (g)         32.6    29.3    35.5      NA         NA
 Polyunsaturated fat (g)         23.8    21.8    26.3      NA         NA
       Linoleic acid (g)         22.2    20.5    24.5      NA        100
Alpha linolenic acid (g)          1.3     1.1     1.7      NA         21
  LC n3 fatty acids (mg)        323.3    78.9   787.1      NA         82
  Vitamin A equivs (mcg)       1510.8  1202.0  1939.1     100        100
           Retinol (mcg)        586.6   520.8   684.1      NA         NA
      Provitamin A (mcg)       5482.9  3674.3  7995.2      NA         NA
            Thiamin (mg)          1.9     1.5     2.2     100        100
         Riboflavin (mg)          3.2     2.8     3.5     100        100
             Niacin (mg)         61.6    54.4    66.9     100        100
      Folate (mcg total)        616.3   539.1   726.1      NA         NA
     Folate equivs (mcg)        909.5   806.2  1018.1     100        100
          Vitamin C (mg)        128.4    87.2   160.1     100        100
         Vitamin D (mcg)          5.6     4.5     7.6      NA          0
          Vitamin E (mg)         15.3    12.2    18.3      NA        100
            Calcium (mg)       1608.0  1458.6  1725.5     100        100
               Iron (mg)         13.4    10.8    15.6     100        100
            Iodine (mcg)        290.8   250.1   337.8     100        100
          Magnesium (mg)        478.7   439.7   529.6     100        100
         Phosphorus (mg)       2274.1  2136.3  2472.0     100        100
          Potassium (mg)       4385.3  4103.8  4765.2      NA        100
             Sodium (mg)       1891.2  1592.6  2810.6      NA        100
               Zinc (mg)         17.3    14.5    27.9     100        100
        Cholesterol (mg)        285.1   188.8   462.1      NA         NA
          Selenium (mcg)        110.5    74.0   171.1     100        100
         Vitamin B6 (mg)          2.0     1.5     2.8     100         90
       Vitamin B12 (mcg)          8.3     6.8    12.5     100        100

         Percent energy from fat 35.5
     Percent energy from protein 22.7
Percent energy from carbohydrate 41.8
     Percent energy from alcohol  0.0
```

A15.8 Sample *7-day Total Diets* for Men 70+ years higher energy level

Tallest (190cm) and highest activity (PAL 2)

Men70plus.hitot1:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           28
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            14
 [4,] Legumes              10
 [5,] NutsSeeds            7
 [6,] OtherVeg             28
 [7,] TotalFruit           21
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       18
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12224.8 11935.4 12573.4      NA         NA
             Energy (kJ)      12713.7 12416.6 13071.2      NA         NA
             Protein (g)        153.4   143.4   162.6     100        100
                 Fat (g)         92.6    85.4   101.8      NA         NA
        Carbohydrate (g)        361.4   342.1   384.8      NA         NA
              Sugars (g)        153.4   138.6   170.6      NA         NA
              Starch (g)        203.9   188.6   219.8      NA         NA
               Fibre (g)         63.6    56.3    76.1      NA        100
             Alcohol (g)          3.8     0.6     9.1      NA         NA
       Saturated fat (g)         29.3    26.2    32.7      NA         NA
 Monounsaturated fat (g)         30.6    26.9    34.7      NA         NA
 Polyunsaturated fat (g)         26.0    23.8    30.1      NA         NA
       Linoleic acid (g)         24.0    21.8    28.1      NA        100
Alpha linolenic acid (g)          1.6     1.4     2.0      NA        100
  LC n3 fatty acids (mg)        305.8    70.2   929.3      NA         71
  Vitamin A equivs (mcg)       2423.3  1889.0  3376.6     100        100
           Retinol (mcg)        607.9   538.8   714.5      NA         NA
      Provitamin A (mcg)      10854.7  7469.6 16424.9      NA         NA
            Thiamin (mg)          2.8     2.3     3.3     100        100
          Riboflavin (mg)         3.7     3.3     4.1     100        100
              Niacin (mg)        77.2    71.0    83.5     100        100
      Folate (mcg total)        872.1   801.2   967.4      NA         NA
     Folate equivs (mcg)       1258.0  1141.7  1379.7     100        100
          Vitamin C (mg)        274.2   213.1   373.9     100        100
          Vitamin D (mcg)         5.3     4.2     8.3      NA          0
           Vitamin E (mg)        17.6    14.3    21.1      NA        100
             Calcium (mg)       1756.9  1519.9  1885.2     100        100
                Iron (mg)        20.4    18.2    22.9     100        100
             Iodine (mcg)        330.7   297.6   367.9     100        100
           Magnesium (mg)        676.4   639.3   722.9     100        100
          Phosphorus (mg)       2804.6  2582.3  3038.0     100        100
           Potassium (mg)       7435.2  7124.1  8067.8      NA        100
              Sodium (mg)       2202.6  1909.3  3059.1      NA        100
                Zinc (mg)        20.8    17.5    31.3     100        100
        Cholesterol (mg)        277.0   179.3   454.6      NA         NA
           Selenium (mcg)       114.5    87.0   159.3     100        100
          Vitamin B6 (mg)         3.0     2.3     4.0     100        100
        Vitamin B12 (mcg)         7.8     6.4    10.6     100        100

         Percent energy from fat 27.6
     Percent energy from protein 21.0
Percent energy from carbohydrate 50.5
     Percent energy from alcohol  0.9
```

Men70plus.hitot2:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    32
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          10
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12336.8 11824.7 12818.6      NA         NA
             Energy (kJ)      12715.9 12186.6 13203.0      NA         NA
             Protein (g)        149.3   143.4   157.5     100        100
                 Fat (g)        103.3    97.3   111.4      NA         NA
        Carbohydrate (g)        346.9   324.4   369.2      NA         NA
              Sugars (g)        169.6   154.2   190.8      NA         NA
              Starch (g)        172.5   159.1   189.2      NA         NA
               Fibre (g)         49.0    43.7    58.5      NA        100
             Alcohol (g)          5.8     1.7    13.0      NA         NA
       Saturated fat (g)         37.2    33.6    41.0      NA         NA
 Monounsaturated fat (g)         33.4    30.3    36.6      NA         NA
 Polyunsaturated fat (g)         25.2    23.1    28.6      NA         NA
       Linoleic acid (g)         23.3    21.4    25.7      NA        100
Alpha linolenic acid (g)          1.6     1.4     2.0      NA        100
  LC n3 fatty acids (mg)        300.1    73.4  1031.2      NA         75
  Vitamin A equivs (mcg)       2443.1  1808.1  2963.1     100        100
           Retinol (mcg)        780.9   692.0   873.4      NA         NA
      Provitamin A (mcg)       9936.7  6040.4 12503.9      NA         NA
            Thiamin (mg)          2.3     1.9     2.7     100        100
         Riboflavin (mg)          4.2     3.8     4.7     100        100
             Niacin (mg)         72.8    68.4    77.8     100        100
      Folate (mcg total)        766.3   677.9   915.7      NA         NA
     Folate equivs (mcg)       1110.1   979.6  1239.2     100        100
          Vitamin C (mg)        190.3   128.9   260.8     100        100
         Vitamin D (mcg)          7.0     5.5     9.8      NA          0
          Vitamin E (mg)         16.3    12.9    20.0      NA        100
            Calcium (mg)       1952.8  1825.0  2119.8     100        100
               Iron (mg)         16.7    14.1    20.0     100        100
            Iodine (mcg)        385.8   343.5   430.1     100        100
          Magnesium (mg)        599.3   552.5   659.9     100        100
         Phosphorus (mg)       2778.3  2629.3  2927.2     100        100
          Potassium (mg)       6325.9  6009.8  6766.8      NA        100
             Sodium (mg)       2193.2  1806.8  2948.1      NA        100
               Zinc (mg)         19.4    17.2    30.9     100        100
        Cholesterol (mg)        334.7   238.8   473.5      NA         NA
          Selenium (mcg)        107.9    82.0   148.4     100        100
         Vitamin B6 (mg)          2.6     2.1     3.1     100        100
       Vitamin B12 (mcg)         10.0     8.6    12.8     100        100

         Percent energy from fat 30.7
     Percent energy from protein 20.4
Percent energy from carbohydrate 47.6
     Percent energy from alcohol  1.3
```

Men70plus.hitot3:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       21
 [3,] OrangeVeg            21
 [4,] Legumes              14
 [5,] NutsSeeds            11
 [6,] OtherVeg             28
 [7,] TotalFruit           25
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12228.8 11747.2 12625.4      NA         NA
             Energy (kJ)      12746.4 12248.7 13171.4      NA         NA
             Protein (g)        153.1   145.5   163.7     100        100
                 Fat (g)        104.0    95.7   112.0      NA         NA
        Carbohydrate (g)        330.0   305.9   351.8      NA         NA
              Sugars (g)        168.8   151.9   186.4      NA         NA
              Starch (g)        155.0   141.8   174.7      NA         NA
               Fibre (g)         65.4    61.1    71.5      NA        100
             Alcohol (g)          8.4     2.9    14.5      NA         NA
       Saturated fat (g)         32.3    29.3    36.0      NA         NA
 Monounsaturated fat (g)         35.6    30.4    39.7      NA         NA
 Polyunsaturated fat (g)         28.8    26.5    31.8      NA         NA
       Linoleic acid (g)         26.8    24.3    29.6      NA        100
Alpha linolenic acid (g)          1.7     1.5     2.1      NA        100
  LC n3 fatty acids (mg)        303.8    79.2   905.4      NA         76
  Vitamin A equivs (mcg)       3158.9  2559.9  3828.7     100        100
           Retinol (mcg)        623.2   548.2   704.1      NA         NA
      Provitamin A (mcg)      15181.3 11864.5 19259.5      NA         NA
            Thiamin (mg)          2.5     2.1     2.8     100        100
         Riboflavin (mg)          3.6     3.2     4.0     100        100
             Niacin (mg)         74.5    68.6    78.6     100        100
      Folate (mcg total)        914.9   809.5  1011.1      NA         NA
     Folate equivs (mcg)       1183.6  1053.0  1292.4     100        100
          Vitamin C (mg)        303.7   228.9   381.8     100        100
         Vitamin D (mcg)          5.2     4.1     8.1      NA          0
          Vitamin E (mg)         19.8    16.9    24.0      NA        100
            Calcium (mg)       1717.6  1581.1  1836.3     100        100
               Iron (mg)         20.3    18.0    23.4     100        100
            Iodine (mcg)        297.2   267.2   354.2     100        100
          Magnesium (mg)        693.9   641.4   753.8     100        100
         Phosphorus (mg)       2750.8  2513.9  2930.8     100        100
          Potassium (mg)       7294.6  6809.8  7771.8      NA        100
             Sodium (mg)       2017.5  1747.9  2621.4      NA        100
               Zinc (mg)         21.2    17.7    31.9     100        100
        Cholesterol (mg)        291.6   179.2   478.5      NA         NA
          Selenium (mcg)        120.2    86.7   158.7     100        100
         Vitamin B6 (mg)          3.2     2.4     4.2     100        100
       Vitamin B12 (mcg)          8.1     6.6    12.1     100        100

         Percent energy from fat 30.8
     Percent energy from protein 20.8
Percent energy from carbohydrate 46.4
     Percent energy from alcohol  1.9
```

Men70plus.hitot4:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           28
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           11
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       32
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12246.9 11910.5 12741.6      NA         NA
             Energy (kJ)      12627.6 12302.5 13148.7      NA         NA
             Protein (g)        148.0   141.6   155.6     100        100
                 Fat (g)         93.2    85.7   102.0      NA         NA
        Carbohydrate (g)        362.9   344.6   387.4      NA         NA
              Sugars (g)        126.1   111.9   141.4      NA         NA
              Starch (g)        233.2   215.0   249.8      NA         NA
               Fibre (g)         50.2    43.8    65.1      NA        100
             Alcohol (g)          5.9     0.0    12.4      NA         NA
       Saturated fat (g)         30.0    26.9    32.5      NA         NA
 Monounsaturated fat (g)         31.2    27.3    34.9      NA         NA
 Polyunsaturated fat (g)         25.4    22.8    28.7      NA         NA
       Linoleic acid (g)         23.6    21.1    26.5      NA        100
Alpha linolenic acid (g)          1.6     1.3     1.9      NA        100
  LC n3 fatty acids (mg)        278.8    88.1   959.2      NA         65
  Vitamin A equivs (mcg)       1649.5  1200.7  2169.9     100        100
           Retinol (mcg)        609.2   533.0   720.9      NA         NA
      Provitamin A (mcg)       6203.4  3501.8  9022.9      NA         NA
            Thiamin (mg)          2.6     2.1     3.0     100        100
         Riboflavin (mg)          3.4     3.0     3.9     100        100
             Niacin (mg)         75.0    67.8    81.2     100        100
      Folate (mcg total)        743.7   645.5   870.1      NA         NA
     Folate equivs (mcg)       1186.1  1043.8  1335.3     100        100
          Vitamin C (mg)        188.7   152.6   249.8     100        100
         Vitamin D (mcg)          5.2     4.1     8.5      NA          0
          Vitamin E (mg)         15.8    12.5    19.2      NA        100
            Calcium (mg)       1637.1  1495.7  1838.8     100        100
               Iron (mg)         18.5    16.0    20.6     100        100
            Iodine (mcg)        332.1   297.8   384.4     100        100
          Magnesium (mg)        601.0   564.3   652.6     100        100
         Phosphorus (mg)       2641.0  2486.2  2818.0     100        100
          Potassium (mg)       6309.5  6020.4  6728.0      NA        100
             Sodium (mg)       2365.1  2038.4  3281.0      NA        100
               Zinc (mg)         19.2    17.3    39.8     100        100
        Cholesterol (mg)        278.8   194.1   470.2      NA         NA
          Selenium (mcg)        114.2    85.3   156.0     100        100
         Vitamin B6 (mg)          2.4     1.9     3.2     100        100
       Vitamin B12 (mcg)          7.8     6.7    12.4     100        100

         Percent energy from fat 28.0
     Percent energy from protein 20.4
Percent energy from carbohydrate 50.2
     Percent energy from alcohol  1.4
```

Men70plus.hitot5:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           35
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       18
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12353.8 11988.1 12766.9      NA         NA
             Energy (kJ)      12778.5 12399.4 13222.4      NA         NA
             Protein (g)        146.3   137.6   156.3     100        100
                 Fat (g)         95.7    86.3   102.0      NA         NA
        Carbohydrate (g)        363.1   342.1   392.7      NA         NA
              Sugars (g)        154.2   138.1   173.0      NA         NA
              Starch (g)        203.6   185.6   221.5      NA         NA
               Fibre (g)         56.0    48.8    66.9      NA        100
             Alcohol (g)          7.5     3.4    13.4      NA         NA
       Saturated fat (g)         31.5    27.9    34.7      NA         NA
 Monounsaturated fat (g)         31.9    28.9    36.1      NA         NA
 Polyunsaturated fat (g)         25.4    23.0    28.0      NA         NA
       Linoleic acid (g)         23.5    21.5    25.9      NA        100
Alpha linolenic acid (g)          1.6     1.4     1.9      NA        100
  LC n3 fatty acids (mg)        273.3    90.2  1016.5      NA         69
  Vitamin A equivs (mcg)       2293.3  1837.5  2881.4     100        100
           Retinol (mcg)        631.0   559.9   712.1      NA         NA
      Provitamin A (mcg)       9939.4  7507.9 13220.1      NA         NA
            Thiamin (mg)          2.5     2.2     2.9     100        100
         Riboflavin (mg)          3.5     3.2     3.9     100        100
             Niacin (mg)         74.0    70.3    78.6     100        100
      Folate (mcg total)        762.3   671.4   894.3      NA         NA
     Folate equivs (mcg)       1098.1   977.9  1235.5     100        100
          Vitamin C (mg)        239.7   189.5   331.1     100        100
         Vitamin D (mcg)          5.3     4.1     9.1      NA          0
          Vitamin E (mg)         16.2    13.3    19.5      NA        100
            Calcium (mg)       1653.0  1483.0  1799.8     100        100
               Iron (mg)         18.1    15.9    22.3     100        100
            Iodine (mcg)        315.8   267.9   347.3     100        100
          Magnesium (mg)        629.8   589.5   679.9     100        100
         Phosphorus (mg)       2679.8  2516.2  2880.9     100        100
          Potassium (mg)       7192.2  6874.2  7634.5      NA        100
             Sodium (mg)       2151.8  1863.0  2671.5      NA        100
               Zinc (mg)         19.1    16.3    29.0     100        100
        Cholesterol (mg)        290.9   201.8   413.3      NA         NA
          Selenium (mcg)        107.7    81.1   135.6     100        100
         Vitamin B6 (mg)          2.5     2.2     3.0     100        100
       Vitamin B12 (mcg)          7.8     6.7    10.5     100        100

         Percent energy from fat 28.4
     Percent energy from protein 19.9
Percent energy from carbohydrate 49.9
     Percent energy from alcohol  1.8
```

Men70plus.hitot6:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       21
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            18
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          7
[15,] LoFatDairy           24
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12338.3 11953.2 12753.1      NA         NA
             Energy (kJ)      12769.3 12374.9 13175.9      NA         NA
             Protein (g)        156.8   150.9   165.3     100        100
                 Fat (g)        120.8   112.4   129.9      NA         NA
        Carbohydrate (g)        304.4   289.0   324.6      NA         NA
              Sugars (g)        167.2   153.7   178.7      NA         NA
              Starch (g)        133.2   120.3   151.4      NA         NA
               Fibre (g)         54.6    49.4    66.4      NA        100
             Alcohol (g)          3.9     0.0     8.6      NA         NA
       Saturated fat (g)         37.3    34.3    41.2      NA         NA
 Monounsaturated fat (g)         43.8    39.9    50.2      NA         NA
 Polyunsaturated fat (g)         31.6    28.5    36.1      NA         NA
       Linoleic acid (g)         29.7    27.0    33.6      NA        100
Alpha linolenic acid (g)          1.6     1.3     2.2      NA        100
  LC n3 fatty acids (mg)        305.5    79.6   880.7      NA         75
  Vitamin A equivs (mcg)       2521.3  1959.7  3057.3     100        100
           Retinol (mcg)        733.0   653.0   882.1      NA         NA
      Provitamin A (mcg)      10688.3  7355.5 14025.3      NA         NA
            Thiamin (mg)          2.5     2.2     2.8     100        100
          Riboflavin (mg)         4.3     3.9     4.6     100        100
             Niacin (mg)         76.8    71.8    82.1     100        100
      Folate (mcg total)        896.4   797.9   980.4      NA         NA
     Folate equivs (mcg)       1165.3  1052.9  1272.1     100        100
          Vitamin C (mg)        243.0   176.6   309.9     100        100
          Vitamin D (mcg)         6.6     5.5     8.8      NA          0
          Vitamin E (mg)         20.8    17.0    26.9      NA        100
            Calcium (mg)       1978.2  1850.1  2099.3     100        100
               Iron (mg)         18.2    15.8    21.8     100        100
            Iodine (mcg)        363.6   328.8   415.1     100        100
          Magnesium (mg)        684.9   626.7   752.2     100        100
          Phosphorus (mg)       2918.9  2762.8  3084.2     100        100
          Potassium (mg)        6594.3  6079.5  6834.3      NA        100
             Sodium (mg)        1948.8  1564.4  2748.1      NA        100
               Zinc (mg)         21.0    18.9    32.4     100        100
        Cholesterol (mg)        330.0   208.7   557.1      NA         NA
          Selenium (mcg)        135.4    86.9   188.2     100        100
          Vitamin B6 (mg)         3.1     2.6     3.9     100        100
        Vitamin B12 (mcg)         9.9     8.6    12.9     100        100

         Percent energy from fat 35.6
     Percent energy from protein 21.2
Percent energy from carbohydrate 42.2
     Percent energy from alcohol  0.9
```

A15.9 Sample 7-*day Total Diets* Women 19-30 years mid energy level

Average height (165cms); light to moderate activity (PAL 1.7)

Women19to30.avtot1:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       17
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9556.9  9152.3  9949.4      NA         NA
             Energy (kJ)       9837.0  9418.8 10234.0      NA         NA
             Protein (g)        121.7   116.1   128.5     100        100
                 Fat (g)         86.1    79.8    97.5      NA         NA
        Carbohydrate (g)        254.0   232.1   276.3      NA         NA
              Sugars (g)        121.6   106.6   139.3      NA         NA
              Starch (g)        130.8   107.5   147.4      NA         NA
               Fibre (g)         36.7    32.1    47.3      NA        100
             Alcohol (g)          1.9     0.0     8.2      NA         NA
       Saturated fat (g)         27.2    25.1    30.0      NA         NA
 Monounsaturated fat (g)         30.1    26.9    35.7      NA         NA
 Polyunsaturated fat (g)         22.8    20.0    25.2      NA         NA
       Linoleic acid (g)         21.2    18.7    23.3      NA        100
Alpha linolenic acid (g)          1.3     1.2     1.8      NA        100
  LC n3 fatty acids (mg)        215.3    71.9   674.4      NA         96
  Vitamin A equivs (mcg)       1670.9  1366.7  2017.0     100        100
           Retinol (mcg)        566.4   519.3   668.1      NA         NA
      Provitamin A (mcg)       6586.5  4687.4  8762.7      NA         NA
            Thiamin (mg)          1.9     1.6     2.2     100        100
          Riboflavin (mg)         3.1     2.9     3.5     100        100
              Niacin (mg)        61.5    55.9    66.8     100        100
      Folate (mcg total)        582.1   492.5   701.3      NA         NA
     Folate equivs (mcg)        868.6   749.1   999.9     100        100
          Vitamin C (mg)        131.7    87.1   194.8     100        100
          Vitamin D (mcg)         4.7     4.0     6.9      NA         16
           Vitamin E (mg)        14.4    10.7    18.9      NA        100
             Calcium (mg)       1412.7  1291.4  1584.6     100        100
                Iron (mg)        13.5    11.5    16.0     100          0
             Iodine (mcg)        271.5   236.5   310.3     100        100
           Magnesium (mg)        463.9   423.9   503.3     100        100
          Phosphorus (mg)       2142.8  2015.3  2245.3     100        100
           Potassium (mg)       4308.4  3982.0  4630.5      NA        100
              Sodium (mg)       1870.1  1438.8  3220.8      NA        100
                Zinc (mg)        16.3    14.2    26.4     100        100
        Cholesterol (mg)        255.1   181.1   508.9      NA         NA
           Selenium (mcg)        92.1    72.6   125.0     100        100
          Vitamin B6 (mg)         2.0     1.6     2.7     100        100
        Vitamin B12 (mcg)         7.6     6.6    11.4     100        100

         Percent energy from fat 33.0
     Percent energy from protein 21.4
Percent energy from carbohydrate 45.0
     Percent energy from alcohol  0.6
```

Women19to30.avtot2:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            7
 [6,] OtherVeg             28
 [7,] TotalFruit           21
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9546.7  9174.0 10108.6      NA         NA
             Energy (kJ)       9875.5  9495.6 10459.4      NA         NA
             Protein (g)        121.7   115.4   133.9     100        100
                 Fat (g)         85.2    78.6    94.8      NA         NA
        Carbohydrate (g)        256.9   238.4   272.1      NA         NA
              Sugars (g)        134.4   118.3   149.5      NA         NA
              Starch (g)        120.5   108.0   135.8      NA         NA
               Fibre (g)         42.5    38.0    51.3      NA        100
             Alcohol (g)          0.8     0.0     8.3      NA         NA
       Saturated fat (g)         26.5    23.8    29.5      NA         NA
 Monounsaturated fat (g)         30.0    26.3    36.5      NA         NA
 Polyunsaturated fat (g)         22.8    20.0    26.7      NA         NA
       Linoleic acid (g)         21.2    18.8    24.9      NA        100
Alpha linolenic acid (g)          1.3     1.2     1.6      NA        100
  LC n3 fatty acids (mg)        237.2    69.3   853.1      NA         93
  Vitamin A equivs (mcg)       1825.7  1486.2  2166.3     100        100
           Retinol (mcg)        556.3   504.5   640.3      NA         NA
      Provitamin A (mcg)       7565.1  5526.2  9453.4      NA         NA
            Thiamin (mg)          1.9     1.7     2.2     100        100
          Riboflavin (mg)         3.2     2.8     3.6     100        100
             Niacin (mg)         62.7    56.4    66.9     100        100
      Folate (mcg total)        643.1   573.3   752.1      NA         NA
     Folate equivs (mcg)        909.8   777.6  1026.2     100        100
          Vitamin C (mg)        177.6   122.8   252.2     100        100
          Vitamin D (mcg)         4.7     3.8     8.3      NA         30
           Vitamin E (mg)        15.3    12.3    19.6      NA        100
             Calcium (mg)       1418.0  1261.0  1560.5     100        100
                Iron (mg)        14.3    12.9    16.9     100          0
             Iodine (mcg)        263.9   232.3   307.6     100        100
           Magnesium (mg)        490.9   450.0   524.4     100        100
          Phosphorus (mg)       2166.2  2058.2  2380.5     100        100
           Potassium (mg)       4902.4  4591.3  5211.3      NA        100
              Sodium (mg)       1710.5  1479.2  2859.6      NA        100
                Zinc (mg)        16.3    14.1    26.8     100        100
        Cholesterol (mg)        248.6   177.9   398.7      NA         NA
          Selenium (mcg)         93.3    71.2   134.3     100        100
          Vitamin B6 (mg)         2.4     1.8     3.9     100        100
        Vitamin B12 (mcg)         7.5     6.3    11.3     100        100

         Percent energy from fat 32.6
     Percent energy from protein 21.4
Percent energy from carbohydrate 45.8
     Percent energy from alcohol  0.3
```

Women19to30.avtot3:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              9
 [5,] NutsSeeds            4
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           18
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9485.0  9121.0  9978.6      NA         NA
             Energy (kJ)       9818.5  9432.8 10306.1      NA         NA
             Protein (g)        120.6   112.2   134.7     100        100
                 Fat (g)         81.0    72.3    90.1      NA         NA
        Carbohydrate (g)        261.7   238.0   281.6      NA         NA
              Sugars (g)        131.6   115.0   148.6      NA         NA
              Starch (g)        128.3   110.7   148.1      NA         NA
               Fibre (g)         43.4    37.3    54.8      NA        100
             Alcohol (g)          2.0     0.0    10.6      NA         NA
       Saturated fat (g)         26.1    22.9    30.1      NA         NA
 Monounsaturated fat (g)         26.8    23.1    29.9      NA         NA
 Polyunsaturated fat (g)         22.2    20.2    25.4      NA         NA
       Linoleic acid (g)         20.5    18.5    23.3      NA        100
Alpha linolenic acid (g)          1.5     1.3     2.0      NA        100
  LC n3 fatty acids (mg)        224.2    58.8   516.8      NA         94
  Vitamin A equivs (mcg)       1686.1  1399.7  2027.2     100        100
           Retinol (mcg)        550.5   490.7   651.8      NA         NA
      Provitamin A (mcg)       6768.0  5262.7  8326.7      NA         NA
            Thiamin (mg)          1.9     1.6     2.2     100        100
         Riboflavin (mg)          2.9     2.6     3.4     100        100
             Niacin (mg)         59.0    52.1    63.2     100        100
      Folate (mcg total)        627.9   564.0   750.7      NA         NA
     Folate equivs (mcg)        896.3   786.9  1002.3     100        100
          Vitamin C (mg)        155.5    98.5   228.4     100        100
         Vitamin D (mcg)          4.6     3.5     6.7      NA         24
          Vitamin E (mg)         14.2    11.1    17.5      NA        100
            Calcium (mg)       1334.6  1211.8  1479.9     100        100
               Iron (mg)         14.9    13.2    17.8     100          0
            Iodine (mcg)        241.8   217.0   285.8     100        100
          Magnesium (mg)        477.1   439.1   527.0     100        100
         Phosphorus (mg)       2072.3  1942.8  2244.9     100        100
          Potassium (mg)       4545.9  4247.8  5050.0      NA        100
             Sodium (mg)       1821.4  1491.4  2733.2      NA        100
               Zinc (mg)         16.1    13.8    27.0     100        100
        Cholesterol (mg)        249.3   151.7   399.7      NA         NA
          Selenium (mcg)         91.1    68.6   126.1     100        100
         Vitamin B6 (mg)          2.1     1.7     3.8     100        100
       Vitamin B12 (mcg)          7.0     5.8     9.8     100        100

         Percent energy from fat 31.1
     Percent energy from protein 21.3
Percent energy from carbohydrate 47.0
     Percent energy from alcohol  0.6
```

Women19to30.avtot4:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           12
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            4
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       17
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9569.9  9216.2 10069.8      NA         NA
             Energy (kJ)       9878.2  9502.5 10380.7      NA         NA
             Protein (g)        123.3   116.6   130.3     100        100
                 Fat (g)         80.3    71.6    90.8      NA         NA
        Carbohydrate (g)        265.8   247.1   287.0      NA         NA
              Sugars (g)        122.6   108.1   134.3      NA         NA
              Starch (g)        141.6   124.4   154.9      NA         NA
               Fibre (g)         42.1    35.0    56.4      NA        100
             Alcohol (g)          1.6     0.0     6.7      NA         NA
       Saturated fat (g)         26.6    22.7    30.1      NA         NA
 Monounsaturated fat (g)         26.8    23.3    31.1      NA         NA
 Polyunsaturated fat (g)         21.3    19.1    25.6      NA         NA
       Linoleic acid (g)         19.7    17.6    23.5      NA        100
Alpha linolenic acid (g)          1.3     1.2     1.7      NA        100
  LC n3 fatty acids (mg)        226.9    71.1   862.1      NA         91
  Vitamin A equivs (mcg)       1716.3  1214.7  2031.1     100        100
           Retinol (mcg)        563.8   507.5   652.7      NA         NA
      Provitamin A (mcg)       6860.9  4074.0  8820.0      NA         NA
            Thiamin (mg)          1.9     1.6     2.2     100        100
         Riboflavin (mg)          3.2     2.8     3.5     100        100
             Niacin (mg)         62.3    56.7    67.8     100        100
      Folate (mcg total)         608.0   499.6   709.3      NA         NA
     Folate equivs (mcg)         898.3   768.5  1045.2     100        100
          Vitamin C (mg)         179.7   132.5   232.6     100        100
         Vitamin D (mcg)           4.7     4.0     7.3      NA         24
          Vitamin E (mg)          13.3    10.4    16.3      NA        100
            Calcium (mg)       1423.2  1296.0  1539.9     100        100
               Iron (mg)          14.2    12.5    16.8     100          0
            Iodine (mcg)         271.8   237.0   324.2     100        100
          Magnesium (mg)         471.0   435.9   528.6     100        100
         Phosphorus (mg)        2178.6  2042.2  2364.6     100        100
          Potassium (mg)        4891.5  4617.3  5179.4      NA        100
             Sodium (mg)        1856.6  1522.6  2687.7      NA        100
               Zinc (mg)          16.9    14.4    26.4     100        100
        Cholesterol (mg)         247.5   180.9   395.0      NA         NA
          Selenium (mcg)          89.9    69.4   111.5     100        100
         Vitamin B6 (mg)           2.1     1.6     2.9     100        100
       Vitamin B12 (mcg)           7.7     6.5    11.6     100        100

         Percent energy from fat 30.7
     Percent energy from protein 21.7
Percent energy from carbohydrate 47.1
     Percent energy from alcohol  0.5
```

Women19to30.avtot5:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            4
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       31
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           17
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9542.9  9114.0 10060.9      NA         NA
             Energy (kJ)       9855.7  9419.0 10377.1      NA         NA
             Protein (g)        123.2   115.9   132.1     100        100
                 Fat (g)         65.2    58.5    74.6      NA         NA
        Carbohydrate (g)        298.3   280.8   320.2      NA         NA
              Sugars (g)        111.1    97.6   123.7      NA         NA
              Starch (g)        185.8   166.6   219.2      NA         NA
               Fibre (g)         40.9    35.5    51.3      NA        100
             Alcohol (g)          1.0     0.0     8.3      NA         NA
       Saturated fat (g)         21.6    19.5    24.5      NA         NA
 Monounsaturated fat (g)         22.9    18.7    27.9      NA         NA
 Polyunsaturated fat (g)         15.5    13.7    18.0      NA         NA
       Linoleic acid (g)         14.2    12.3    16.3      NA        100
Alpha linolenic acid (g)          1.1     0.9     1.5      NA        100
  LC n3 fatty acids (mg)        227.4    75.3   806.4      NA         94
  Vitamin A equivs (mcg)       1455.5  1126.7  1781.6     100        100
           Retinol (mcg)        382.9   334.6   479.4      NA         NA
      Provitamin A (mcg)       6390.2  4631.5  8369.1      NA         NA
            Thiamin (mg)          2.1     1.9     2.5     100        100
         Riboflavin (mg)          3.0     2.5     3.3     100        100
             Niacin (mg)         63.5    57.7    69.3     100        100
      Folate (mcg total)        585.3   504.8   683.9      NA         NA
     Folate equivs (mcg)       1016.8   890.7  1172.2     100        100
          Vitamin C (mg)        127.2    98.4   170.7     100        100
         Vitamin D (mcg)          3.7     2.6     5.5      NA          5
          Vitamin E (mg)         10.5     8.1    13.4      NA        100
            Calcium (mg)       1321.3  1185.3  1508.0     100        100
               Iron (mg)         15.1    13.7    18.3     100          2
            Iodine (mcg)        277.5   234.6   339.6     100        100
          Magnesium (mg)        466.4   428.9   511.3     100        100
         Phosphorus (mg)       2102.1  1983.2  2242.5     100        100
          Potassium (mg)       4198.9  3835.4  4436.9      NA        100
             Sodium (mg)       1986.3  1622.4  2909.4      NA        100
               Zinc (mg)         16.4    14.4    26.8     100        100
        Cholesterol (mg)        241.0   160.3   391.9      NA         NA
          Selenium (mcg)         94.8    71.7   118.6     100        100
         Vitamin B6 (mg)          1.9     1.5     2.6     100        100
       Vitamin B12 (mcg)          6.9     5.8    11.3     100        100

         Percent energy from fat 25.1
     Percent energy from protein 21.8
Percent energy from carbohydrate 52.9
     Percent energy from alcohol  0.3
```

Women19to30.avtot6:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           12
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              9
 [5,] NutsSeeds            4
 [6,] OtherVeg             21
 [7,] TotalFruit           17
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       17
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9475.9  9097.0  9875.7      NA         NA
             Energy (kJ)       9840.0  9442.0 10244.7      NA         NA
             Protein (g)        128.2   122.6   138.0     100        100
                 Fat (g)         78.1    71.0    84.9      NA         NA
        Carbohydrate (g)        262.5   248.3   281.0      NA         NA
              Sugars (g)        118.7   109.0   128.9      NA         NA
              Starch (g)        142.5   129.0   163.6      NA         NA
               Fibre (g)         49.8    42.0    60.7      NA        100
             Alcohol (g)          0.0     0.0     0.0      NA         NA
       Saturated fat (g)         24.4    22.2    27.0      NA         NA
 Monounsaturated fat (g)         25.7    22.5    30.4      NA         NA
 Polyunsaturated fat (g)         22.2    19.9    24.8      NA         NA
       Linoleic acid (g)         20.5    18.2    22.8      NA        100
Alpha linolenic acid (g)          1.4     1.2     1.8      NA        100
  LC n3 fatty acids (mg)        233.9    76.6   903.1      NA         97
  Vitamin A equivs (mcg)       1804.2  1498.5  2142.5     100        100
           Retinol (mcg)        545.0   489.7   603.0      NA         NA
      Provitamin A (mcg)       7506.7  5597.5  9541.6      NA         NA
            Thiamin (mg)          2.0     1.7     2.4     100        100
          Riboflavin (mg)         3.2     2.9     3.6     100        100
              Niacin (mg)        63.4    58.1    69.4     100        100
      Folate (mcg total)        683.7   594.3   830.7      NA         NA
     Folate equivs (mcg)        968.5   802.3  1146.7     100        100
          Vitamin C (mg)        192.9   150.9   255.2     100        100
          Vitamin D (mcg)         4.7     3.8     7.0      NA         29
           Vitamin E (mg)        14.0    11.6    17.5      NA        100
             Calcium (mg)       1465.0  1317.2  1603.7     100        100
                Iron (mg)        16.0    14.1    17.9     100          0
             Iodine (mcg)        264.9   236.5   304.6     100        100
           Magnesium (mg)        513.3   479.4   576.6     100        100
          Phosphorus (mg)       2260.7  2097.8  2405.0     100        100
           Potassium (mg)       5265.6  4912.6  5590.5      NA        100
              Sodium (mg)       1728.0  1483.5  2611.6      NA        100
                Zinc (mg)        17.1    15.0    27.5     100        100
        Cholesterol (mg)        242.9   157.7   369.1      NA         NA
           Selenium (mcg)        93.1    73.8   132.5     100        100
          Vitamin B6 (mg)         2.4     1.8     3.4     100        100
        Vitamin B12 (mcg)         7.5     6.5    10.3     100        100

         Percent energy from fat 30.0
     Percent energy from protein 22.6
Percent energy from carbohydrate 47.4
     Percent energy from alcohol  0.0
```

A15.10 Sample *7-day Total Diets* Women 19-30 years higher energy level

Tallest (180cm) and high acivity (PAL 2)

Women19to30.hitot1:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            14
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               21
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12476.0 12067.5 13036.5      NA         NA
             Energy (kJ)      12901.6 12459.5 13436.4      NA         NA
             Protein (g)        140.8   132.7   150.0     100        100
                 Fat (g)        116.1   103.1   129.2      NA         NA
        Carbohydrate (g)        336.1   318.6   361.2      NA         NA
              Sugars (g)        152.9   136.2   178.2      NA         NA
              Starch (g)        180.6   166.7   193.3      NA         NA
               Fibre (g)         57.6    47.9    74.8      NA        100
             Alcohol (g)          5.7     0.0    23.1      NA         NA
       Saturated fat (g)         34.8    29.5    39.6      NA         NA
 Monounsaturated fat (g)         43.2    36.4    48.3      NA         NA
 Polyunsaturated fat (g)         30.4    27.8    34.5      NA         NA
       Linoleic acid (g)         28.4    25.8    31.8      NA        100
Alpha linolenic acid (g)          1.6     1.4     2.2      NA        100
  LC n3 fatty acids (mg)        225.3    89.0   661.4      NA         98
  Vitamin A equivs (mcg)       2581.6  2145.7  3222.7     100        100
           Retinol (mcg)        589.4   518.0   674.8      NA         NA
      Provitamin A (mcg)      11897.4  9594.8 15540.9      NA         NA
            Thiamin (mg)          2.7     2.4     3.0     100        100
         Riboflavin (mg)          3.4     3.0     3.8     100        100
             Niacin (mg)         75.3    68.4    83.4     100        100
      Folate (mcg total)        722.5   630.8   827.9      NA         NA
     Folate equivs (mcg)       1064.2   952.8  1204.3     100        100
          Vitamin C (mg)        189.1   142.9   244.8     100        100
         Vitamin D (mcg)          4.6     3.8     7.1      NA         20
          Vitamin E (mg)         19.4    15.9    23.7      NA        100
            Calcium (mg)       1398.5  1278.9  1597.7     100        100
               Iron (mg)         19.8    18.0    22.4     100         98
            Iodine (mcg)        252.8   216.8   291.0     100        100
          Magnesium (mg)        643.8   592.2   699.9     100        100
         Phosphorus (mg)       2523.7  2380.0  2688.8     100        100
          Potassium (mg)       5648.1  5330.1  6068.0      NA        100
             Sodium (mg)       2386.2  2016.0  3753.7      NA        100
               Zinc (mg)         19.4    17.2    30.3     100        100
        Cholesterol (mg)        274.1   203.0   428.8      NA         NA
          Selenium (mcg)        115.2    92.1   148.7     100        100
         Vitamin B6 (mg)          2.7     2.2     3.6     100        100
       Vitamin B12 (mcg)          6.4     5.0     9.3     100        100

         Percent energy from fat 33.9
     Percent energy from protein 18.9
Percent energy from carbohydrate 45.8
     Percent energy from alcohol  1.3
```

Women19to30.hitot2:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            14
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12413.4 12019.7 12937.9      NA         NA
             Energy (kJ)      12862.3 12445.9 13392.4      NA         NA
             Protein (g)        144.3   136.2   149.4     100        100
                 Fat (g)        111.5   102.4   119.7      NA         NA
        Carbohydrate (g)        341.9   316.8   370.0      NA         NA
              Sugars (g)        147.6   126.0   168.6      NA         NA
              Starch (g)        191.7   170.5   207.9      NA         NA
               Fibre (g)         60.6    52.5    73.7      NA        100
             Alcohol (g)          3.6     0.0    14.0      NA         NA
       Saturated fat (g)         31.7    28.6    35.2      NA         NA
 Monounsaturated fat (g)         41.7    36.9    49.5      NA         NA
 Polyunsaturated fat (g)         30.6    27.8    34.6      NA         NA
       Linoleic acid (g)         28.6    26.0    32.1      NA        100
Alpha linolenic acid (g)          1.7     1.4     2.3      NA        100
  LC n3 fatty acids (mg)        212.4    78.6   583.9      NA         96
  Vitamin A equivs (mcg)       1744.6  1402.9  2093.8     100        100
           Retinol (mcg)        549.1   488.8   639.0      NA         NA
      Provitamin A (mcg)       7123.6  4890.8  9024.9      NA         NA
            Thiamin (mg)          2.6     2.4     3.0     100        100
         Riboflavin (mg)          3.1     2.7     3.7     100        100
             Niacin (mg)         73.8    68.0    78.9     100        100
      Folate (mcg total)        770.9   604.8   896.6      NA         NA
     Folate equivs (mcg)       1129.0   933.4  1249.4     100        100
          Vitamin C (mg)        193.8   148.4   270.0     100        100
         Vitamin D (mcg)          4.4     3.5     6.6      NA         18
          Vitamin E (mg)         19.9    16.7    23.8      NA        100
            Calcium (mg)       1369.4  1210.7  1532.5     100        100
               Iron (mg)         20.3    17.8    23.0     100         98
            Iodine (mcg)        248.4   214.2   301.1     100        100
          Magnesium (mg)        657.7   609.8   718.7     100        100
         Phosphorus (mg)       2494.1  2330.3  2642.5     100        100
          Potassium (mg)       5690.8  5365.5  6161.3      NA        100
             Sodium (mg)       2238.5  1921.1  3203.6      NA        100
               Zinc (mg)         19.5    17.7    29.8     100        100
        Cholesterol (mg)        250.8   182.3   462.8      NA         NA
          Selenium (mcg)        117.1    92.1   152.0     100        100
         Vitamin B6 (mg)          2.7     2.2     3.8     100        100
       Vitamin B12 (mcg)          6.2     5.3     9.1     100        100

         Percent energy from fat 32.7
     Percent energy from protein 19.5
Percent energy from carbohydrate 47.0
     Percent energy from alcohol  0.8
```

Women19to30.hitot3:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           21
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12434.6 12030.0 13035.6      NA         NA
             Energy (kJ)      12893.2 12501.3 13496.3      NA         NA
             Protein (g)        146.5   138.9   157.1     100        100
                 Fat (g)         99.2    90.5   109.2      NA         NA
        Carbohydrate (g)        367.0   348.7   387.1      NA         NA
              Sugars (g)        138.0   121.0   158.9      NA         NA
              Starch (g)        226.7   209.5   244.6      NA         NA
               Fibre (g)         64.6    53.6    82.2      NA        100
             Alcohol (g)          3.9     0.0    12.8      NA         NA
       Saturated fat (g)         30.4    27.5    34.4      NA         NA
 Monounsaturated fat (g)         34.3    30.0    41.3      NA         NA
 Polyunsaturated fat (g)         27.3    24.3    30.2      NA         NA
       Linoleic acid (g)         25.3    22.5    28.2      NA        100
Alpha linolenic acid (g)          1.7     1.5     2.2      NA        100
  LC n3 fatty acids (mg)        236.6    85.9   725.1      NA         98
  Vitamin A equivs (mcg)       1762.5  1397.0  2098.8     100        100
           Retinol (mcg)        564.8   497.7   690.5      NA         NA
      Provitamin A (mcg)       7137.8  5238.1  8958.4      NA         NA
            Thiamin (mg)          2.8     2.5     3.2     100        100
         Riboflavin (mg)          3.4     2.9     3.9     100        100
             Niacin (mg)         76.5    70.4    82.7     100        100
      Folate (mcg total)        766.6   689.3   890.2      NA         NA
     Folate equivs (mcg)       1203.3  1061.1  1373.7     100        100
          Vitamin C (mg)        186.8   146.5   233.5     100        100
         Vitamin D (mcg)          4.6     3.7     7.2      NA         24
          Vitamin E (mg)         17.1    14.6    20.5      NA        100
            Calcium (mg)       1443.3  1313.1  1606.5     100        100
               Iron (mg)         21.8    19.4    23.9     100        100
            Iodine (mcg)        278.6   250.2   333.4     100        100
          Magnesium (mg)        653.7   612.6   708.7     100        100
         Phosphorus (mg)       2590.2  2418.8  2769.2     100        100
          Potassium (mg)       5908.4  5583.3  6201.7      NA        100
             Sodium (mg)       2496.9  2077.8  3329.4      NA        100
               Zinc (mg)         20.3    18.1    30.4     100        100
        Cholesterol (mg)        261.1   162.0   435.8      NA         NA
          Selenium (mg)         116.7    91.4   152.4     100        100
         Vitamin B6 (mg)          2.7     2.1     4.0     100        100
       Vitamin B12 (mg)           6.6     5.4    11.3     100        100

         Percent energy from fat 29.1
     Percent energy from protein 19.8
Percent energy from carbohydrate 50.2
     Percent energy from alcohol  0.9
```

Women19to30.hitot4:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       18
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12426.6 12043.5 12899.3      NA         NA
             Energy (kJ)      12916.7 12520.1 13403.2      NA         NA
             Protein (g)        146.1   137.5   156.0     100        100
                 Fat (g)         99.8    89.7   110.8      NA         NA
        Carbohydrate (g)        366.5   347.1   387.9      NA         NA
              Sugars (g)        155.2   138.8   169.9      NA         NA
              Starch (g)        208.5   186.8   231.2      NA         NA
               Fibre (g)         66.2    57.8    87.2      NA        100
             Alcohol (g)          3.9     0.0    11.7      NA         NA
       Saturated fat (g)         30.9    27.2    37.1      NA         NA
 Monounsaturated fat (g)         34.2    29.4    38.5      NA         NA
 Polyunsaturated fat (g)         27.4    24.3    30.2      NA         NA
       Linoleic acid (g)         25.3    22.6    27.9      NA        100
Alpha linolenic acid (g)          1.8     1.5     2.2      NA        100
  LC n3 fatty acids (mg)        230.1    78.7   560.5      NA         98
  Vitamin A equivs (mcg)       1850.5  1493.5  2237.2     100        100
           Retinol (mcg)        569.0   512.6   689.4      NA         NA
      Provitamin A (mcg)       7643.0  5738.2  9947.0      NA         NA
            Thiamin (mg)          2.8     2.5     3.3     100        100
          Riboflavin (mg)         3.5     3.1     3.9     100        100
              Niacin (mg)        75.5    69.8    80.6     100        100
      Folate (mcg total)        825.0   736.4   963.9      NA         NA
     Folate equivs (mcg)       1238.0  1072.3  1402.4     100        100
          Vitamin C (mg)        225.2   164.6   277.7     100        100
          Vitamin D (mcg)         4.7     3.7     6.9      NA         28
          Vitamin E (mg)         17.5    14.8    21.5      NA        100
            Calcium (mg)       1469.9  1331.4  1596.2     100        100
               Iron (mg)         22.2    20.1    25.0     100        100
            Iodine (mcg)        269.3   233.1   309.0     100        100
          Magnesium (mg)        673.8   633.6   718.9     100        100
          Phosphorus (mg)       2585.3  2460.9  2742.2     100        100
           Potassium (mg)       5982.3  5502.0  6476.5      NA        100
              Sodium (mg)       2409.6  1989.8  3429.2      NA        100
                Zinc (mg)         20.2    17.9    30.6     100        100
        Cholesterol (mg)        264.2   169.6   548.4      NA         NA
          Selenium (mcg)        111.5    91.6   140.2     100        100
          Vitamin B6 (mg)         2.9     2.2     3.7     100        100
       Vitamin B12 (mcg)          6.2     5.2     9.3     100        100

         Percent energy from fat 29.2
     Percent energy from protein 19.7
Percent energy from carbohydrate 50.3
     Percent energy from alcohol  0.9
```

Women19to30.hitot5:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          7
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               17.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12614.4 12189.5 13090.3      NA         NA
             Energy (kJ)      12998.0 12570.3 13487.1      NA         NA
             Protein (g)        143.9   135.5   152.6     100        100
                 Fat (g)        107.0    99.0   120.4      NA         NA
        Carbohydrate (g)        362.6   344.7   384.2      NA         NA
              Sugars (g)        152.1   131.8   173.9      NA         NA
              Starch (g)        208.0   184.5   227.2      NA         NA
               Fibre (g)         52.2    45.0    64.6      NA        100
             Alcohol (g)          5.0     0.0    16.0      NA         NA
       Saturated fat (g)         36.6    32.7    41.7      NA         NA
 Monounsaturated fat (g)         36.8    32.7    43.4      NA         NA
 Polyunsaturated fat (g)         26.0    23.7    29.2      NA         NA
       Linoleic acid (g)         24.1    21.9    26.6      NA        100
Alpha linolenic acid (g)          1.6     1.5     2.0      NA        100
  LC n3 fatty acids (mg)        230.7    79.3  1024.7      NA         96
  Vitamin A equivs (mcg)       1893.4  1560.5  2255.2     100        100
           Retinol (mcg)        695.5   625.8   773.4      NA         NA
      Provitamin A (mcg)       7140.3  4878.0  9314.6      NA         NA
            Thiamin (mg)          2.4     2.1     2.9     100        100
          Riboflavin (mg)         3.6     3.2     4.0     100        100
             Niacin (mg)         73.8    67.0    80.3     100        100
      Folate (mcg total)        683.4   608.8   784.8      NA         NA
     Folate equivs (mcg)       1095.6   958.3  1215.4     100        100
          Vitamin C (mg)        173.0   122.8   228.1     100        100
          Vitamin D (mcg)         5.8     4.9     8.9      NA         98
          Vitamin E (mg)         16.2    12.9    20.0      NA        100
            Calcium (mg)       1555.7  1439.7  1760.0     100        100
               Iron (mg)         18.4    16.6    21.2     100         67
            Iodine (mcg)        316.8   287.6   354.0     100        100
          Magnesium (mg)        585.3   546.1   638.9     100        100
          Phosphorus (mg)       2540.5  2387.9  2700.7     100        100
          Potassium (mg)        5489.7  5223.0  5930.9      NA        100
             Sodium (mg)        2550.1  2169.0  3413.6      NA        100
               Zinc (mg)         18.8    16.7    29.8     100        100
        Cholesterol (mg)        302.3   212.4   436.1      NA         NA
          Selenium (mcg)        114.1    86.3   148.2     100        100
          Vitamin B6 (mg)         2.6     2.1     3.5     100        100
        Vitamin B12 (mcg)         8.1     6.7    12.2     100        100

         Percent energy from fat 31.1
     Percent energy from protein 19.2
Percent energy from carbohydrate 48.6
     Percent energy from alcohol  1.1
```

Women19to30.hitot6:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             28
 [7,] TotalFruit           28
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12499.4 11904.0 13073.7      NA         NA
             Energy (kJ)      13015.0 12404.1 13605.4      NA         NA
             Protein (g)        143.7   137.9   151.9     100        100
                 Fat (g)         96.8    86.8   105.7      NA         NA
        Carbohydrate (g)        381.6   361.6   400.0      NA         NA
              Sugars (g)        168.0   151.5   182.6      NA         NA
              Starch (g)        210.7   192.9   229.3      NA         NA
               Fibre (g)         68.8    60.9    82.0      NA        100
             Alcohol (g)          2.7     0.0    12.2      NA         NA
       Saturated fat (g)         29.4    25.7    32.7      NA         NA
 Monounsaturated fat (g)         33.6    29.6    41.5      NA         NA
 Polyunsaturated fat (g)         26.6    24.4    30.0      NA         NA
       Linoleic acid (g)         24.6    22.6    27.8      NA        100
Alpha linolenic acid (g)          1.6     1.4     2.0      NA        100
  LC n3 fatty acids (mg)        248.8    82.3   781.4      NA         98
  Vitamin A equivs (mcg)       2688.6  2053.3  3208.9     100        100
           Retinol (mcg)        552.6   497.1   654.1      NA         NA
      Provitamin A (mcg)      12772.0  9045.4 15889.9      NA         NA
            Thiamin (mg)          2.9     2.6     3.4     100        100
         Riboflavin (mg)          3.5     3.2     3.9     100        100
             Niacin (mg)         76.5    71.9    82.5     100        100
      Folate (mcg total)        832.8   694.5   950.1      NA         NA
     Folate equivs (mcg)       1269.2  1095.8  1390.2     100        100
          Vitamin C (mg)        263.1   206.9   344.9     100        100
         Vitamin D (mcg)          4.6     3.6     6.5      NA         26
          Vitamin E (mg)         18.3    14.5    22.5      NA        100
            Calcium (mg)       1476.6  1337.3  1627.2     100        100
               Iron (mg)         21.8    20.0    25.1     100        100
            Iodine (mcg)        274.5   248.8   337.7     100        100
          Magnesium (mg)        670.7   612.8   719.0     100        100
         Phosphorus (mg)       2576.6  2433.2  2753.9     100        100
          Potassium (mg)       6457.2  6161.7  6783.4      NA        100
             Sodium (mg)       2369.7  2053.9  3294.9      NA        100
               Zinc (mg)         19.7    17.9    29.9     100        100
        Cholesterol (mg)        251.9   157.9   388.4      NA         NA
          Selenium (mcg)        110.7    92.3   132.5     100        100
         Vitamin B6 (mg)          3.1     2.3     4.7     100        100
       Vitamin B12 (mcg)          6.3     5.3    11.5     100        100

         Percent energy from fat 28.1
     Percent energy from protein 19.2
Percent energy from carbohydrate 52.0
     Percent energy from alcohol  0.6
```

A15.11 Sample *7-day Total Diets* Women 31-50 years mid energy level

Average height (165cms); light to moderate activity (PAL 1.7

Women31to50.avtot1:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            4
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       17
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           18
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9185.8  8716.7  9701.5      NA         NA
             Energy (kJ)       9460.7  8976.4  9983.5      NA         NA
             Protein (g)        113.8   105.8   124.9     100        100
                 Fat (g)         79.4    70.5    87.6      NA         NA
        Carbohydrate (g)        253.1   235.6   274.2      NA         NA
              Sugars (g)        110.4    97.2   122.4      NA         NA
              Starch (g)        141.1   123.1   166.9      NA         NA
               Fibre (g)         35.3    30.6    41.5      NA        100
             Alcohol (g)          2.3     0.0     9.9      NA         NA
       Saturated fat (g)         25.8    22.3    29.4      NA         NA
 Monounsaturated fat (g)         26.5    22.8    30.9      NA         NA
 Polyunsaturated fat (g)         21.5    19.7    24.1      NA         NA
       Linoleic acid (g)         19.8    18.1    22.1      NA        100
Alpha linolenic acid (g)          1.3     1.2     1.8      NA        100
  LC n3 fatty acids (mg)        264.7    85.3   778.3      NA         96
  Vitamin A equivs (mcg)       1646.3  1306.1  1988.6     100        100
           Retinol (mcg)        558.1   480.3   705.1      NA         NA
      Provitamin A (mcg)       6471.4  4263.0  8391.0      NA         NA
            Thiamin (mg)          1.7     1.4     2.1     100        100
         Riboflavin (mg)          2.8     2.4     3.3     100        100
             Niacin (mg)         55.4    50.1    60.0     100        100
      Folate (mcg total)        521.2   406.7   639.6      NA         NA
     Folate equivs (mcg)        779.5   658.4   918.0     100        100
          Vitamin C (mg)        126.0    86.8   175.3     100        100
         Vitamin D (mcg)          4.7     3.5     6.7      NA         30
          Vitamin E (mg)         13.8    11.0    17.0      NA        100
            Calcium (mg)       1271.5  1091.4  1447.7     100        100
               Iron (mg)         13.1    11.4    14.9     100          0
            Iodine (mcg)        241.9   204.8   301.2     100        100
          Magnesium (mg)        425.6   390.3   485.8     100        100
         Phosphorus (mg)       1977.8  1847.6  2130.9     100        100
          Potassium (mg)       4061.0  3689.4  4421.1      NA        100
             Sodium (mg)       1738.6  1368.8  2681.6      NA        100
               Zinc (mg)         15.4    13.2    26.3     100        100
        Cholesterol (mg)        272.0   172.6   463.7      NA         NA
          Selenium (mcg)         88.4    68.0   136.4     100        100
         Vitamin B6 (mg)          1.9     1.4     2.7     100        100
       Vitamin B12 (mcg)          7.3     6.1    12.3     100        100

         Percent energy from fat 31.7
     Percent energy from protein 20.9
Percent energy from carbohydrate 46.7
     Percent energy from alcohol  0.7
```

Women31to50.avtot2:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            4
 [6,] OtherVeg             28
 [7,] TotalFruit           21
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           18
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9140.2  8768.1  9476.8      NA         NA
             Energy (kJ)       9461.9  9093.4  9811.8      NA         NA
             Protein (g)        114.0   108.2   121.7     100        100
                 Fat (g)         78.2    71.7    86.5      NA         NA
        Carbohydrate (g)        255.0   236.0   273.9      NA         NA
              Sugars (g)        124.2   113.9   132.5      NA         NA
              Starch (g)        128.8   115.4   146.8      NA         NA
               Fibre (g)         41.7    35.8    49.7      NA        100
             Alcohol (g)          1.3     0.0     6.7      NA         NA
       Saturated fat (g)         24.7    22.8    28.8      NA         NA
 Monounsaturated fat (g)         26.4    23.0    29.8      NA         NA
 Polyunsaturated fat (g)         21.5    19.9    24.5      NA         NA
       Linoleic acid (g)         19.8    18.4    22.7      NA        100
Alpha linolenic acid (g)          1.3     1.1     1.8      NA        100
  LC n3 fatty acids (mg)        242.0    86.4   677.2      NA         98
  Vitamin A equivs (mcg)       1775.0  1411.7  2107.5     100        100
           Retinol (mcg)        542.1   472.0   641.0      NA         NA
      Provitamin A (mcg)       7347.4  5274.6  9186.4      NA         NA
            Thiamin (mg)          1.7     1.4     2.1     100        100
         Riboflavin (mg)          2.8     2.4     3.1     100        100
             Niacin (mg)         56.4    50.5    61.0     100        100
      Folate (mcg total)        586.3   477.6   668.1      NA         NA
     Folate equivs (mcg)        827.1   716.9   932.3     100        100
          Vitamin C (mg)        174.0   115.2   237.2     100        100
         Vitamin D (mcg)          4.5     3.7     6.8      NA         26
          Vitamin E (mg)         15.1    10.9    18.5      NA        100
            Calcium (mg)       1288.1  1182.5  1395.4     100        100
               Iron (mg)         13.7    11.8    16.0     100          0
            Iodine (mcg)        237.2   190.9   278.8     100        100
          Magnesium (mg)        451.6   418.9   498.0     100        100
         Phosphorus (mg)       1996.7  1855.0  2167.7     100        100
          Potassium (mg)       4617.1  4221.4  4919.3      NA        100
             Sodium (mg)       1664.7  1352.1  2433.0      NA        100
               Zinc (mg)         15.2    13.6    26.1     100        100
        Cholesterol (mg)        259.2   169.1   400.2      NA         NA
          Selenium (mcg)         90.1    70.8   128.3     100        100
         Vitamin B6 (mg)          2.4     1.6     3.4     100        100
       Vitamin B12 (mcg)          7.3     6.0    12.7     100        100

         Percent energy from fat 31.2
     Percent energy from protein 20.9
Percent energy from carbohydrate 47.5
     Percent energy from alcohol  0.4
```

Women31to50.avtot3:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            4
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           18
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9284.6  8911.0  9662.4      NA         NA
             Energy (kJ)       9581.5  9215.0  9973.8      NA         NA
             Protein (g)        113.1   105.1   119.0     100        100
                 Fat (g)         79.6    70.9    86.6      NA         NA
        Carbohydrate (g)        259.7   239.0   277.3      NA         NA
              Sugars (g)        126.5   113.9   139.8      NA         NA
              Starch (g)        131.0   116.2   144.3      NA         NA
               Fibre (g)         38.5    33.2    51.6      NA        100
             Alcohol (g)          2.3     0.0     7.6      NA         NA
       Saturated fat (g)         25.7    22.9    28.6      NA         NA
 Monounsaturated fat (g)         26.5    23.4    29.8      NA         NA
 Polyunsaturated fat (g)         21.6    19.4    24.8      NA         NA
       Linoleic acid (g)         19.8    17.8    22.9      NA        100
Alpha linolenic acid (g)          1.4     1.2     1.9      NA        100
  LC n3 fatty acids (mg)        294.0    78.8   850.4      NA         99
  Vitamin A equivs (mcg)       1680.8  1362.7  2067.1     100        100
           Retinol (mcg)        555.8   490.3   649.8      NA         NA
      Provitamin A (mcg)       6699.1  4697.6  9182.1      NA         NA
            Thiamin (mg)          1.7     1.4     2.0     100        100
          Riboflavin (mg)         2.8     2.4     3.2     100        100
              Niacin (mg)        55.5    50.7    60.2     100        100
      Folate (mcg total)        551.7   483.2   656.4      NA         NA
     Folate equivs (mcg)        792.6   676.4   887.8     100        100
          Vitamin C (mg)        152.9   115.7   205.5     100        100
          Vitamin D (mcg)         4.8     3.6     7.8      NA         37
           Vitamin E (mg)        14.4    11.8    17.6      NA        100
             Calcium (mg)       1271.8  1150.9  1397.1     100        100
                Iron (mg)         13.2    11.5    15.6     100          0
             Iodine (mcg)        240.1   207.9   294.4     100        100
           Magnesium (mg)        439.0   400.6   492.9     100        100
          Phosphorus (mg)       1973.5  1830.1  2142.1     100        100
           Potassium (mg)       4328.5  3993.4  4683.2      NA        100
              Sodium (mg)       1714.2  1407.8  2544.0      NA        100
                Zinc (mg)         15.2    13.1    34.6     100        100
        Cholesterol (mg)        262.8   172.1   428.9      NA         NA
           Selenium (mcg)        88.1    61.4   137.6     100        100
          Vitamin B6 (mg)         2.0     1.5     2.7     100        100
        Vitamin B12 (mcg)         7.3     5.9    12.1     100        100

         Percent energy from fat 31.4
     Percent energy from protein 20.5
Percent energy from carbohydrate 47.4
     Percent energy from alcohol  0.7
```

Women31to50.avtot4:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           12
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            3
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       17
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           18
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9338.9  8939.4  9821.1      NA         NA
             Energy (kJ)       9622.4  9220.4 10128.0      NA         NA
             Protein (g)        115.1   106.0   125.4     100        100
                 Fat (g)         77.3    69.0    88.9      NA         NA
        Carbohydrate (g)        265.3   243.1   288.8      NA         NA
              Sugars (g)        110.6    96.7   128.7      NA         NA
              Starch (g)        152.9   137.6   171.3      NA         NA
               Fibre (g)         37.8    31.8    51.9      NA        100
             Alcohol (g)          2.4     0.0     8.2      NA         NA
       Saturated fat (g)         25.5    22.4    29.5      NA         NA
 Monounsaturated fat (g)         25.3    22.0    30.1      NA         NA
 Polyunsaturated fat (g)         20.9    19.1    23.6      NA         NA
       Linoleic acid (g)         19.2    17.6    21.5      NA        100
Alpha linolenic acid (g)          1.3     1.2     1.8      NA        100
  LC n3 fatty acids (mg)        270.3    64.6   670.6      NA         97
  Vitamin A equivs (mcg)       1642.7  1184.3  2046.1     100        100
           Retinol (mcg)        556.1   483.6   631.0      NA         NA
      Provitamin A (mcg)       6451.0  3922.5  9172.0      NA         NA
            Thiamin (mg)          1.7     1.4     2.1     100        100
         Riboflavin (mg)          2.7     2.5     3.2     100        100
             Niacin (mg)         56.2    49.4    62.2     100        100
      Folate (mcg total)        520.5   450.0   622.0      NA         NA
     Folate equivs (mcg)        772.7   651.5   938.3     100        100
          Vitamin C (mg)        143.6    96.9   209.5     100        100
         Vitamin D (mcg)          4.7     3.5     6.3      NA         40
          Vitamin E (mg)         13.3    10.0    15.9      NA        100
            Calcium (mg)       1264.7  1156.4  1355.9     100        100
               Iron (mg)         13.4    11.7    15.0     100          0
            Iodine (mcg)        241.3   203.6   276.4     100        100
          Magnesium (mg)        437.3   403.9   490.0     100        100
         Phosphorus (mg)       2013.9  1876.6  2125.3     100        100
          Potassium (mg)       4464.0  4143.9  4898.6      NA        100
             Sodium (mg)       1767.0  1466.3  2528.1      NA        100
               Zinc (mg)         15.5    13.5    25.7     100        100
        Cholesterol (mg)        270.4   177.2   459.3      NA         NA
          Selenium (mcg)         88.0    69.0   118.6     100        100
         Vitamin B6 (mg)          1.9     1.5     2.6     100        100
       Vitamin B12 (mcg)          7.3     6.0    10.5     100        100

         Percent energy from fat 30.4
     Percent energy from protein 20.8
Percent energy from carbohydrate 48.1
     Percent energy from alcohol  0.7
```

Women31to50.avtot5:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            4
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       24
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           17
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9230.8  8814.8  9806.8      NA         NA
             Energy (kJ)       9532.2  9120.2 10119.9      NA         NA
             Protein (g)        119.6   109.5   129.2     100        100
                 Fat (g)         64.2    56.7    71.8      NA         NA
        Carbohydrate (g)        285.2   266.8   304.7      NA         NA
              Sugars (g)        105.7    91.9   126.9      NA         NA
              Starch (g)        178.1   160.1   189.0      NA         NA
               Fibre (g)         38.9    33.6    51.6      NA        100
             Alcohol (g)          1.0     0.0     4.2      NA         NA
       Saturated fat (g)         21.2    18.8    23.6      NA         NA
 Monounsaturated fat (g)         22.2    18.6    25.6      NA         NA
 Polyunsaturated fat (g)         15.8    13.2    18.1      NA         NA
       Linoleic acid (g)         14.3    12.1    16.4      NA        100
Alpha linolenic acid (g)          1.1     0.9     1.5      NA        100
  LC n3 fatty acids (mg)        291.1    79.5   840.2      NA         98
  Vitamin A equivs (mcg)       1436.7  1125.8  1822.8     100        100
           Retinol (mcg)        382.5   325.6   468.8      NA         NA
      Provitamin A (mcg)       6270.6  4311.4  8608.4      NA         NA
            Thiamin (mg)          1.9     1.6     2.3     100        100
         Riboflavin (mg)          2.8     2.5     3.1     100        100
             Niacin (mg)         59.2    52.4    64.0     100        100
      Folate (mcg total)        544.0   477.3   649.9      NA         NA
     Folate equivs (mcg)        876.3   743.4  1028.8     100        100
          Vitamin C (mg)        125.1    81.5   165.5     100        100
         Vitamin D (mcg)          3.6     2.5     5.9      NA          5
          Vitamin E (mg)         11.2     8.7    13.6      NA        100
            Calcium (mg)       1277.8  1122.4  1416.7     100        100
               Iron (mg)         14.4    12.5    16.2     100          0
            Iodine (mcg)        259.1   224.1   296.7     100        100
          Magnesium (mg)        457.0   413.0   487.2     100        100
         Phosphorus (mg)       2065.3  1946.8  2248.6     100        100
          Potassium (mg)       4146.7  3855.6  4456.2      NA        100
             Sodium (mg)       1836.1  1468.7  2729.4      NA        100
               Zinc (mg)         16.0    14.0    26.2     100        100
        Cholesterol (mg)        258.6   155.1   425.7      NA         NA
          Selenium (mcg)         96.2    73.6   126.3     100        100
         Vitamin B6 (mg)          1.9     1.5     2.6     100        100
       Vitamin B12 (mcg)          7.3     6.2    10.6     100        100

         Percent energy from fat 25.5
     Percent energy from protein 21.9
Percent energy from carbohydrate 52.3
     Percent energy from alcohol  0.3
```

Women31to50.avtot6:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              9
 [5,] NutsSeeds            4
 [6,] OtherVeg             21
 [7,] TotalFruit           17
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       17
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           17
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9112.2  8733.3  9535.6      NA         NA
             Energy (kJ)       9463.8  9069.0  9939.4      NA         NA
             Protein (g)        120.9   113.3   130.0     100        100
                 Fat (g)         76.0    66.9    87.7      NA         NA
        Carbohydrate (g)        252.6   233.7   274.4      NA         NA
              Sugars (g)        107.0    96.9   118.2      NA         NA
              Starch (g)        144.1   127.3   162.0      NA         NA
               Fibre (g)         45.4    39.0    55.0      NA        100
             Alcohol (g)          0.0     0.0     0.0      NA         NA
       Saturated fat (g)         23.0    20.4    26.5      NA         NA
 Monounsaturated fat (g)         25.0    21.2    31.2      NA         NA
 Polyunsaturated fat (g)         22.5    20.2    25.9      NA         NA
       Linoleic acid (g)         20.7    18.6    23.4      NA        100
Alpha linolenic acid (g)          1.5     1.2     2.0      NA        100
  LC n3 fatty acids (mg)        275.1    72.8   953.0      NA         97
  Vitamin A equivs (mcg)       1725.7  1432.6  2089.6     100        100
           Retinol (mcg)        525.7   464.4   615.8      NA         NA
      Provitamin A (mcg)       7138.4  5504.9  9250.2      NA         NA
            Thiamin (mg)          1.9     1.6     2.1     100        100
         Riboflavin (mg)          2.8     2.3     3.2     100        100
             Niacin (mg)         57.2    51.1    61.6     100        100
      Folate (mcg total)        623.9   529.6   717.6      NA         NA
     Folate equivs (mcg)        877.1   778.9   978.1     100        100
          Vitamin C (mg)        175.3   124.2   251.0     100        100
         Vitamin D (mcg)          4.5     3.4     7.9      NA         30
          Vitamin E (mg)         14.7    11.2    17.6      NA        100
            Calcium (mg)       1293.6  1168.9  1456.9     100        100
               Iron (mg)         15.3    13.8    17.1     100          0
            Iodine (mcg)        232.2   194.8   271.9     100        100
          Magnesium (mg)        486.0   445.3   541.4     100        100
         Phosphorus (mg)       2075.9  1932.0  2222.4     100        100
          Potassium (mg)       4660.6  4420.0  5020.3      NA        100
             Sodium (mg)       1579.5  1317.6  2484.5      NA        100
               Zinc (mg)         16.7    14.5    27.1     100        100
        Cholesterol (mg)        253.0   151.9   439.2      NA         NA
          Selenium (mcg)         92.1    68.4   122.3     100        100
         Vitamin B6 (mg)          2.3     1.7     3.6     100        100
       Vitamin B12 (mcg)          7.0     5.7     9.6     100        100

         Percent energy from fat 30.4
     Percent energy from protein 22.2
Percent energy from carbohydrate 47.4
     Percent energy from alcohol  0.0
```

A15.12 Sample *7-day Total Diets* Women 31-50 years higher energy level

Tallest (180cm) and high acivity (PAL 2)

Women31to50.hitot1:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            14
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11467.6 10990.7 11895.6      NA         NA
             Energy (kJ)      11865.4 11399.9 12306.4      NA         NA
             Protein (g)        133.2   125.0   140.9     100        100
                 Fat (g)        109.6    99.9   119.9      NA         NA
        Carbohydrate (g)        298.7   277.6   318.6      NA         NA
              Sugars (g)        126.6   112.8   142.9      NA         NA
              Starch (g)        169.6   148.2   190.9      NA         NA
               Fibre (g)         53.3    45.9    67.6      NA        100
             Alcohol (g)          4.8     0.0    11.9      NA         NA
       Saturated fat (g)         31.2    26.9    35.3      NA         NA
 Monounsaturated fat (g)         40.3    36.3    47.1      NA         NA
 Polyunsaturated fat (g)         30.8    27.2    35.5      NA         NA
       Linoleic acid (g)         28.8    25.5    32.8      NA        100
Alpha linolenic acid (g)          1.7     1.3     2.4      NA        100
  LC n3 fatty acids (mg)        259.6    68.4   681.6      NA         97
  Vitamin A equivs (mcg)       2479.4  1950.7  2992.3     100        100
           Retinol (mcg)        565.0   495.6   665.3      NA         NA
      Provitamin A (mcg)      11432.2  8056.0 14496.2      NA         NA
            Thiamin (mg)          2.4     2.1     2.6     100        100
          Riboflavin (mg)         2.9     2.6     3.4     100        100
             Niacin (mg)         68.1    63.3    72.9     100        100
      Folate (mcg total)        668.8   593.7   777.9      NA         NA
     Folate equivs (mcg)        960.3   840.6  1060.1     100        100
          Vitamin C (mg)        174.9   125.5   225.8     100        100
          Vitamin D (mcg)         4.6     3.8     7.8      NA         24
          Vitamin E (mg)         20.4    15.7    24.9      NA        100
            Calcium (mg)       1303.7  1184.4  1447.7     100        100
               Iron (mg)         18.0    16.3    20.9     100         45
            Iodine (mcg)        233.0   202.5   278.1     100        100
          Magnesium (mg)        602.5   562.6   661.4     100        100
          Phosphorus (mg)      2359.5  2210.8  2491.2     100        100
          Potassium (mg)       5400.2  5090.0  5691.5      NA        100
             Sodium (mg)       2049.5  1710.0  2834.6      NA        100
               Zinc (mg)         18.4    16.4    28.0     100        100
        Cholesterol (mg)        282.4   182.4   397.4      NA         NA
          Selenium (mcg)        123.3    91.3   177.4     100        100
          Vitamin B6 (mg)         2.6     1.9     3.6     100        100
        Vitamin B12 (mcg)         6.5     5.2     9.4     100        100

         Percent energy from fat 34.8
     Percent energy from protein 19.5
Percent energy from carbohydrate 44.5
     Percent energy from alcohol  1.2
```

Women31to50.hitot2:

```
             AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            11
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          7
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11771.0 11365.1 12228.6      NA         NA
             Energy (kJ)      12146.7 11733.5 12608.2      NA         NA
             Protein (g)        137.7   130.2   147.5     100        100
                 Fat (g)        110.0   100.9   120.6      NA         NA
        Carbohydrate (g)        312.1   289.2   336.9      NA         NA
              Sugars (g)        138.2   122.6   154.2      NA         NA
              Starch (g)        171.8   153.3   190.5      NA         NA
               Fibre (g)         48.6    43.1    63.7      NA        100
             Alcohol (g)          4.7     0.0    12.6      NA         NA
       Saturated fat (g)         35.3    32.6    38.6      NA         NA
 Monounsaturated fat (g)         38.5    34.4    43.4      NA         NA
 Polyunsaturated fat (g)         28.7    25.3    32.2      NA         NA
       Linoleic acid (g)         26.5    23.6    29.8      NA        100
Alpha linolenic acid (g)          1.7     1.4     2.2      NA        100
  LC n3 fatty acids (mg)        309.4   115.7   811.6      NA        100
  Vitamin A equivs (mcg)       2560.3  1981.2  3015.3     100        100
           Retinol (mcg)        678.0   595.2   782.2      NA         NA
      Provitamin A (mcg)      11236.8  8059.8 13941.8      NA         NA
            Thiamin (mg)          2.2     1.8     2.4     100        100
         Riboflavin (mg)          3.3     3.0     3.8     100        100
             Niacin (mg)         66.2    61.2    71.5     100        100
      Folate (mcg total)        658.8   559.1   750.9      NA         NA
     Folate equivs (mcg)        937.3   820.5  1056.7     100        100
          Vitamin C (mg)        176.9   127.1   255.2     100        100
         Vitamin D (mcg)          5.9     4.7     8.0      NA         91
          Vitamin E (mg)         18.4    14.7    24.0      NA        100
            Calcium (mg)       1508.2  1379.4  1623.0     100        100
               Iron (mg)         17.1    15.4    19.6     100         15
            Iodine (mcg)        282.2   248.1   330.8     100        100
          Magnesium (mg)        576.8   527.4   618.3     100        100
         Phosphorus (mg)       2447.0  2263.6  2623.5     100        100
          Potassium (mg)       5217.4  4850.9  5634.5      NA        100
             Sodium (mg)       2106.2  1772.0  3182.4      NA        100
               Zinc (mg)         19.1    16.2    30.0     100        100
        Cholesterol (mg)        306.8   212.4   516.8      NA         NA
          Selenium (mcg)        118.2    89.2   179.7     100        100
         Vitamin B6 (mg)          2.6     2.1     3.4     100        100
       Vitamin B12 (mcg)          8.2     7.0    11.2     100        100

         Percent energy from fat 34.2
     Percent energy from protein 19.6
Percent energy from carbohydrate 45.1
     Percent energy from alcohol  1.1
```

Women31to50.hitot3:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11523.5 11059.9 11908.0      NA         NA
             Energy (kJ)      11929.4 11439.6 12356.2      NA         NA
             Protein (g)        136.0   129.3   146.6     100        100
                 Fat (g)         97.0    90.1   108.0      NA         NA
        Carbohydrate (g)        326.7   306.9   357.5      NA         NA
              Sugars (g)        123.3   101.2   144.4      NA         NA
              Starch (g)        201.3   185.8   221.0      NA         NA
               Fibre (g)         54.4    45.7    66.4      NA        100
             Alcohol (g)          4.8     0.0    14.5      NA         NA
       Saturated fat (g)         29.7    26.0    33.3      NA         NA
 Monounsaturated fat (g)         33.2    29.0    39.2      NA         NA
 Polyunsaturated fat (g)         27.3    24.5    30.5      NA         NA
       Linoleic acid (g)         25.1    22.4    28.0      NA        100
Alpha linolenic acid (g)          1.8     1.4     2.2      NA        100
  LC n3 fatty acids (mg)        254.7    74.3   883.5      NA         99
  Vitamin A equivs (mcg)       1706.3  1317.2  2064.2     100        100
           Retinol (mcg)        563.3   488.1   686.3      NA         NA
      Provitamin A (mcg)       6803.4  4499.6  9288.4      NA         NA
            Thiamin (mg)          2.3     2.0     2.7     100        100
         Riboflavin (mg)          2.8     2.4     3.3     100        100
             Niacin (mg)         66.2    60.9    70.5     100        100
      Folate (mcg total)        674.3   560.6   761.0      NA         NA
     Folate equivs (mcg)        991.9   870.7  1127.1     100        100
          Vitamin C (mg)        171.6   115.5   223.4     100        100
         Vitamin D (mcg)          4.5     3.5     6.8      NA         21
          Vitamin E (mg)         17.5    14.3    24.6      NA        100
            Calcium (mg)       1314.8  1170.0  1497.0     100        100
               Iron (mg)         18.7    16.5    20.9     100         80
            Iodine (mcg)        239.6   201.1   309.1     100        100
          Magnesium (mg)        585.8   530.1   643.8     100        100
         Phosphorus (mg)       2347.7  2183.4  2514.4     100        100
          Potassium (mg)       5261.8  4720.2  5700.8      NA        100
             Sodium (mg)       2136.4  1774.0  3129.9      NA        100
               Zinc (mg)         18.6    16.0    39.1     100        100
        Cholesterol (mg)        280.6   172.5   463.8      NA         NA
          Selenium (mcg)        112.6    87.5   159.1     100        100
         Vitamin B6 (mg)          2.5     1.7     3.4     100        100
       Vitamin B12 (mcg)          6.7     5.5    10.6     100        100

         Percent energy from fat 30.7
     Percent energy from protein 19.8
Percent energy from carbohydrate 48.3
     Percent energy from alcohol  1.2
```

Women31to50.hitot4:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           21
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11650.4 11292.8 12167.0      NA         NA
             Energy (kJ)      12081.1 11718.6 12623.7      NA         NA
             Protein (g)        138.6   127.6   147.5     100        100
                 Fat (g)         98.2    89.3   111.0      NA         NA
        Carbohydrate (g)        328.5   306.3   352.9      NA         NA
              Sugars (g)        125.3   112.1   149.2      NA         NA
              Starch (g)        200.9   183.1   222.0      NA         NA
               Fibre (g)         59.2    51.8    78.8      NA        100
             Alcohol (g)          4.9     0.0    11.0      NA         NA
       Saturated fat (g)         30.2    26.5    35.0      NA         NA
 Monounsaturated fat (g)         33.4    29.7    39.8      NA         NA
 Polyunsaturated fat (g)         27.6    24.3    32.8      NA         NA
       Linoleic acid (g)         25.5    22.6    30.0      NA        100
Alpha linolenic acid (g)          1.8     1.4     2.2      NA        100
  LC n3 fatty acids (mg)        270.4    89.3   644.0      NA         99
  Vitamin A equivs (mcg)       1746.4  1398.6  2152.7     100        100
           Retinol (mcg)        568.6   489.6   685.2      NA         NA
      Provitamin A (mcg)       7010.0  4993.0  9431.6      NA         NA
            Thiamin (mg)          2.5     2.2     2.8     100        100
         Riboflavin (mg)          3.0     2.6     3.3     100        100
             Niacin (mg)         69.0    60.7    73.7     100        100
      Folate (mcg total)        703.5   610.3   854.8      NA         NA
     Folate equivs (mcg)       1033.6   892.6  1164.3     100        100
          Vitamin C (mg)        183.0   132.1   237.8     100        100
         Vitamin D (mcg)          4.6     3.6     7.7      NA         27
          Vitamin E (mg)         17.5    14.0    21.4      NA        100
            Calcium (mg)       1352.2  1218.4  1492.5     100        100
               Iron (mg)         19.8    17.9    22.4     100         99
            Iodine (mcg)        248.2   213.2   304.0     100        100
          Magnesium (mg)        624.1   588.8   673.4     100        100
         Phosphorus (mg)       2450.3  2241.8  2601.5     100        100
          Potassium (mg)       5769.1  5396.5  6073.1      NA        100
             Sodium (mg)       2149.7  1705.5  3008.1      NA        100
               Zinc (mg)         19.5    16.6    38.9     100        100
        Cholesterol (mg)        281.2   164.5   503.5      NA         NA
          Selenium (mcg)        117.4    89.8   170.0     100        100
         Vitamin B6 (mg)          2.7     2.1     3.9     100        100
       Vitamin B12 (mcg)          6.8     5.4    11.7     100        100

         Percent energy from fat 30.7
     Percent energy from protein 19.9
Percent energy from carbohydrate 48.1
     Percent energy from alcohol  1.2
```

Women31to50.hitot5:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       18
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11371.1 10761.6 11836.6      NA         NA
             Energy (kJ)      11818.1 11197.8 12317.1      NA         NA
             Protein (g)        136.5   128.9   143.7     100        100
                 Fat (g)         94.6    83.6   104.3      NA         NA
        Carbohydrate (g)        324.5   304.6   343.4      NA         NA
              Sugars (g)        134.0   118.8   149.0      NA         NA
              Starch (g)        188.1   170.5   209.4      NA         NA
               Fibre (g)         59.5    51.6    71.4      NA        100
             Alcohol (g)          3.6     0.0    13.2      NA         NA
       Saturated fat (g)         28.4    24.4    31.9      NA         NA
 Monounsaturated fat (g)         32.4    28.4    37.3      NA         NA
 Polyunsaturated fat (g)         27.0    23.9    32.3      NA         NA
       Linoleic acid (g)         24.8    21.8    29.4      NA        100
Alpha linolenic acid (g)          1.7     1.5     2.6      NA        100
  LC n3 fatty acids (mg)        285.7    80.5   688.9      NA         96
  Vitamin A equivs (mcg)       1803.0  1367.2  2188.2     100        100
           Retinol (mcg)        550.8   486.7   649.6      NA         NA
      Provitamin A (mcg)       7467.1  5191.0  9733.8      NA         NA
            Thiamin (mg)          2.4     2.1     2.8     100        100
          Riboflavin (mg)         2.9     2.5     3.4     100        100
             Niacin (mg)         66.5    61.6    73.5     100        100
      Folate (mcg total)        740.5   638.0   926.7      NA         NA
     Folate equivs (mcg)       1053.9   918.3  1216.9     100        100
          Vitamin C (mg)        213.5   157.9   278.8     100        100
          Vitamin D (mcg)         4.6     3.4     7.7      NA         31
          Vitamin E (mg)         17.5    13.9    21.0      NA        100
            Calcium (mg)       1330.6  1197.2  1541.2     100        100
               Iron (mg)         19.4    17.6    21.8     100         94
            Iodine (mcg)        240.2   199.1   277.0     100        100
          Magnesium (mg)        611.8   569.7   651.4     100        100
          Phosphorus (mg)       2361.5  2212.9  2509.6     100        100
          Potassium (mg)        5687.1  5358.3  6179.3      NA        100
             Sodium (mg)        2025.6  1657.9  3269.1      NA        100
               Zinc (mg)         18.9    16.6    29.0     100        100
        Cholesterol (mg)        268.0   150.9   404.8      NA         NA
          Selenium (mcg)        113.1    85.4   175.5     100        100
          Vitamin B6 (mg)         2.7     2.1     4.0     100        100
        Vitamin B12 (mcg)         6.6     5.4    10.8     100        100

         Percent energy from fat 30.3
     Percent energy from protein 20.1
Percent energy from carbohydrate 48.8
     Percent energy from alcohol  0.9
```

Women31to50.hitot6:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            14
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11585.7 11185.1 11972.4      NA         NA
             Energy (kJ)      11991.7 11574.1 12397.6      NA         NA
             Protein (g)        139.3   131.3   150.5     100        100
                 Fat (g)        108.6   100.1   117.1      NA         NA
        Carbohydrate (g)        304.0   282.4   328.7      NA         NA
              Sugars (g)        146.8   129.7   163.0      NA         NA
              Starch (g)        154.9   142.0   170.0      NA         NA
               Fibre (g)         54.8    47.1    67.0      NA        100
             Alcohol (g)          3.6     0.0    10.3      NA         NA
       Saturated fat (g)         31.6    27.5    34.7      NA         NA
 Monounsaturated fat (g)         39.7    35.8    45.1      NA         NA
 Polyunsaturated fat (g)         30.0    26.6    33.5      NA         NA
       Linoleic acid (g)         28.0    25.0    30.9      NA        100
Alpha linolenic acid (g)          1.6     1.3     2.3      NA        100
  LC n3 fatty acids (mg)        281.3    98.6   654.1      NA        100
  Vitamin A equivs (mcg)       1840.6  1446.1  2266.8     100        100
           Retinol (mcg)        595.0   515.0   664.0      NA         NA
      Provitamin A (mcg)       7407.5  4976.7  9602.3      NA         NA
            Thiamin (mg)          2.3     2.0     2.6     100        100
         Riboflavin (mg)          3.4     2.8     3.7     100        100
             Niacin (mg)         68.8    62.2    75.9     100        100
      Folate (mcg total)        754.9   673.3   865.7      NA         NA
     Folate equivs (mcg)        995.7   883.9  1109.6     100        100
          Vitamin C (mg)        213.7   164.9   266.6     100        100
         Vitamin D (mcg)          5.0     3.8     8.0      NA         42
          Vitamin E (mg)         20.2    15.7    24.7      NA        100
            Calcium (mg)       1524.7  1366.2  1664.9     100        100
               Iron (mg)         17.7    16.1    20.1     100         32
            Iodine (mcg)        265.5   230.0   311.2     100        100
          Magnesium (mg)        619.5   581.4   685.1     100        100
         Phosphorus (mg)       2512.1  2318.3  2673.1     100        100
          Potassium (mg)       5889.4  5581.6  6264.7      NA        100
             Sodium (mg)       1927.9  1631.9  2832.1      NA        100
               Zinc (mg)         19.4    16.7    29.3     100        100
        Cholesterol (mg)        285.0   190.1   445.5      NA         NA
          Selenium (mcg)        124.7    82.9   185.8     100        100
         Vitamin B6 (mg)          2.7     2.1     3.8     100        100
       Vitamin B12 (mcg)          8.2     6.9    12.9     100        100

         Percent energy from fat 34.2
     Percent energy from protein 20.1
Percent energy from carbohydrate 44.8
     Percent energy from alcohol  0.9
```

A15.13 Sample *7-day Total Diets* Women 51-70 years mid energy level

Average height (165cms); light to moderate activity (PAL 1.7)

Women51to70.avtot1:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              3
 [5,] NutsSeeds            3
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       15
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8805.1  8323.0  9256.9      NA         NA
             Energy (kJ)       9070.1  8606.1  9544.9      NA         NA
             Protein (g)        123.3   116.4   130.8     100        100
                 Fat (g)         65.1    56.6    72.6      NA         NA
        Carbohydrate (g)        253.4   237.2   274.6      NA         NA
              Sugars (g)        126.4   109.3   140.5      NA         NA
              Starch (g)        125.1   111.7   144.4      NA         NA
               Fibre (g)         34.0    28.3    40.9      NA        100
             Alcohol (g)          1.9     0.0     5.6      NA         NA
       Saturated fat (g)         24.2    20.8    27.2      NA         NA
 Monounsaturated fat (g)         21.6    18.2    25.3      NA         NA
 Polyunsaturated fat (g)         14.2    12.3    16.6      NA         NA
       Linoleic acid (g)         12.9    11.1    15.0      NA        100
Alpha linolenic acid (g)          1.0     0.9     1.3      NA        100
  LC n3 fatty acids (mg)        309.8    97.5  1145.9      NA        100
  Vitamin A equivs (mcg)       1465.5  1109.9  1916.6     100        100
           Retinol (mcg)        454.9   388.8   643.8      NA         NA
      Provitamin A (mcg)       6004.1  3833.2  8505.0      NA         NA
            Thiamin (mg)          1.6     1.4     1.9     100        100
          Riboflavin (mg)         3.3     2.9     3.7     100        100
              Niacin (mg)        59.4    52.6    66.4     100        100
      Folate (mcg total)        562.9   481.6   647.7      NA         NA
     Folate equivs (mcg)        819.0   722.1   934.4     100        100
          Vitamin C (mg)        132.7    83.4   224.0     100        100
          Vitamin D (mcg)         4.5     3.3     7.3      NA          0
          Vitamin E (mg)         10.4     7.8    13.7      NA        100
            Calcium (mg)       1576.8  1400.3  1723.0     100        100
               Iron (mg)         12.6    10.8    14.2     100        100
            Iodine (mcg)        299.9   261.0   347.8     100        100
          Magnesium (mg)        445.7   415.8   495.9     100        100
          Phosphorus (mg)       2220.7  2088.0  2359.0     100        100
          Potassium (mg)        4508.1  4161.1  4839.2      NA        100
             Sodium (mg)        1797.6  1519.7  3487.0      NA        100
               Zinc (mg)         16.0    13.7    26.9     100        100
        Cholesterol (mg)        278.7   194.2   572.8      NA         NA
          Selenium (mcg)         87.0    72.4   127.1     100        100
          Vitamin B6 (mg)         2.0     1.4     3.0     100         98
        Vitamin B12 (mcg)         8.7     7.4    11.5     100        100

         Percent energy from fat 27.1
     Percent energy from protein 23.6
Percent energy from carbohydrate 48.6
     Percent energy from alcohol  0.6
```

Women51to70.avtot2:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              10
 [5,] NutsSeeds            10
 [6,] OtherVeg             28
 [7,] TotalFruit           21
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       8
[10,] Poultryfisheggsleg   7
[11,] RedMeats             3
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8725.7  8300.7  9337.3      NA         NA
             Energy (kJ)       9072.3  8634.1  9726.1      NA         NA
             Protein (g)        118.5   111.7   125.9     100        100
                 Fat (g)         73.2    63.4    82.7      NA         NA
        Carbohydrate (g)        237.3   218.4   272.2      NA         NA
              Sugars (g)        139.1   122.6   165.3      NA         NA
              Starch (g)         95.7    82.5   108.7      NA         NA
               Fibre (g)         44.3    40.0    55.6      NA        100
             Alcohol (g)          1.0     0.0     5.6      NA         NA
       Saturated fat (g)         23.1    19.2    25.9      NA         NA
 Monounsaturated fat (g)         26.2    21.6    32.0      NA         NA
 Polyunsaturated fat (g)         18.6    15.1    23.3      NA         NA
       Linoleic acid (g)         17.3    14.2    21.3      NA        100
Alpha linolenic acid (g)          1.1     0.8     1.7      NA        100
  LC n3 fatty acids (mg)        289.7    51.5   961.6      NA         93
  Vitamin A equivs (mcg)       1603.1  1177.7  1985.4     100        100
           Retinol (mcg)        433.0   369.5   513.2      NA         NA
      Provitamin A (mcg)       6956.2  4554.5  9223.8      NA         NA
            Thiamin (mg)          1.7     1.4     1.9     100        100
          Riboflavin (mg)         3.3     2.8     3.7     100        100
              Niacin (mg)        57.4    52.8    62.2     100        100
      Folate (mcg total)        686.1   575.0   771.7      NA         NA
     Folate equivs (mcg)        857.1   743.2   954.7     100        100
          Vitamin C (mg)        182.2   119.9   232.1     100        100
          Vitamin D (mcg)         4.3     2.9     6.9      NA          0
          Vitamin E (mg)         14.5    11.5    18.6      NA        100
            Calcium (mg)       1579.3  1430.2  1710.2     100        100
               Iron (mg)         13.4    11.9    16.2     100        100
            Iodine (mcg)        274.0   234.5   322.2     100        100
          Magnesium (mg)        526.1   475.3   570.5     100        100
          Phosphorus (mg)       2250.5  2085.6  2410.7     100        100
          Potassium (mg)        5209.5  4839.0  5826.8      NA        100
             Sodium (mg)        1482.3  1141.0  2401.5      NA        100
               Zinc (mg)         15.2    13.5    25.7     100        100
        Cholesterol (mg)        241.7   162.9   402.1      NA         NA
          Selenium (mcg)         98.6    68.8   147.0     100        100
          Vitamin B6 (mg)         2.5     1.6     4.1     100        100
        Vitamin B12 (mcg)         7.9     6.8    12.4     100        100

         Percent energy from fat 30.4
     Percent energy from protein 22.7
Percent energy from carbohydrate 46.6
     Percent energy from alcohol  0.3
```

Women51to70.avtot3:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              3
 [5,] NutsSeeds            3
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       8
[10,] Poultryfisheggsleg   7
[11,] RedMeats             3
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          7
[15,] LoFatDairy           25
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8787.3  8395.2  9133.1      NA         NA
             Energy (kJ)       9054.3  8667.1  9409.9      NA         NA
             Protein (g)        118.6   110.4   128.5     100        100
                 Fat (g)         71.8    61.8    80.0      NA         NA
        Carbohydrate (g)        245.9   231.0   271.7      NA         NA
              Sugars (g)        133.5   122.8   145.3      NA         NA
              Starch (g)        110.8    96.3   127.0      NA         NA
               Fibre (g)         34.5    30.2    41.2      NA        100
             Alcohol (g)          0.0     0.0     0.0      NA         NA
       Saturated fat (g)         27.0    23.6    29.2      NA         NA
 Monounsaturated fat (g)         22.2    18.3    26.9      NA         NA
 Polyunsaturated fat (g)         17.1    14.9    21.0      NA         NA
       Linoleic acid (g)         15.7    13.7    18.8      NA        100
Alpha linolenic acid (g)          1.2     1.0     1.7      NA        100
  LC n3 fatty acids (mg)        273.1    55.6   716.3      NA         90
  Vitamin A equivs (mcg)       1646.1  1268.8  2042.8     100        100
           Retinol (mcg)        623.8   543.3   743.5      NA         NA
      Provitamin A (mcg)       6051.2  3638.4  8218.6      NA         NA
            Thiamin (mg)          1.6     1.4     1.9     100        100
         Riboflavin (mg)          3.8     3.4     4.2     100        100
             Niacin (mg)         57.5    52.7    62.6     100        100
      Folate (mcg total)        595.3   527.8   679.4      NA         NA
     Folate equivs (mcg)        845.9   732.9   956.6     100        100
          Vitamin C (mg)        127.2    82.9   179.2     100        100
         Vitamin D (mcg)          6.1     4.7     9.0      NA          0
          Vitamin E (mg)         11.3     8.6    14.3      NA        100
            Calcium (mg)       1842.5  1743.6  2002.0     100        100
               Iron (mg)         11.6    10.1    13.9     100        100
            Iodine (mcg)        351.8   312.8   401.0     100        100
          Magnesium (mg)        466.3   422.8   526.4     100        100
         Phosphorus (mg)       2349.5  2202.9  2496.4     100        100
          Potassium (mg)       4752.3  4356.1  5061.6      NA        100
             Sodium (mg)       1713.3  1476.1  2664.7      NA        100
               Zinc (mg)         14.6    12.8    24.7     100        100
        Cholesterol (mg)        269.9   172.5   500.0      NA         NA
          Selenium (mg)         86.9    66.5   145.6     100        100
         Vitamin B6 (mg)          2.1     1.6     3.2     100        100
       Vitamin B12 (mg)           9.4     7.8    12.3     100        100

         Percent energy from fat 29.9
     Percent energy from protein 22.7
Percent energy from carbohydrate 47.3
     Percent energy from alcohol  0.0
```

Women51to70.avtot4:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           12
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              3
 [5,] NutsSeeds            3
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       8
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8761.1  8271.1  9140.7      NA         NA
             Energy (kJ)       9088.9  8584.6  9485.8      NA         NA
             Protein (g)        125.4   114.3   133.6     100        100
                 Fat (g)         62.4    53.4    68.8      NA         NA
         Carbohydrate (g)        255.5   240.4   279.1      NA         NA
               Sugars (g)        141.5   128.6   157.5      NA         NA
               Starch (g)        111.6   102.7   127.2      NA         NA
                Fibre (g)         43.0    35.8    51.9      NA        100
             Alcohol (g)          1.3     0.0     4.3      NA         NA
       Saturated fat (g)         22.8    19.6    25.0      NA         NA
 Monounsaturated fat (g)         20.5    16.9    24.2      NA         NA
 Polyunsaturated fat (g)         14.1    12.1    16.7      NA         NA
       Linoleic acid (g)         12.7    10.8    15.0      NA        100
Alpha linolenic acid (g)          1.0     0.8     1.3      NA        100
  LC n3 fatty acids (mg)        348.7    72.8   955.3      NA         96
  Vitamin A equivs (mcg)       1617.6  1227.1  2006.7     100        100
           Retinol (mcg)        442.9   386.7   519.3      NA         NA
      Provitamin A (mcg)       6981.4  4781.4  9220.2      NA         NA
             Thiamin (mg)          1.7     1.5     2.1     100        100
          Riboflavin (mg)          3.5     3.0     3.9     100        100
             Niacin (mg)         61.1    55.3    66.1     100        100
      Folate (mcg total)        641.4   548.8   738.7      NA         NA
     Folate equivs (mcg)        853.2   735.9   962.5     100        100
          Vitamin C (mg)        214.0   152.5   274.7     100        100
          Vitamin D (mcg)         4.6     3.2     8.4      NA          0
          Vitamin E (mg)         10.9     8.3    15.3      NA        100
            Calcium (mg)       1615.8  1473.7  1745.4     100        100
               Iron (mg)         13.7    11.7    15.5     100        100
            Iodine (mcg)        289.4   258.7   323.9     100        100
          Magnesium (mg)        491.6   459.8   521.1     100        100
          Phosphorus (mg)       2300.3  2132.5  2468.4     100        100
          Potassium (mg)       5554.6  5161.4  5944.6      NA        100
             Sodium (mg)       1598.2  1385.8  2424.6      NA        100
               Zinc (mg)         16.1    14.7    26.6     100        100
        Cholesterol (mg)        272.6   187.6   439.2      NA         NA
          Selenium (mcg)         88.3    67.0   122.9     100        100
          Vitamin B6 (mg)         2.5     1.8     3.6     100        100
        Vitamin B12 (mcg)         8.4     7.3    11.3     100        100

         Percent energy from fat 26.0
     Percent energy from protein 24.0
Percent energy from carbohydrate 49.7
     Percent energy from alcohol  0.4
```

Women51to70.avtot5:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              3
 [5,] NutsSeeds            10
 [6,] OtherVeg             28
 [7,] TotalFruit           14
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       8
[10,] Poultryfisheggsleg   7
[11,] RedMeats             3
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8702.4  8320.3  9266.2      NA         NA
             Energy (kJ)       8982.8  8575.0  9556.3      NA         NA
             Protein (g)        112.0   104.4   119.6     100        100
                 Fat (g)         82.2    73.1    91.9      NA         NA
        Carbohydrate (g)        220.8   203.3   241.3      NA         NA
              Sugars (g)        128.3   112.9   144.8      NA         NA
              Starch (g)         90.3    79.3   103.8      NA         NA
               Fibre (g)         36.1    31.2    43.7      NA        100
             Alcohol (g)          2.2     0.0     6.4      NA         NA
       Saturated fat (g)         26.2    22.0    29.1      NA         NA
 Monounsaturated fat (g)         29.5    25.2    34.0      NA         NA
 Polyunsaturated fat (g)         20.9    18.4    24.7      NA         NA
       Linoleic acid (g)         19.5    17.2    22.8      NA        100
Alpha linolenic acid (g)          1.1     0.9     1.6      NA        100
  LC n3 fatty acids (mg)        294.6    41.3   995.9      NA         94
  Vitamin A equivs (mcg)       1675.7  1219.0  2118.0     100        100
           Retinol (mcg)        531.1   434.3   627.1      NA         NA
      Provitamin A (mcg)       6794.9  4436.7  9174.7      NA         NA
            Thiamin (mg)          1.5     1.3     2.0     100        100
         Riboflavin (mg)          3.3     3.0     3.6     100        100
             Niacin (mg)         55.0    49.5    60.5     100        100
      Folate (mcg total)        591.7   506.2   691.1      NA         NA
     Folate equivs (mcg)        756.4   654.7   847.1     100        100
          Vitamin C (mg)        160.4   125.3   205.4     100        100
         Vitamin D (mcg)          4.8     3.5     8.3      NA          0
          Vitamin E (mg)         15.3    12.1    20.2      NA        100
            Calcium (mg)       1553.4  1417.0  1748.3     100        100
               Iron (mg)         11.7    10.0    13.5     100        100
            Iodine (mcg)        274.8   240.8   324.1     100        100
          Magnesium (mg)        474.9   428.6   535.8     100        100
         Phosphorus (mg)       2164.9  2012.7  2295.2     100        100
          Potassium (mg)       4739.6  4448.2  5225.3      NA        100
             Sodium (mg)       1571.5  1318.6  2969.9      NA        100
               Zinc (mg)         14.3    12.5    24.8     100        100
        Cholesterol (mg)        263.5   155.3   431.6      NA         NA
          Selenium (mcg)         96.8    62.9   163.1     100        100
         Vitamin B6 (mg)          2.4     1.5     3.9     100        100
       Vitamin B12 (mcg)          8.0     6.7    12.8     100        100

         Percent energy from fat 34.5
     Percent energy from protein 21.6
Percent energy from carbohydrate 43.2
     Percent energy from alcohol  0.7
```

Women51to70.avtot6:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              10
 [5,] NutsSeeds            3
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       8
[10,] Poultryfisheggsleg   7
[11,] RedMeats             3
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           7
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8672.1  8252.6  9063.6      NA         NA
             Energy (kJ)       8981.4  8560.4  9382.4      NA         NA
             Protein (g)        119.6   109.4   131.0     100        100
                 Fat (g)         75.6    68.0    85.8      NA         NA
        Carbohydrate (g)        225.5   210.3   244.7      NA         NA
              Sugars (g)        127.0   115.3   144.9      NA         NA
              Starch (g)         96.4    84.2   113.9      NA         NA
               Fibre (g)         39.4    34.7    45.6      NA        100
             Alcohol (g)          2.3     0.0     8.0      NA         NA
       Saturated fat (g)         28.7    26.2    31.8      NA         NA
 Monounsaturated fat (g)         23.6    20.0    28.3      NA         NA
 Polyunsaturated fat (g)         17.9    15.7    20.9      NA         NA
       Linoleic acid (g)         16.3    14.4    19.0      NA        100
Alpha linolenic acid (g)          1.3     1.1     1.7      NA        100
  LC n3 fatty acids (mg)        282.7    45.4   990.4      NA         91
  Vitamin A equivs (mcg)       1743.2  1355.8  2113.5     100        100
           Retinol (mcg)        580.6   510.4   687.7      NA         NA
      Provitamin A (mcg)       6872.9  4219.7  9142.6      NA         NA
            Thiamin (mg)          1.5     1.2     1.8     100        100
         Riboflavin (mg)          3.3     2.9     3.7     100        100
             Niacin (mg)         53.9    46.6    61.3     100        100
      Folate (mcg total)        642.2   556.6   737.6      NA         NA
     Folate equivs (mcg)        814.8   706.4   937.2     100        100
          Vitamin C (mg)        176.0   107.8   233.1     100        100
         Vitamin D (mcg)          5.5     3.9     8.3      NA          0
          Vitamin E (mg)         12.3     9.5    16.5      NA        100
            Calcium (mg)       1731.7  1573.9  1863.1     100        100
               Iron (mg)         12.9    11.8    15.2     100        100
            Iodine (mcg)        279.6   248.4   316.9     100        100
          Magnesium (mg)        468.7   429.9   525.2     100        100
         Phosphorus (mg)       2256.9  2093.3  2377.6     100        100
          Potassium (mg)       4862.3  4533.1  5157.9      NA        100
             Sodium (mg)       1817.4  1523.7  2703.9      NA        100
               Zinc (mg)         15.0    13.0    24.9     100        100
        Cholesterol (mg)        271.7   183.4   400.3      NA         NA
          Selenium (mcg)         87.0    68.3   124.7     100        100
         Vitamin B6 (mg)          2.4     1.7     3.8     100        100
       Vitamin B12 (mcg)          8.5     7.0    12.4     100        100

         Percent energy from fat 31.7
     Percent energy from protein 23.1
Percent energy from carbohydrate 44.4
     Percent energy from alcohol  0.8
```

A15.14 Sample *7-day Total Diets* Women 51-70 years higher energy level

Tallest (180cm) and high acivity (PAL 2)

$Nserves.Women51to70.hitot1:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              3
 [5,] NutsSeeds            3
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11274.5 10938.3 11810.3      NA         NA
             Energy (kJ)      11641.8 11285.2 12201.8      NA         NA
             Protein (g)        143.4   135.4   154.4     100        100
                 Fat (g)         71.0    64.7    79.1      NA         NA
        Carbohydrate (g)        365.8   347.2   392.8      NA         NA
              Sugars (g)        153.8   141.0   174.6      NA         NA
              Starch (g)        209.4   191.9   229.6      NA         NA
               Fibre (g)         48.2    42.7    64.6      NA        100
             Alcohol (g)          2.1     0.0     7.8      NA         NA
       Saturated fat (g)         25.8    22.8    28.9      NA         NA
 Monounsaturated fat (g)         23.3    20.6    27.2      NA         NA
 Polyunsaturated fat (g)         16.1    14.3    20.1      NA         NA
       Linoleic acid (g)         14.5    13.0    17.7      NA        100
Alpha linolenic acid (g)          1.2     1.0     1.7      NA        100
  LC n3 fatty acids (mg)        328.5    88.9  1194.9      NA         99
  Vitamin A equivs (mcg)       1571.3  1234.3  1980.8     100        100
           Retinol (mcg)        474.4   412.4   565.2      NA         NA
      Provitamin A (mcg)       6508.8  4453.7  8906.8      NA         NA
            Thiamin (mg)          2.3     2.0     2.6     100        100
         Riboflavin (mg)          3.8     3.1     4.2     100        100
             Niacin (mg)         71.7    67.4    77.0     100        100
      Folate (mcg total)        691.0   603.1   778.4      NA         NA
     Folate equivs (mcg)       1104.2   934.8  1270.0     100        100
          Vitamin C (mg)        181.9   122.7   236.7     100        100
         Vitamin D (mcg)          4.7     3.5     7.6      NA          0
          Vitamin E (mg)         11.6     8.8    14.5      NA        100
            Calcium (mg)       1788.9  1640.2  1961.0     100        100
               Iron (mg)         16.6    14.5    18.7     100        100
            Iodine (mcg)        357.5   325.8   408.4     100        100
          Magnesium (mg)        566.7   538.7   596.1     100        100
         Phosphorus (mg)       2626.3  2490.4  2824.5     100        100
          Potassium (mg)       5725.0  5445.0  6091.7      NA        100
             Sodium (mg)       2277.7  1966.3  4063.8      NA        100
               Zinc (mg)         18.8    16.4    28.9     100        100
        Cholesterol (mg)        294.8   179.8   467.6      NA         NA
          Selenium (mcg)        104.4    78.4   158.9     100        100
         Vitamin B6 (mg)          2.3     1.8     3.1     100        100
       Vitamin B12 (mcg)          9.1     7.6    12.1     100        100

         Percent energy from fat 23.2
     Percent energy from protein 21.5
Percent energy from carbohydrate 54.8
     Percent energy from alcohol  0.5
```

Women51to70.hitot2:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              10
 [5,] NutsSeeds            10
 [6,] OtherVeg             28
 [7,] TotalFruit           21
 [8,] WholegrainCereals    39
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             3
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11025.0 10562.5 11607.4      NA         NA
             Energy (kJ)      11437.2 10963.6 12039.9      NA         NA
             Protein (g)        136.0   127.3   146.4     100        100
                 Fat (g)         86.3    78.0    95.6      NA         NA
        Carbohydrate (g)        326.7   300.9   351.1      NA         NA
              Sugars (g)        148.7   132.5   162.3      NA         NA
              Starch (g)        175.4   155.8   198.3      NA         NA
               Fibre (g)         52.5    47.0    61.1      NA        100
             Alcohol (g)          1.2     0.0     5.5      NA         NA
       Saturated fat (g)         26.3    23.3    29.3      NA         NA
 Monounsaturated fat (g)         30.4    26.4    35.6      NA         NA
 Polyunsaturated fat (g)         23.4    20.8    27.4      NA         NA
       Linoleic acid (g)         21.8    18.9    25.5      NA        100
Alpha linolenic acid (g)          1.4     1.2     1.8      NA        100
  LC n3 fatty acids (mg)        270.7    61.6   984.1      NA         90
  Vitamin A equivs (mcg)       1695.8  1330.0  2113.4     100        100
           Retinol (mcg)        525.0   470.0   587.6      NA         NA
      Provitamin A (mcg)       6953.7  4884.7  9174.5      NA         NA
            Thiamin (mg)          2.3     2.0     2.6     100        100
         Riboflavin (mg)          3.7     3.3     4.2     100        100
             Niacin (mg)         68.2    60.6    74.5     100        100
      Folate (mcg total)        783.0   669.7   869.0      NA         NA
     Folate equivs (mcg)       1135.8   971.1  1310.9     100        100
          Vitamin C (mg)        183.6   136.5   243.6     100        100
         Vitamin D (mcg)          4.8     3.6     8.0      NA          0
          Vitamin E (mg)         16.6    12.4    20.5      NA        100
            Calcium (mg)       1768.6  1653.0  1944.6     100        100
               Iron (mg)         17.0    15.8    18.7     100        100
            Iodine (mcg)        336.6   299.1   376.5     100        100
          Magnesium (mg)        624.2   584.2   682.3     100        100
         Phosphorus (mg)       2595.5  2449.6  2810.2     100        100
          Potassium (mg)       5645.9  5369.6  6146.7      NA        100
             Sodium (mg)       2099.5  1719.2  3004.6      NA        100
               Zinc (mg)         17.2    15.8    27.1     100        100
        Cholesterol (mg)        246.8   167.1   373.8      NA         NA
          Selenium (mg)         113.4    81.5   168.7     100        100
         Vitamin B6 (mg)          2.7     2.0     3.7     100        100
       Vitamin B12 (mg)           8.1     7.0    11.1     100        100

         Percent energy from fat 28.6
     Percent energy from protein 20.7
Percent energy from carbohydrate 50.4
     Percent energy from alcohol  0.3
```

Women51to70.hitot3:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              3
 [5,] NutsSeeds            10
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             3
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          7
[15,] LoFatDairy           25
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10976.1 10596.2 11378.8      NA         NA
             Energy (kJ)      11297.3 10909.8 11708.1      NA         NA
             Protein (g)        135.7   129.6   145.8     100        100
                 Fat (g)         93.9    83.9   103.1      NA         NA
        Carbohydrate (g)        307.5   290.1   335.0      NA         NA
              Sugars (g)        152.5   131.2   168.2      NA         NA
              Starch (g)        153.0   135.7   172.5      NA         NA
               Fibre (g)         41.5    36.9    56.6      NA        100
             Alcohol (g)          1.8     0.0     6.8      NA         NA
       Saturated fat (g)         32.5    28.7    36.2      NA         NA
 Monounsaturated fat (g)         32.3    28.2    36.2      NA         NA
 Polyunsaturated fat (g)         22.4    20.0    26.4      NA         NA
       Linoleic acid (g)         20.8    18.8    24.5      NA        100
Alpha linolenic acid (g)          1.3     1.1     1.8      NA        100
  LC n3 fatty acids (mg)        283.3    43.1  1033.5      NA         91
  Vitamin A equivs (mcg)       1721.9  1419.5  2067.1     100        100
           Retinol (mcg)        656.6   557.3   757.6      NA         NA
      Provitamin A (mcg)       6311.4  4507.3  8632.2      NA         NA
            Thiamin (mg)          2.1     1.8     2.5     100        100
         Riboflavin (mg)          4.2     3.7     4.6     100        100
             Niacin (mg)         68.0    64.3    75.3     100        100
      Folate (mcg total)        689.1   590.2   783.4      NA         NA
     Folate equivs (mcg)       1016.2   888.6  1163.2     100        100
          Vitamin C (mg)        140.4    91.6   220.5     100        100
         Vitamin D (mcg)          6.1     4.8     9.1      NA          0
          Vitamin E (mg)         14.7    11.5    20.3      NA        100
            Calcium (mg)       1991.6  1859.5  2119.0     100        100
               Iron (mg)         14.6    13.2    16.4     100        100
            Iodine (mcg)        385.2   335.0   431.2     100        100
          Magnesium (mg)        580.8   546.9   620.7     100        100
         Phosphorus (mg)       2697.7  2555.1  2866.8     100        100
          Potassium (mg)       5290.3  5026.4  5565.4      NA        100
             Sodium (mg)       2117.3  1805.8  3160.4      NA        100
               Zinc (mg)         17.3    15.0    37.8     100        100
        Cholesterol (mg)        287.1   201.0   405.6      NA         NA
          Selenium (mcg)        108.5    76.8   188.4     100        100
         Vitamin B6 (mg)          2.4     1.9     3.6     100        100
       Vitamin B12 (mcg)          9.6     8.4    13.6     100        100

         Percent energy from fat 31.4
     Percent energy from protein 20.8
Percent energy from carbohydrate 47.3
     Percent energy from alcohol  0.5
```

Women51to70.hitot4:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              10
 [5,] NutsSeeds            3
 [6,] OtherVeg             21
 [7,] TotalFruit           28
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       8
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11000.4 10559.3 11434.7      NA         NA
             Energy (kJ)      11421.2 10965.4 11855.1      NA         NA
             Protein (g)        141.6   131.8   155.5     100        100
                 Fat (g)         86.5    78.3    94.1      NA         NA
        Carbohydrate (g)        316.0   291.9   333.6      NA         NA
              Sugars (g)        172.6   153.3   187.9      NA         NA
              Starch (g)        140.0   128.8   152.7      NA         NA
               Fibre (g)         54.9    48.2    64.9      NA        100
             Alcohol (g)          3.3     0.0     9.7      NA         NA
       Saturated fat (g)         30.1    26.8    32.9      NA         NA
 Monounsaturated fat (g)         27.5    22.4    32.0      NA         NA
 Polyunsaturated fat (g)         22.4    20.1    25.2      NA         NA
       Linoleic acid (g)         20.4    18.4    22.9      NA        100
Alpha linolenic acid (g)          1.6     1.4     2.1      NA        100
  LC n3 fatty acids (mg)        348.4    90.1   877.4      NA        100
  Vitamin A equivs (mcg)       1890.2  1577.2  2342.5     100        100
           Retinol (mcg)        635.8   554.5   720.6      NA         NA
      Provitamin A (mcg)       7457.4  5663.3  9810.6      NA         NA
            Thiamin (mg)          2.1     1.8     2.4     100        100
         Riboflavin (mg)          3.8     3.4     4.1     100        100
             Niacin (mg)         68.4    62.1    73.1     100        100
      Folate (mcg total)        775.2   651.5   893.0      NA         NA
     Folate equivs (mcg)       1031.4   920.4  1176.0     100        100
          Vitamin C (mg)        253.8   194.8   351.8     100        100
         Vitamin D (mcg)          5.6     4.3     8.9      NA          0
          Vitamin E (mg)         15.4    12.7    20.5      NA        100
            Calcium (mg)       1753.3  1625.3  1911.1     100        100
               Iron (mg)         17.2    15.5    20.0     100        100
            Iodine (mcg)        313.2   273.1   363.9     100        100
          Magnesium (mg)        590.1   552.8   641.2     100        100
         Phosphorus (mg)       2598.3  2427.2  2833.9     100        100
          Potassium (mg)       6403.0  6060.6  6959.8      NA        100
             Sodium (mg)       2020.7  1730.3  2948.5      NA        100
               Zinc (mg)         18.5    16.5    29.2     100        100
        Cholesterol (mg)        298.5   198.2   457.5      NA         NA
          Selenium (mcg)         99.1    78.3   142.6     100        100
         Vitamin B6 (mg)          2.8     2.0     4.0     100        100
       Vitamin B12 (mcg)          8.8     7.7    11.7     100        100

         Percent energy from fat 28.6
     Percent energy from protein 21.5
Percent energy from carbohydrate 49.0
     Percent energy from alcohol  0.8
```

Women51to70.hitot5:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              3
 [5,] NutsSeeds            17
 [6,] OtherVeg             28
 [7,] TotalFruit           21
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       8
[10,] Poultryfisheggsleg   7
[11,] RedMeats             3
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11034.1 10708.3 11453.3      NA         NA
             Energy (kJ)      11386.1 11087.8 11787.3      NA         NA
             Protein (g)        127.3   120.8   135.9     100        100
                 Fat (g)        111.0   102.9   121.0      NA         NA
        Carbohydrate (g)        277.7   257.4   311.2      NA         NA
              Sugars (g)        163.3   145.0   189.7      NA         NA
              Starch (g)        111.4   100.3   125.1      NA         NA
               Fibre (g)         45.2    40.0    53.5      NA        100
             Alcohol (g)          4.3     0.0     9.5      NA         NA
       Saturated fat (g)         33.2    30.1    36.4      NA         NA
 Monounsaturated fat (g)         41.3    36.6    46.2      NA         NA
 Polyunsaturated fat (g)         29.4    25.3    34.3      NA         NA
       Linoleic acid (g)         27.6    23.6    31.9      NA        100
Alpha linolenic acid (g)          1.5     1.2     2.1      NA        100
  LC n3 fatty acids (mg)        289.1    68.5  1062.4      NA         96
  Vitamin A equivs (mcg)       1844.3  1443.1  2281.9     100        100
           Retinol (mcg)        639.4   560.4   730.2      NA         NA
      Provitamin A (mcg)       7149.8  4685.2 10138.1      NA         NA
            Thiamin (mg)          2.0     1.8     2.3     100        100
         Riboflavin (mg)          3.6     3.3     4.2     100        100
             Niacin (mg)         64.4    58.6    73.1     100        100
      Folate (mcg total)        701.5   612.4   793.8      NA         NA
     Folate equivs (mcg)        909.7   822.3  1061.6     100        100
          Vitamin C (mg)        189.4   139.9   243.8     100        100
         Vitamin D (mcg)          5.4     4.1     7.6      NA          0
          Vitamin E (mg)         20.5    16.4    25.0      NA        100
            Calcium (mg)       1687.3  1551.8  1855.1     100        100
               Iron (mg)         14.7    13.2    16.7     100        100
            Iodine (mcg)        295.6   263.4   348.1     100        100
          Magnesium (mg)        596.3   557.5   653.2     100        100
         Phosphorus (mg)       2485.3  2354.4  2670.1     100        100
          Potassium (mg)       5444.2  5096.1  5942.9      NA        100
             Sodium (mg)       1932.8  1643.8  2696.1      NA        100
               Zinc (mg)         17.2    14.8    27.2     100        100
        Cholesterol (mg)        271.1   188.0   401.4      NA         NA
          Selenium (mcg)        117.5    85.2   178.2     100        100
         Vitamin B6 (mg)          2.7     2.0     3.9     100        100
       Vitamin B12 (mcg)          8.4     6.8    12.8     100        100

         Percent energy from fat 36.7
     Percent energy from protein 19.3
Percent energy from carbohydrate 42.9
     Percent energy from alcohol  1.1
```

Women51to70.hitot6:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              10
 [5,] NutsSeeds            3
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       25
[10,] Poultryfisheggsleg   7
[11,] RedMeats             3
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           7
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11204.3 10782.2 11724.2      NA         NA
             Energy (kJ)      11557.3 11109.1 12105.4      NA         NA
             Protein (g)        135.5   127.2   143.6     100        100
                 Fat (g)         92.6    81.4   103.9      NA         NA
        Carbohydrate (g)        319.1   295.3   354.3      NA         NA
              Sugars (g)        144.6   126.6   166.1      NA         NA
              Starch (g)        172.1   154.7   198.2      NA         NA
               Fibre (g)         45.1    39.4    52.9      NA        100
             Alcohol (g)          4.2     0.0    11.1      NA         NA
       Saturated fat (g)         34.6    31.3    37.6      NA         NA
 Monounsaturated fat (g)         28.9    24.9    34.4      NA         NA
 Polyunsaturated fat (g)         22.5    19.5    25.9      NA         NA
       Linoleic acid (g)         20.6    17.8    23.2      NA        100
Alpha linolenic acid (g)          1.6     1.4     2.1      NA        100
  LC n3 fatty acids (mg)        306.7    71.9  1006.1      NA         94
  Vitamin A equivs (mcg)       1904.7  1519.0  2292.8     100        100
           Retinol (mcg)        697.9   616.6   803.3      NA         NA
      Provitamin A (mcg)       7130.9  4746.0  9443.6      NA         NA
            Thiamin (mg)          1.9     1.7     2.2     100        100
         Riboflavin (mg)          3.6     3.2     3.9     100        100
             Niacin (mg)         63.2    58.1    68.2     100        100
      Folate (mcg total)        700.1   621.5   768.0      NA         NA
     Folate equivs (mcg)       1012.5   890.5  1134.2     100        100
          Vitamin C (mg)        180.0   121.0   236.8     100        100
         Vitamin D (mcg)          6.2     5.0     9.2      NA          0
          Vitamin E (mg)         14.6    11.3    17.6      NA        100
            Calcium (mg)       1841.4  1682.8  1975.2     100        100
               Iron (mg)         15.3    13.5    18.2     100        100
            Iodine (mcg)        327.6   279.8   366.9     100        100
          Magnesium (mg)        530.5   489.3   572.8     100        100
         Phosphorus (mg)       2517.4  2325.3  2650.3     100        100
          Potassium (mg)       5165.1  4850.3  5552.8      NA        100
             Sodium (mg)       2420.9  2002.1  3212.7      NA        100
               Zinc (mg)         16.9    15.0    27.0     100        100
        Cholesterol (mg)        287.0   207.1   491.2      NA         NA
          Selenium (mcg)         98.7    72.8   139.9     100        100
         Vitamin B6 (mg)          2.4     1.7     3.5     100        100
       Vitamin B12 (mcg)          8.7     7.4    11.6     100        100

         Percent energy from fat 30.3
     Percent energy from protein 20.4
Percent energy from carbohydrate 48.3
     Percent energy from alcohol  1.1
```

A15.15 Sample *7-day Total Diets* Women 70+ years mid energy level

Average height (165cms); light to moderate activity (PAL 1.7)

Women70plus.avtot1:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              3
 [5,] NutsSeeds            3
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    25
 [9,] RefinedCereals       15
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8330.8  7996.6  8801.6      NA         NA
             Energy (kJ)       8580.0  8246.6  9082.9      NA         NA
             Protein (g)        120.7   110.8   130.4     100        100
                 Fat (g)         63.2    56.0    70.3      NA         NA
        Carbohydrate (g)        233.9   216.4   262.7      NA         NA
              Sugars (g)        120.1   103.1   132.6      NA         NA
              Starch (g)        112.0    98.2   124.0      NA         NA
               Fibre (g)         31.7    28.5    42.4      NA        100
             Alcohol (g)          0.7     0.0     5.3      NA         NA
       Saturated fat (g)         23.1    20.3    26.4      NA         NA
 Monounsaturated fat (g)         20.7    17.0    24.7      NA         NA
 Polyunsaturated fat (g)         14.4    12.3    18.1      NA         NA
       Linoleic acid (g)         12.9    11.0    15.8      NA        100
Alpha linolenic acid (g)          1.0     0.8     1.6      NA        100
  LC n3 fatty acids (mg)        395.4    81.4   967.2      NA         99
  Vitamin A equivs (mcg)       1399.2  1079.6  1831.0     100        100
           Retinol (mcg)        454.7   386.0   534.0      NA         NA
      Provitamin A (mcg)       5619.1  3861.6  8140.1      NA         NA
            Thiamin (mg)          1.5     1.2     1.8     100        100
         Riboflavin (mg)          3.2     2.9     3.6     100        100
             Niacin (mg)         58.1    53.0    63.7     100        100
      Folate (mcg total)        554.4   484.7   626.8      NA         NA
     Folate equivs (mcg)        802.0   669.4   898.2     100        100
          Vitamin C (mg)        132.4    97.8   178.3     100        100
         Vitamin D (mcg)          4.8     3.4     7.8      NA          0
          Vitamin E (mg)          9.8     6.7    12.1      NA         99
            Calcium (mg)       1564.5  1426.9  1681.2     100        100
               Iron (mg)         11.9    10.2    15.1     100        100
            Iodine (mcg)        298.9   267.9   341.8     100        100
          Magnesium (mg)        423.2   398.0   465.3     100        100
         Phosphorus (mg)       2146.9  2027.1  2265.6     100        100
          Potassium (mg)       4447.3  4161.4  4802.7      NA        100
             Sodium (mg)       1601.7  1398.0  2478.8      NA        100
               Zinc (mg)         15.4    13.7    25.9     100        100
        Cholesterol (mg)        296.6   175.8   430.5      NA         NA
          Selenium (mcg)         88.1    64.4   120.9     100        100
         Vitamin B6 (mg)          1.9     1.4     2.4     100         98
       Vitamin B12 (mcg)          9.1     7.8    12.1     100        100

         Percent energy from fat 27.8
     Percent energy from protein 24.4
Percent energy from carbohydrate 47.5
     Percent energy from alcohol  0.2
```

Women70plus.avtot2:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             28
 [7,] TotalFruit           21
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       8
[10,] Poultryfisheggsleg   7
[11,] RedMeats             3
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8346.4  8022.6  8749.1      NA         NA
             Energy (kJ)       8660.7  8310.3  9077.0      NA         NA
             Protein (g)        113.6   107.1   122.4     100        100
                 Fat (g)         69.2    61.9    77.8      NA         NA
        Carbohydrate (g)        229.4   213.1   255.3      NA         NA
              Sugars (g)        138.9   123.7   154.4      NA         NA
              Starch (g)         88.1    77.0    98.4      NA         NA
               Fibre (g)         39.9    35.8    45.9      NA        100
             Alcohol (g)          0.6     0.0     2.8      NA         NA
       Saturated fat (g)         22.9    20.6    26.0      NA         NA
 Monounsaturated fat (g)         23.6    19.9    27.8      NA         NA
 Polyunsaturated fat (g)         17.6    14.9    23.4      NA         NA
       Linoleic acid (g)         16.0    13.8    20.4      NA        100
Alpha linolenic acid (g)          1.2     0.8     2.2      NA        100
  LC n3 fatty acids (mg)        358.7    39.3  1156.3      NA         94
  Vitamin A equivs (mcg)       1518.0  1133.6  1891.1     100        100
           Retinol (mcg)        448.3   384.8   520.1      NA         NA
      Provitamin A (mcg)       6369.4  3846.3  8657.7      NA         NA
            Thiamin (mg)          1.5     1.3     1.8     100        100
         Riboflavin (mg)          3.2     3.0     3.5     100        100
             Niacin (mg)         56.2    50.9    60.4     100        100
      Folate (mcg total)        667.0   592.7   739.9      NA         NA
     Folate equivs (mcg)        850.4   743.7   954.9     100        100
          Vitamin C (mg)        176.8   127.1   248.4     100        100
         Vitamin D (mcg)          4.7     3.3     8.9      NA          0
          Vitamin E (mg)         12.6    10.3    16.0      NA        100
            Calcium (mg)       1559.6  1426.7  1675.1     100        100
               Iron (mg)         12.0    10.5    14.8     100        100
            Iodine (mcg)        277.1   234.9   334.9     100        100
          Magnesium (mg)        476.1   436.3   517.5     100        100
         Phosphorus (mg)       2128.0  1998.6  2308.6     100        100
          Potassium (mg)       5054.1  4721.4  5475.3      NA        100
             Sodium (mg)       1443.9  1223.4  2221.3      NA        100
               Zinc (mg)         14.0    12.4    24.4     100        100
        Cholesterol (mg)        257.0   154.3   406.0      NA         NA
          Selenium (mcg)         88.0    65.5   125.5     100        100
         Vitamin B6 (mg)          2.4     1.6     3.6     100        100
       Vitamin B12 (mcg)          7.9     6.8    12.6     100        100

         Percent energy from fat 30.2
     Percent energy from protein 22.7
Percent energy from carbohydrate 46.9
     Percent energy from alcohol  0.2
```

Women70plus.avtot3:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              3
 [5,] NutsSeeds            3
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    32
 [9,] RefinedCereals       8
[10,] Poultryfisheggsleg   7
[11,] RedMeats             3
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          4
[15,] LoFatDairy           25
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8293.0  7998.0  8841.1      NA         NA
             Energy (kJ)       8548.2  8253.0  9104.0      NA         NA
             Protein (g)        113.3   107.0   120.2     100        100
                 Fat (g)         69.0    61.6    76.3      NA         NA
        Carbohydrate (g)        228.0   212.2   246.6      NA         NA
              Sugars (g)        127.0   112.2   141.5      NA         NA
              Starch (g)         99.2    91.0   114.3      NA         NA
               Fibre (g)         32.8    28.9    38.8      NA        100
             Alcohol (g)          0.0     0.0     0.0      NA         NA
       Saturated fat (g)         24.9    22.1    28.1      NA         NA
 Monounsaturated fat (g)         21.4    18.5    25.6      NA         NA
 Polyunsaturated fat (g)         17.5    15.7    20.3      NA         NA
       Linoleic acid (g)         15.9    14.4    18.3      NA        100
Alpha linolenic acid (g)          1.2     1.0     1.6      NA        100
  LC n3 fatty acids (mg)        359.8    49.8   935.5      NA         92
  Vitamin A equivs (mcg)       1524.6  1121.0  1879.0     100        100
           Retinol (mcg)        576.9   505.8   686.6      NA         NA
      Provitamin A (mcg)       5624.7  3473.4  7826.4      NA         NA
            Thiamin (mg)          1.5     1.3     1.8     100        100
          Riboflavin (mg)         3.6     3.1     3.9     100        100
             Niacin (mg)         55.7    50.3    61.5     100        100
      Folate (mcg total)        585.8   520.2   686.0      NA         NA
     Folate equivs (mcg)        832.5   698.8   940.4     100        100
          Vitamin C (mg)        125.1    86.7   165.5     100        100
          Vitamin D (mcg)         5.8     4.4     9.2      NA          0
          Vitamin E (mg)         10.7     8.2    13.5      NA        100
            Calcium (mg)       1732.1  1585.9  1891.5     100        100
               Iron (mg)         11.3     9.8    14.2     100        100
            Iodine (mcg)        330.4   291.2   378.4     100        100
          Magnesium (mg)        440.4   406.6   489.6     100        100
          Phosphorus (mg)       2204.9  2025.0  2333.1     100        100
          Potassium (mg)        4565.8  4268.6  4898.8      NA        100
             Sodium (mg)        1601.9  1398.9  1779.6      NA        100
               Zinc (mg)         14.4    12.2    24.4     100        100
        Cholesterol (mg)        267.2   175.8   439.2      NA         NA
          Selenium (mcg)         81.1    63.4   105.2     100        100
          Vitamin B6 (mg)         2.0     1.4     3.0     100         99
        Vitamin B12 (mcg)         9.2     7.7    13.2     100        100

         Percent energy from fat 30.5
     Percent energy from protein 23.0
Percent energy from carbohydrate 46.6
     Percent energy from alcohol  0.0
```

Women70plus.avtot4:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           10
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              3
 [5,] NutsSeeds            3
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       8
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8319.0  7976.0  8743.1      NA         NA
             Energy (kJ)       8607.1  8262.2  9038.0      NA         NA
             Protein (g)        122.9   117.0   130.6     100        100
                 Fat (g)         63.7    56.8    73.0      NA         NA
        Carbohydrate (g)        229.9   215.6   242.9      NA         NA
              Sugars (g)        124.5   110.2   134.3      NA         NA
              Starch (g)        103.7    93.2   115.4      NA         NA
               Fibre (g)         36.9    31.5    44.9      NA        100
             Alcohol (g)          0.6     0.0     2.8      NA         NA
       Saturated fat (g)         23.4    20.5    27.3      NA         NA
 Monounsaturated fat (g)         20.8    17.3    25.4      NA         NA
 Polyunsaturated fat (g)         14.5    12.7    17.4      NA         NA
       Linoleic acid (g)         13.0    11.7    15.4      NA        100
Alpha linolenic acid (g)          1.0     0.8     1.7      NA        100
  LC n3 fatty acids (mg)        369.3    81.2   882.1      NA         98
  Vitamin A equivs (mcg)       1532.3  1147.5  2023.9     100        100
           Retinol (mcg)        459.9   385.1   557.8      NA         NA
      Provitamin A (mcg)       6378.9  4079.9  8842.7      NA         NA
            Thiamin (mg)          1.6     1.4     2.0     100        100
          Riboflavin (mg)         3.4     3.1     3.8     100        100
             Niacin (mg)         60.3    55.4    66.8     100        100
      Folate (mcg total)        617.0   536.2   694.6      NA         NA
     Folate equivs (mcg)        837.7   735.4   938.0     100        100
          Vitamin C (mg)        183.7   140.4   242.6     100        100
          Vitamin D (mcg)         4.8     3.3     6.9      NA          0
          Vitamin E (mg)         10.4     7.7    12.8      NA        100
            Calcium (mg)       1614.3  1405.2  1774.7     100        100
               Iron (mg)         13.3    11.7    15.4     100        100
            Iodine (mcg)        295.7   262.5   329.6     100        100
          Magnesium (mg)        461.8   431.5   512.0     100        100
          Phosphorus (mg)       2234.4  2084.0  2365.5     100        100
          Potassium (mg)        5121.0  4748.1  5427.0      NA        100
             Sodium (mg)        1586.9  1358.3  2463.8      NA        100
               Zinc (mg)         16.4    14.2    27.6     100        100
        Cholesterol (mg)        296.9   199.0   444.4      NA         NA
          Selenium (mcg)         84.9    64.8   109.3     100        100
          Vitamin B6 (mg)         2.3     1.7     3.0     100        100
        Vitamin B12 (mcg)         8.7     7.5    13.8     100        100

         Percent energy from fat 28.0
     Percent energy from protein 24.8
Percent energy from carbohydrate 47.0
     Percent energy from alcohol  0.2
```

Women70plus.avtot5:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              3
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       8
[10,] Poultryfisheggsleg   7
[11,] RedMeats             3
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8243.5  7910.6  8670.8      NA         NA
             Energy (kJ)       8486.3  8139.7  8915.8      NA         NA
             Protein (g)        107.9   101.6   117.1     100        100
                 Fat (g)         76.7    70.4    85.1      NA         NA
        Carbohydrate (g)        211.8   193.8   227.7      NA         NA
              Sugars (g)        124.4   110.5   135.0      NA         NA
              Starch (g)         85.4    75.6    94.5      NA         NA
               Fibre (g)         30.8    27.7    36.5      NA        100
             Alcohol (g)          1.1     0.0     4.1      NA         NA
       Saturated fat (g)         25.7    23.3    28.3      NA         NA
 Monounsaturated fat (g)         25.5    21.9    30.0      NA         NA
 Polyunsaturated fat (g)         20.1    17.2    23.4      NA         NA
       Linoleic acid (g)         18.5    16.0    21.4      NA        100
Alpha linolenic acid (g)          1.3     1.0     1.9      NA        100
  LC n3 fatty acids (mg)        341.8    38.8   865.3      NA         91
  Vitamin A equivs (mcg)       1457.1  1137.4  1826.2     100        100
           Retinol (mcg)        538.8   470.8   623.5      NA         NA
      Provitamin A (mcg)       5454.4  3708.0  7704.4      NA         NA
            Thiamin (mg)          1.4     1.2     1.7     100        100
         Riboflavin (mg)          3.1     2.7     3.4     100        100
             Niacin (mg)         52.7    46.5    58.0     100        100
      Folate (mcg total)         568.1   482.2   707.4      NA         NA
     Folate equivs (mcg)         746.7   650.5   897.6     100        100
          Vitamin C (mg)         128.8    88.6   170.2     100        100
         Vitamin D (mcg)          5.0     3.6     7.9      NA          0
          Vitamin E (mg)         12.3     9.9    16.1      NA        100
            Calcium (mg)       1520.5  1335.1  1691.6     100        100
               Iron (mg)         10.4     8.7    13.1     100        100
            Iodine (mcg)        278.3   239.7   327.0     100        100
          Magnesium (mg)        419.9   380.9   457.4     100        100
         Phosphorus (mg)       2028.5  1890.1  2196.1     100        100
          Potassium (mg)       4316.5  3972.2  4770.3      NA        100
             Sodium (mg)       1507.4  1282.8  2412.3      NA        100
               Zinc (mg)         12.9    11.2    23.6     100        100
        Cholesterol (mg)        260.0   169.6   424.3      NA         NA
          Selenium (mcg)         85.3    55.9   127.4     100         99
         Vitamin B6 (mg)          1.9     1.3     2.8     100         93
       Vitamin B12 (mcg)          8.0     6.8    12.0     100        100

         Percent energy from fat 34.1
     Percent energy from protein 22.0
Percent energy from carbohydrate 43.6
     Percent energy from alcohol  0.4
```

Women70plus.avtot6:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              10
 [5,] NutsSeeds            3
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       8
[10,] Poultryfisheggsleg   7
[11,] RedMeats             3
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                          Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8388.0  8058.7  8834.3      NA         NA
             Energy (kJ)       8696.4  8349.6  9126.9      NA         NA
             Protein (g)        114.1   105.6   122.7     100        100
                 Fat (g)         71.1    64.4    80.7      NA         NA
        Carbohydrate (g)        226.2   209.5   243.9      NA         NA
              Sugars (g)        128.0   114.2   140.3      NA         NA
              Starch (g)         96.2    85.9   108.4      NA         NA
               Fibre (g)         39.7    35.0    49.2      NA        100
             Alcohol (g)          1.2     0.0     4.3      NA         NA
       Saturated fat (g)         25.3    22.6    27.9      NA         NA
 Monounsaturated fat (g)         22.2    19.4    25.9      NA         NA
 Polyunsaturated fat (g)         18.3    16.1    21.5      NA         NA
       Linoleic acid (g)         16.6    14.7    19.3      NA        100
Alpha linolenic acid (g)          1.3     1.0     1.9      NA        100
  LC n3 fatty acids (mg)        368.5    48.7  1000.5      NA         95
  Vitamin A equivs (mcg)       1600.9  1334.8  1971.9     100        100
           Retinol (mcg)        543.9   465.7   617.4      NA         NA
      Provitamin A (mcg)       6288.8  4680.9  8663.8      NA         NA
            Thiamin (mg)          1.5     1.3     1.8     100        100
         Riboflavin (mg)          3.2     2.9     3.7     100        100
             Niacin (mg)         54.1    48.9    60.3     100        100
      Folate (mcg total)        655.1   566.2   745.7      NA         NA
     Folate equivs (mcg)        833.4   721.9   929.5     100        100
          Vitamin C (mg)        177.1   133.5   219.8     100        100
         Vitamin D (mcg)          5.1     3.4     7.8      NA          0
          Vitamin E (mg)         11.9     9.5    14.7      NA        100
            Calcium (mg)       1567.6  1452.9  1722.3     100        100
               Iron (mg)         12.8    11.3    15.4     100        100
            Iodine (mcg)        279.2   229.4   317.5     100        100
          Magnesium (mg)        460.1   409.8   500.9     100        100
         Phosphorus (mg)       2128.3  2024.7  2285.5     100        100
          Potassium (mg)       4976.5  4546.8  5317.6      NA        100
             Sodium (mg)       1554.9  1322.1  2380.8      NA        100
               Zinc (mg)         14.1    12.3    24.8     100        100
        Cholesterol (mg)        265.3   169.1   430.0      NA         NA
          Selenium (mcg)         81.0    60.1   112.4     100        100
         Vitamin B6 (mg)          2.2     1.5     3.4     100        100
       Vitamin B12 (mcg)          8.0     6.8    11.2     100        100

         Percent energy from fat 30.8
     Percent energy from protein 22.7
Percent energy from carbohydrate 46.0
     Percent energy from alcohol  0.4
```

A15.16 Sample *7-day Total Diets* Women 70+ years higher energy level

Tallest (180cm) and high acivity (PAL 2)

Women70plus.hitot1:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              3
 [5,] NutsSeeds            14
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    31
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10645.9 10271.7 11053.8      NA         NA
             Energy (kJ)      10944.2 10573.4 11357.8      NA         NA
             Protein (g)        136.5   128.1   147.9     100        100
                 Fat (g)        103.2    96.5   114.2      NA         NA
        Carbohydrate (g)        266.4   249.2   284.3      NA         NA
              Sugars (g)        138.7   125.5   154.1      NA         NA
              Starch (g)        125.7   113.6   136.8      NA         NA
               Fibre (g)         37.9    33.2    48.3      NA        100
             Alcohol (g)          2.0     0.0     8.0      NA         NA
       Saturated fat (g)         32.1    28.5    35.5      NA         NA
 Monounsaturated fat (g)         37.1    32.7    42.2      NA         NA
 Polyunsaturated fat (g)         27.1    21.6    34.6      NA         NA
       Linoleic acid (g)         24.9    20.3    31.1      NA        100
Alpha linolenic acid (g)          1.7     1.1     2.6      NA        100
  LC n3 fatty acids (mg)        411.4   117.2  1033.0      NA        100
  Vitamin A equivs (mcg)       1546.9  1161.3  1953.1     100        100
           Retinol (mcg)        577.8   477.6   707.4      NA         NA
      Provitamin A (mcg)       5762.6  3460.7  8097.3      NA         NA
             Thiamin (mg)          2.0     1.7     2.3     100        100
          Riboflavin (mg)          3.5     3.2     3.9     100        100
              Niacin (mg)         68.5    62.7    74.4     100        100
      Folate (mcg total)         678.0   608.8   763.8      NA         NA
     Folate equivs (mcg)         958.7   849.0  1118.5     100        100
          Vitamin C (mg)         133.7    87.1   180.9     100        100
          Vitamin D (mcg)          5.5     3.8     9.4      NA          0
          Vitamin E (mg)          15.9    11.4    19.5      NA        100
            Calcium (mg)       1673.8  1550.5  1833.3     100        100
               Iron (mg)         14.2    12.9    16.3     100        100
            Iodine (mcg)        314.8   284.8   350.9     100        100
          Magnesium (mg)        538.2   507.9   586.8     100        100
          Phosphorus (mg)       2461.4  2337.3  2680.3     100        100
          Potassium (mg)        4881.7  4565.7  5144.8      NA        100
             Sodium (mg)        1905.8  1599.8  2862.9      NA        100
               Zinc (mg)         17.6    14.9    28.4     100        100
        Cholesterol (mg)         311.0   205.1   541.9      NA         NA
          Selenium (mcg)         117.6    79.4   175.8     100        100
          Vitamin B6 (mg)          2.2     1.7     2.9     100        100
        Vitamin B12 (mcg)          8.8     7.8    11.8     100        100

         Percent energy from fat 35.5
     Percent energy from protein 21.6
Percent energy from carbohydrate 42.4
     Percent energy from alcohol  0.5
```

Women70plus.hitot2:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10571.8 10196.6 11029.9      NA         NA
             Energy (kJ)      10934.4 10564.3 11383.0      NA         NA
             Protein (g)        137.8   130.6   147.9     100        100
                 Fat (g)         80.8    71.5    91.0      NA         NA
        Carbohydrate (g)        309.5   289.3   330.6      NA         NA
              Sugars (g)        156.3   138.9   175.8      NA         NA
              Starch (g)        150.7   137.7   166.1      NA         NA
               Fibre (g)         46.4    41.9    56.1      NA        100
             Alcohol (g)          1.8     0.0     6.4      NA         NA
       Saturated fat (g)         28.1    24.3    32.3      NA         NA
 Monounsaturated fat (g)         27.3    22.9    34.0      NA         NA
 Polyunsaturated fat (g)         19.2    15.8    24.7      NA         NA
       Linoleic acid (g)         17.3    14.7    21.8      NA        100
Alpha linolenic acid (g)          1.4     0.9     2.3      NA        100
  LC n3 fatty acids (mg)        384.9    88.9  1225.1      NA         99
  Vitamin A equivs (mcg)       2198.2  1739.6  2667.8     100        100
           Retinol (mcg)        493.8   414.3   583.5      NA         NA
      Provitamin A (mcg)      10173.6  7389.7 12914.5      NA         NA
            Thiamin (mg)          1.9     1.7     2.2     100        100
         Riboflavin (mg)          3.5     3.2     3.9     100        100
             Niacin (mg)         67.7    62.1    75.5     100        100
      Folate (mcg total)        707.0   626.4   795.8      NA         NA
     Folate equivs (mcg)        978.7   839.3  1102.3     100        100
          Vitamin C (mg)        198.0   150.1   252.6     100        100
         Vitamin D (mcg)          4.8     3.4     8.3      NA          0
          Vitamin E (mg)         13.2    10.1    16.7      NA        100
            Calcium (mg)       1650.4  1530.9  1757.1     100        100
               Iron (mg)         15.1    13.6    17.5     100        100
            Iodine (mcg)        307.6   272.4   380.6     100        100
          Magnesium (mg)        541.7   506.2   583.1     100        100
         Phosphorus (mg)       2447.0  2315.3  2606.2     100        100
          Potassium (mg)       5972.5  5563.8  6400.7      NA        100
             Sodium (mg)       1876.7  1619.9  2604.7      NA        100
               Zinc (mg)         17.7    15.4    28.7     100        100
        Cholesterol (mg)        317.9   215.7   491.5      NA         NA
          Selenium (mcg)        105.1    79.8   149.2     100        100
         Vitamin B6 (mg)          2.5     2.0     3.6     100        100
       Vitamin B12 (mcg)          9.0     7.3    13.9     100        100

         Percent energy from fat 27.9
     Percent energy from protein 21.9
Percent energy from carbohydrate 49.7
     Percent energy from alcohol  0.5
```

Women70plus.hitot3:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              3
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       8
[10,] Poultryfisheggsleg   7
[11,] RedMeats             3
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          7
[15,] LoFatDairy           25
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10699.8 10238.8 11169.4      NA         NA
             Energy (kJ)      11008.8 10530.8 11482.3      NA         NA
             Protein (g)        128.1   121.5   137.2     100        100
                 Fat (g)         99.5    93.6   106.2      NA         NA
        Carbohydrate (g)        287.4   261.6   308.6      NA         NA
              Sugars (g)        170.5   150.0   190.8      NA         NA
              Starch (g)        114.4   102.4   128.5      NA         NA
               Fibre (g)         39.0    34.8    44.6      NA        100
             Alcohol (g)          1.7     0.0     8.0      NA         NA
       Saturated fat (g)         35.8    32.8    39.3      NA         NA
 Monounsaturated fat (g)         31.9    28.6    35.5      NA         NA
 Polyunsaturated fat (g)         24.8    22.2    28.4      NA         NA
       Linoleic acid (g)         22.8    20.4    25.5      NA        100
Alpha linolenic acid (g)          1.7     1.3     2.3      NA        100
  LC n3 fatty acids (mg)        344.7    48.6   933.2      NA         93
  Vitamin A equivs (mcg)       1752.0  1408.0  2205.4     100        100
           Retinol (mcg)        768.9   674.1   873.3      NA         NA
      Provitamin A (mcg)       5840.0  3683.7  9209.8      NA         NA
            Thiamin (mg)          1.8     1.5     2.1     100        100
         Riboflavin (mg)          4.1     3.7     4.4     100        100
             Niacin (mg)         63.6    57.0    68.8     100        100
      Folate (mcg total)         688.8   617.6   787.3      NA         NA
     Folate equivs (mcg)         949.9   862.0  1078.7     100        100
          Vitamin C (mg)         159.5   118.5   216.1     100        100
         Vitamin D (mcg)           6.9     5.5     9.8      NA          0
          Vitamin E (mg)          15.0    12.3    18.0      NA        100
            Calcium (mg)       1938.0  1794.1  2100.5     100        100
               Iron (mg)          13.1    10.6    16.1     100        100
            Iodine (mcg)         368.8   313.0   406.1     100        100
          Magnesium (mg)         527.8   485.0   579.2     100        100
         Phosphorus (mg)        2518.2  2351.4  2684.4     100        100
          Potassium (mg)        5296.3  4935.6  5804.7      NA        100
             Sodium (mg)        1979.6  1724.0  2990.8      NA        100
               Zinc (mg)          16.3    13.7    26.0     100        100
        Cholesterol (mg)         315.6   212.4   509.9      NA         NA
          Selenium (mcg)          95.5    67.1   125.7     100        100
         Vitamin B6 (mg)           2.3     1.9     3.1     100        100
       Vitamin B12 (mcg)           9.7     8.3    13.3     100        100

         Percent energy from fat 34.0
     Percent energy from protein 20.1
Percent energy from carbohydrate 45.4
     Percent energy from alcohol  0.5
```

Women70plus.hitot4:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           10
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              3
 [5,] NutsSeeds            3
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       10
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10715.3 10353.2 11182.4      NA         NA
             Energy (kJ)      11064.0 10694.7 11544.1      NA         NA
             Protein (g)        134.2   129.1   143.9     100        100
                 Fat (g)         90.9    83.7    99.3      NA         NA
        Carbohydrate (g)        299.5   284.0   321.1      NA         NA
              Sugars (g)        165.4   147.2   181.8      NA         NA
              Starch (g)        130.9   115.4   145.1      NA         NA
               Fibre (g)         44.4    39.9    52.7      NA        100
             Alcohol (g)          2.3     0.0     6.8      NA         NA
       Saturated fat (g)         32.9    28.8    38.2      NA         NA
 Monounsaturated fat (g)         29.0    24.8    32.3      NA         NA
 Polyunsaturated fat (g)         22.4    19.9    25.2      NA         NA
       Linoleic acid (g)         20.3    18.0    22.9      NA        100
Alpha linolenic acid (g)          1.6     1.3     2.0      NA        100
  LC n3 fatty acids (mg)        388.3   114.6  1258.5      NA        100
  Vitamin A equivs (mcg)       1814.4  1487.2  2265.6     100        100
           Retinol (mcg)        682.2   592.6   786.8      NA         NA
      Provitamin A (mcg)       6733.0  4439.4  9453.9      NA         NA
            Thiamin (mg)          1.9     1.6     2.3     100        100
         Riboflavin (mg)          3.7     3.4     4.1     100        100
             Niacin (mg)         66.3    61.9    72.0     100        100
      Folate (mcg total)        695.5   611.8   782.3      NA         NA
     Folate equivs (mcg)        974.0   872.4  1102.3     100        100
          Vitamin C (mg)        209.2   160.2   258.1     100        100
         Vitamin D (mcg)          5.9     4.5     9.0      NA          0
          Vitamin E (mg)         14.3    11.2    16.9      NA        100
            Calcium (mg)       1744.5  1587.1  1936.3     100        100
               Iron (mg)         15.5    13.5    18.2     100        100
            Iodine (mcg)        324.4   285.3   379.1     100        100
          Magnesium (mg)        532.3   502.5   574.3     100        100
         Phosphorus (mg)       2459.2  2328.5  2612.5     100        100
          Potassium (mg)       5724.6  5324.4  6118.5      NA        100
             Sodium (mg)       2058.1  1805.7  2848.3      NA        100
               Zinc (mg)         17.5    15.5    27.7     100        100
        Cholesterol (mg)        320.3   226.6   455.4      NA         NA
          Selenium (mcg)         92.4    72.3   119.0     100        100
         Vitamin B6 (mg)          2.5     1.8     3.4     100        100
       Vitamin B12 (mcg)          9.1     7.9    14.1     100        100

         Percent energy from fat 31.0
     Percent energy from protein 21.0
Percent energy from carbohydrate 47.4
     Percent energy from alcohol  0.6
```

Women70plus.hitot5:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           11
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              3
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10517.1 10087.9 11106.0      NA         NA
             Energy (kJ)      10800.9 10347.6 11396.0      NA         NA
             Protein (g)        132.9   126.0   142.5     100        100
                 Fat (g)         86.9    79.3    94.5      NA         NA
        Carbohydrate (g)        297.9   277.2   319.9      NA         NA
              Sugars (g)        134.0   116.8   147.4      NA         NA
              Starch (g)        162.0   143.8   175.2      NA         NA
               Fibre (g)         36.4    32.8    44.0      NA        100
             Alcohol (g)          1.7     0.0     8.3      NA         NA
       Saturated fat (g)         29.5    26.1    32.8      NA         NA
 Monounsaturated fat (g)         29.5    25.7    34.6      NA         NA
 Polyunsaturated fat (g)         21.5    18.1    28.3      NA         NA
       Linoleic acid (g)         19.6    16.9    25.2      NA        100
Alpha linolenic acid (g)          1.5     1.1     2.6      NA        100
  LC n3 fatty acids (mg)        411.7    87.5  1022.9      NA         99
  Vitamin A equivs (mcg)       1572.7  1095.0  2194.8     100        100
           Retinol (mcg)        565.0   481.3   641.8      NA         NA
      Provitamin A (mcg)       5991.3  3359.5  9563.8      NA         NA
            Thiamin (mg)          1.8     1.5     2.2     100        100
         Riboflavin (mg)          3.3     3.0     3.6     100        100
             Niacin (mg)         65.5    58.8    71.1     100        100
      Folate (mcg total)        608.4   491.9   701.7      NA         NA
     Folate equivs (mcg)        925.8   745.5  1087.5     100        100
          Vitamin C (mg)        144.4   113.4   192.0     100        100
         Vitamin D (mcg)          5.3     3.9     7.8      NA          0
          Vitamin E (mg)         13.0    10.3    16.5      NA        100
            Calcium (mg)       1599.4  1477.2  1752.8     100        100
               Iron (mg)         13.5    11.9    17.0     100        100
            Iodine (mcg)        317.5   273.8   369.9     100        100
          Magnesium (mg)        482.0   458.6   512.2     100        100
         Phosphorus (mg)       2333.9  2196.0  2494.4     100        100
          Potassium (mg)       4967.6  4727.7  5218.2      NA        100
             Sodium (mg)       1967.3  1722.7  2502.5      NA        100
               Zinc (mg)         17.2    14.6    37.8     100        100
        Cholesterol (mg)        303.6   214.1   474.8      NA         NA
          Selenium (mcg)        103.4    78.1   141.5     100        100
         Vitamin B6 (mg)          2.1     1.6     3.0     100        100
       Vitamin B12 (mcg)          9.1     7.7    14.1     100        100

         Percent energy from fat 30.4
     Percent energy from protein 21.4
Percent energy from carbohydrate 47.8
     Percent energy from alcohol  0.5
```

Women70plus.hitot6:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              10
 [5,] NutsSeeds            3
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   7
[11,] RedMeats             3
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10688.7 10353.8 11139.8      NA         NA
             Energy (kJ)      11031.1 10690.3 11494.2      NA         NA
             Protein (g)        128.1   119.0   138.8     100        100
                 Fat (g)         87.0    79.1    97.8      NA         NA
        Carbohydrate (g)        312.0   289.8   328.7      NA         NA
              Sugars (g)        143.0   125.0   160.1      NA         NA
              Starch (g)        166.7   150.8   185.4      NA         NA
               Fibre (g)         43.6    38.2    50.1      NA        100
             Alcohol (g)          2.3     0.0     8.0      NA         NA
       Saturated fat (g)         30.9    27.2    34.2      NA         NA
 Monounsaturated fat (g)         27.2    22.8    31.3      NA         NA
 Polyunsaturated fat (g)         22.6    19.9    26.5      NA         NA
       Linoleic acid (g)         20.6    18.5    24.0      NA        100
Alpha linolenic acid (g)          1.6     1.3     2.2      NA        100
  LC n3 fatty acids (mg)        353.6    57.9   943.1      NA         94
  Vitamin A equivs (mcg)       1716.2  1224.3  2141.5     100        100
           Retinol (mcg)        655.8   582.9   745.0      NA         NA
      Provitamin A (mcg)       6309.1  3749.5  8550.7      NA         NA
            Thiamin (mg)          1.8     1.4     2.1     100        100
         Riboflavin (mg)          3.4     3.0     3.7     100        100
             Niacin (mg)         61.4    57.0    66.4     100        100
      Folate (mcg total)        691.7   608.6   818.7      NA         NA
     Folate equivs (mcg)       1007.9   861.6  1158.9     100        100
          Vitamin C (mg)        185.0   127.3   234.2     100        100
         Vitamin D (mcg)          5.6     4.1     8.4      NA          0
          Vitamin E (mg)         14.0    11.2    18.0      NA        100
            Calcium (mg)       1652.5  1511.0  1777.2     100        100
               Iron (mg)         14.7    12.3    17.2     100        100
            Iodine (mcg)        317.3   282.7   359.3     100        100
          Magnesium (mg)        504.6   462.9   549.7     100        100
         Phosphorus (mg)       2325.9  2176.2  2506.2     100        100
          Potassium (mg)       5180.7  4885.6  5654.8      NA        100
             Sodium (mg)       2142.4  1745.4  2979.5      NA        100
               Zinc (mg)         16.0    13.7    26.5     100        100
        Cholesterol (mg)        277.5   190.1   441.9      NA         NA
          Selenium (mcg)         94.2    74.6   130.2     100        100
         Vitamin B6 (mg)          2.4     1.7     3.4     100        100
       Vitamin B12 (mcg)          8.4     7.0    12.5     100        100

         Percent energy from fat 29.8
     Percent energy from protein 20.2
Percent energy from carbohydrate 49.4
     Percent energy from alcohol  0.6
```

A15.17 Sample *7-day Total Diets* Pregnancy Women 19-50 years mid energy level

Average height 165cm; light to moderate activity PAL 1.7

Preg .avtot1:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            10
 [4,] Legumes              7
 [5,] NutsSeeds            10
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       24
[10,] Poultryfisheggsleg   12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             17
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11117.9 10613.2 11629.9      NA         NA
             Energy (kJ)      11509.1 10986.6 12016.5      NA         NA
             Protein (g)        160.6   150.5   168.4     100        100
                 Fat (g)         88.6    78.9    99.5      NA         NA
        Carbohydrate (g)        303.6   286.6   326.4      NA         NA
              Sugars (g)        101.7    92.2   114.2      NA         NA
              Starch (g)        200.5   183.2   227.8      NA         NA
               Fibre (g)         51.2    45.0    65.1      NA        100
             Alcohol (g)          0.0     0.0     0.0      NA         NA
       Saturated fat (g)         25.0    22.0    28.6      NA         NA
 Monounsaturated fat (g)         33.2    29.1    38.6      NA         NA
 Polyunsaturated fat (g)         23.7    20.7    28.4      NA         NA
       Linoleic acid (g)         21.5    18.6    25.6      NA        100
Alpha linolenic acid (g)          1.4     1.1     2.2      NA        100
  LC n3 fatty acids (mg)        501.4   141.3  1295.0      NA        100
  Vitamin A equivs (mcg)       1854.6  1500.7  2322.7     100        100
           Retinol (mcg)        421.6   351.1   498.6      NA         NA
      Provitamin A (mcg)       8543.3  6096.4 11323.6      NA         NA
            Thiamin (mg)          2.5     2.1     2.8     100        100
         Riboflavin (mg)          3.1     2.6     3.4     100        100
             Niacin (mg)         78.3    70.1    84.5     100        100
      Folate (mcg total)        661.8   590.3   772.9      NA         NA
     Folate equivs (mcg)       1041.5   887.4  1215.2     100        100
          Vitamin C (mg)        145.9   102.6   203.9     100        100
         Vitamin D (mcg)          4.7     2.9     7.3      NA         32
          Vitamin E (mg)         17.0    14.2    21.1      NA        100
            Calcium (mg)       1310.4  1151.7  1445.9     100        100
               Iron (mg)         19.8    17.5    22.1       1          0
            Iodine (mcg)        270.0   217.2   345.5     100         99
          Magnesium (mg)        603.7   556.1   657.6     100        100
         Phosphorus (mg)       2551.9  2393.6  2709.0     100        100
          Potassium (mg)       5137.4  4887.2  5440.2      NA        100
             Sodium (mg)       1997.0  1628.2  2831.0      NA        100
               Zinc (mg)         22.4    19.3    52.5     100        100
        Cholesterol (mg)        379.6   207.8   530.3      NA         NA
          Selenium (mg)         143.5   102.6   193.3     100        100
         Vitamin B6 (mg)          2.6     1.9     3.4     100        100
       Vitamin B12 (mcg)          8.6     6.0    13.6     100        100

         Percent energy from fat 29.1
     Percent energy from protein 24.2
Percent energy from carbohydrate 46.6
     Percent energy from alcohol  0.0
```

Preg.avtot2:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             18
 [7,] TotalFruit           14
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           17
[16,] PolyMarg             17
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11162.9 10699.5 11624.2      NA         NA
             Energy (kJ)      11549.1 11105.5 12039.6      NA         NA
             Protein (g)        163.3   156.5   171.8     100        100
                 Fat (g)         85.4    77.3    93.7      NA         NA
        Carbohydrate (g)        310.7   287.5   336.3      NA         NA
              Sugars (g)        108.0    97.3   130.0      NA         NA
              Starch (g)        201.3   180.0   228.8      NA         NA
               Fibre (g)         50.7    43.2    60.7      NA        100
             Alcohol (g)          0.0     0.0     0.0      NA         NA
       Saturated fat (g)         25.8    23.2    28.7      NA         NA
 Monounsaturated fat (g)         30.9    27.2    35.5      NA         NA
 Polyunsaturated fat (g)         22.1    19.4    25.3      NA         NA
       Linoleic acid (g)         20.0    17.4    23.1      NA        100
Alpha linolenic acid (g)          1.4     1.1     1.9      NA        100
  LC n3 fatty acids (mg)        455.3   153.0  1015.5      NA        100
  Vitamin A equivs (mcg)       1556.8  1178.7  2146.4     100        100
           Retinol (mcg)        454.7   372.1   539.1      NA         NA
      Provitamin A (mcg)       6566.2  4075.5  9660.6      NA         NA
             Thiamin (mg)          2.5     2.2     2.9     100        100
          Riboflavin (mg)          3.3     2.9     3.8     100        100
              Niacin (mg)         79.8    73.3    88.0     100        100
      Folate (mcg total)         686.8   595.2   779.1      NA         NA
     Folate equivs (mcg)        1089.0   909.6  1222.0     100        100
          Vitamin C (mg)         136.0    91.8   194.7     100        100
          Vitamin D (mcg)          4.7     3.3     7.6      NA         37
          Vitamin E (mg)          15.3    11.5    19.1      NA        100
            Calcium (mg)        1467.4  1311.9  1695.5     100        100
               Iron (mg)         20.0    17.9    22.1       1          0
            Iodine (mcg)         301.5   264.5   346.0     100        100
          Magnesium (mg)         606.4   550.4   653.0     100        100
          Phosphorus (mg)       2656.3  2486.8  2835.6     100        100
          Potassium (mg)        5149.2  4822.6  5595.0      NA        100
             Sodium (mg)        2078.9  1789.7  2872.1      NA        100
               Zinc (mg)         22.8    18.7    33.2     100        100
        Cholesterol (mg)         399.3   237.1   590.6      NA         NA
          Selenium (mcg)         137.0   111.2   180.5     100        100
          Vitamin B6 (mg)          2.5     1.9     3.3     100        100
        Vitamin B12 (mcg)          9.0     7.2    14.1     100        100

         Percent energy from fat 28.0
     Percent energy from protein 24.6
Percent energy from carbohydrate 47.4
     Percent energy from alcohol  0.0
```

Preg.avtot3:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            5
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           17
[16,] PolyMarg             17
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11106.8 10637.7 11572.6      NA         NA
             Energy (kJ)      11463.3 10989.5 11940.8      NA         NA
             Protein (g)        159.0   150.4   173.6     100        100
                 Fat (g)         83.8    73.3    93.1      NA         NA
        Carbohydrate (g)        310.8   289.4   329.7      NA         NA
              Sugars (g)        116.0   103.8   130.2      NA         NA
              Starch (g)        193.1   173.1   212.0      NA         NA
               Fibre (g)         45.9    39.9    55.8      NA        100
             Alcohol (g)            0     0.0       0      NA         NA
       Saturated fat (g)         27.2    24.1    31.2      NA         NA
 Monounsaturated fat (g)         29.2    24.8    33.3      NA         NA
 Polyunsaturated fat (g)         20.7    17.9    24.1      NA         NA
       Linoleic acid (g)         18.6    16.0    21.2      NA        100
Alpha linolenic acid (g)          1.4     1.1     2.1      NA        100
  LC n3 fatty acids (mg)        449.1   168.8  1017.1      NA        100
  Vitamin A equivs (mcg)       1533.9  1206.1  1952.6     100        100
           Retinol (mcg)        476.4   398.0   588.2      NA         NA
      Provitamin A (mcg)       6282.1  4397.0  8886.1      NA         NA
            Thiamin (mg)          2.3     2.1     2.8     100        100
         Riboflavin (mg)          3.2     2.9     3.7     100        100
             Niacin (mg)         76.3    70.6    83.1     100        100
      Folate (mcg total)        642.8   556.4   735.9      NA         NA
     Folate equivs (mcg)        998.0   841.9  1126.6     100        100
          Vitamin C (mg)        134.6   100.5   164.5     100        100
         Vitamin D (mcg)          4.8     3.2     8.5      NA         36
          Vitamin E (mg)         14.2    10.8    18.0      NA        100
            Calcium (mg)       1415.7  1249.4  1578.9     100        100
               Iron (mg)         19.0    17.0    21.7       0          0
            Iodine (mcg)        286.6   244.7   362.1     100        100
          Magnesium (mg)        565.8   519.4   611.4     100        100
         Phosphorus (mg)       2553.2  2396.7  2744.5     100        100
          Potassium (mg)       4967.0  4555.3  5361.4      NA        100
             Sodium (mg)       2172.4  1689.9  3046.7      NA        100
               Zinc (mg)         21.6    18.7    42.7     100        100
        Cholesterol (mg)        417.9   253.9   643.3      NA         NA
          Selenium (mg)         133.8   105.5   172.0     100        100
         Vitamin B6 (mg)          2.4     1.8     3.2     100         98
       Vitamin B12 (mg)           9.2     7.5    15.2     100        100

         Percent energy from fat 27.7
     Percent energy from protein 24.4
Percent energy from carbohydrate 47.9
     Percent energy from alcohol  0.0
```

Preg.avtot4:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11217.2 10806.3 11633.8      NA         NA
             Energy (kJ)      11581.2 11144.8 12035.9      NA         NA
             Protein (g)        156.8   147.7   166.0     100        100
                 Fat (g)         91.0    81.2    98.8      NA         NA
        Carbohydrate (g)        305.0   285.0   322.6      NA         NA
              Sugars (g)        109.4    96.6   122.2      NA         NA
              Starch (g)        193.9   175.2   211.6      NA         NA
               Fibre (g)         47.9    40.9    61.8      NA        100
             Alcohol (g)            0     0.0       0      NA         NA
       Saturated fat (g)         28.0    23.6    31.1      NA         NA
 Monounsaturated fat (g)         32.3    27.5    37.0      NA         NA
 Polyunsaturated fat (g)         23.8    20.9    29.6      NA         NA
       Linoleic acid (g)         21.5    19.1    27.3      NA        100
Alpha linolenic acid (g)          1.5     1.2     2.0      NA        100
  LC n3 fatty acids (mg)        463.0   126.3  1213.0      NA        100
  Vitamin A equivs (mcg)       1567.8  1206.1  1911.2     100        100
           Retinol (mcg)        494.1   401.8   608.0      NA         NA
      Provitamin A (mcg)       6392.9  4435.7  8759.4      NA         NA
            Thiamin (mg)          2.4     2.1     2.8     100        100
         Riboflavin (mg)          3.0     2.6     3.5     100        100
             Niacin (mg)         75.7    70.0    84.5     100        100
      Folate (mcg total)        630.8   558.5   768.5      NA         NA
     Folate equivs (mcg)        992.4   868.2  1151.1     100        100
          Vitamin C (mg)        134.9    89.1   182.3     100        100
         Vitamin D (mcg)          4.8     3.3     7.6      NA         38
          Vitamin E (mg)         16.1    13.0    20.4      NA        100
            Calcium (mg)       1293.9  1112.0  1488.3     100        100
               Iron (mg)         19.2    16.7    22.7       1          0
            Iodine (mcg)        265.5   222.6   331.0     100        100
          Magnesium (mg)        569.8   510.6   625.6     100        100
         Phosphorus (mg)       2480.5  2336.4  2616.5     100        100
          Potassium (mg)       4822.4  4483.5  5260.8      NA        100
             Sodium (mg)       2087.9  1718.6  3010.6      NA        100
               Zinc (mg)         21.5    19.0    31.7     100        100
        Cholesterol (mg)        392.4   238.9   640.6      NA         NA
          Selenium (mcg)        135.6    99.6   205.1     100        100
         Vitamin B6 (mg)          2.4     1.9     3.4     100         99
       Vitamin B12 (mcg)          8.5     6.7    13.6     100        100

         Percent energy from fat 29.9
     Percent energy from protein 23.5
Percent energy from carbohydrate 46.6
     Percent energy from alcohol  0.0
```

Preg.avtot5:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            4
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             17
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11148.9 10637.4 11658.7      NA         NA
             Energy (kJ)      11525.8 10996.0 12042.6      NA         NA
             Protein (g)        157.6   149.5   168.3     100        100
                 Fat (g)         83.3    71.0    95.6      NA         NA
        Carbohydrate (g)        314.6   292.6   341.0      NA         NA
              Sugars (g)        117.1   100.6   142.5      NA         NA
              Starch (g)        195.6   175.6   218.0      NA         NA
               Fibre (g)         49.3    42.8    61.9      NA        100
             Alcohol (g)            0     0.0     0.0      NA         NA
       Saturated fat (g)         27.6    23.2    31.4      NA         NA
 Monounsaturated fat (g)         28.7    24.2    34.0      NA         NA
 Polyunsaturated fat (g)         20.3    18.1    23.5      NA         NA
       Linoleic acid (g)         18.2    15.9    20.8      NA        100
Alpha linolenic acid (g)          1.4     1.1     1.8      NA        100
  LC n3 fatty acids (mg)        464.1   150.7   960.0      NA        100
  Vitamin A equivs (mcg)       1607.2  1265.9  2043.1     100        100
           Retinol (mcg)        466.0   385.7   573.5      NA         NA
      Provitamin A (mcg)       6796.0  4440.5  9608.8      NA         NA
            Thiamin (mg)          2.4     2.1     2.8     100        100
         Riboflavin (mg)          3.1     2.7     3.5     100        100
             Niacin (mg)         75.4    68.5    81.1     100        100
      Folate (mcg total)        643.6   543.2   735.7      NA         NA
     Folate equivs (mcg)        999.0   856.1  1125.0     100        100
          Vitamin C (mg)        164.4   115.4   219.8     100        100
         Vitamin D (mcg)          4.7     3.2     7.6      NA         31
          Vitamin E (mg)         14.2    10.3    17.6      NA        100
            Calcium (mg)       1334.7  1179.7  1472.4     100        100
               Iron (mg)         19.7    17.6    22.3       1          0
            Iodine (mcg)        266.6   222.6   339.7     100        100
          Magnesium (mg)        569.4   521.8   634.5     100        100
         Phosphorus (mg)       2509.2  2317.2  2651.7     100        100
          Potassium (mg)       5027.3  4717.0  5311.5      NA        100
             Sodium (mg)       2212.2  1791.9  3778.6      NA        100
               Zinc (mg)         22.2    18.7    41.1     100        100
        Cholesterol (mg)        404.0   243.3   597.6      NA         NA
          Selenium (mcg)        129.6   105.3   163.1     100        100
         Vitamin B6 (mg)          2.5     1.9     3.5     100        100
       Vitamin B12 (mcg)          8.5     6.6    12.6     100        100

         Percent energy from fat 27.3
     Percent energy from protein 23.8
Percent energy from carbohydrate 48.9
     Percent energy from alcohol  0.0
```

Preg.avtot6:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            2
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             17
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11390.5 11030.1 12059.4      NA         NA
             Energy (kJ)      11744.4 11361.0 12400.7      NA         NA
             Protein (g)        162.4   153.6   171.6     100        100
                 Fat (g)         81.5    73.4    90.9      NA         NA
        Carbohydrate (g)        328.4   306.8   351.8      NA         NA
              Sugars (g)        131.2   114.7   145.9      NA         NA
              Starch (g)        195.2   180.8   211.7      NA         NA
               Fibre (g)         46.8    40.6    59.9      NA        100
             Alcohol (g)            0     0.0     0.0      NA         NA
       Saturated fat (g)         29.0    25.9    32.1      NA         NA
 Monounsaturated fat (g)         27.1    23.0    32.5      NA         NA
 Polyunsaturated fat (g)         18.7    16.3    22.3      NA         NA
       Linoleic acid (g)         16.7    14.7    19.6      NA        100
Alpha linolenic acid (g)          1.4     1.2     1.9      NA        100
  LC n3 fatty acids (mg)        451.1   164.6  1084.9      NA        100
  Vitamin A equivs (mcg)       1597.9  1330.7  1983.2     100        100
           Retinol (mcg)        512.4   432.4   615.1      NA         NA
      Provitamin A (mcg)       6442.7  4639.0  9071.1      NA         NA
            Thiamin (mg)          2.3     2.0     2.8     100        100
         Riboflavin (mg)          3.5     3.0     3.9     100        100
             Niacin (mg)         77.6    68.4    84.6     100        100
      Folate (mcg total)        660.5   572.8   756.3      NA         NA
     Folate equivs (mcg)       1029.9   891.7  1134.5     100        100
          Vitamin C (mg)        138.5    94.4   202.1     100        100
         Vitamin D (mcg)          5.1     3.5     7.9      NA         50
          Vitamin E (mg)         13.1     9.8    15.9      NA        100
            Calcium (mg)       1561.4  1443.5  1706.4     100        100
               Iron (mg)         18.8    16.8    21.8       0          0
            Iodine (mcg)        317.9   260.5   379.4     100        100
          Magnesium (mg)        561.1   513.8   605.9     100        100
         Phosphorus (mg)       2649.6  2512.1  2843.5     100        100
          Potassium (mg)       5142.2  4853.1  5553.3      NA        100
             Sodium (mg)       2265.6  1908.1  3120.9      NA        100
               Zinc (mg)         21.8    18.6    33.2     100        100
        Cholesterol (mg)        418.5   285.8   617.6      NA         NA
          Selenium (mcg)        127.8   103.3   166.6     100        100
         Vitamin B6 (mg)          2.4     1.9     3.3     100         99
       Vitamin B12 (mcg)         10.0     8.4    17.1     100        100

         Percent energy from fat 26.7
     Percent energy from protein 24.0
Percent energy from carbohydrate 49.3
     Percent energy from alcohol  0.0
```

A15.18 Sample *7-day Total Diets* Pregnancy Women 19-50 years higher energy level

Tall, height 180 cm; high activity PAL 2

Preg.hitot1:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            14
 [6,] OtherVeg             21
 [7,] TotalFruit           28
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      13934.0 13480.3 14427.0      NA         NA
             Energy (kJ)      14451.1 13958.4 14953.5      NA         NA
             Protein (g)        180.6   169.9   189.7     100        100
                 Fat (g)        116.1   107.8   128.7      NA         NA
        Carbohydrate (g)        388.4   365.7   418.1      NA         NA
              Sugars (g)        144.3   127.6   162.3      NA         NA
              Starch (g)        241.7   225.7   270.2      NA         NA
               Fibre (g)         66.1    58.3    72.5      NA        100
             Alcohol (g)            0     0.0       0      NA         NA
       Saturated fat (g)         31.3    28.8    34.5      NA         NA
 Monounsaturated fat (g)         43.0    37.4    48.4      NA         NA
 Polyunsaturated fat (g)         33.4    29.9    38.6      NA         NA
       Linoleic acid (g)         30.7    27.8    34.9      NA        100
Alpha linolenic acid (g)          2.0     1.6     2.8      NA        100
  LC n3 fatty acids (mg)        456.2   139.7  1035.5      NA        100
  Vitamin A equivs (mcg)       1796.2  1323.5  2311.8     100        100
           Retinol (mcg)        565.9   495.7   680.6      NA         NA
      Provitamin A (mcg)       7334.3  4786.7 10487.1      NA         NA
            Thiamin (mg)          3.0     2.7     3.3     100        100
         Riboflavin (mg)          3.4     3.0     4.1     100        100
             Niacin (mg)         88.4    80.3    95.0     100        100
      Folate (mcg total)        863.1   752.0   982.8      NA         NA
     Folate equivs (mcg)       1289.9  1139.8  1419.9     100        100
          Vitamin C (mg)        193.4   145.5   253.6     100        100
         Vitamin D (mcg)          5.4     3.9     7.7      NA         61
          Vitamin E (mg)         22.7    18.8    27.4      NA        100
            Calcium (mg)       1474.8  1255.9  1648.7     100        100
               Iron (mg)         24.2    22.3    27.2     100          2
            Iodine (mcg)        289.9   242.0   350.7     100        100
          Magnesium (mg)        754.4   694.1   812.4     100        100
         Phosphorus (mg)       2925.4  2781.0  3122.7     100        100
          Potassium (mg)       6125.5  5813.5  6533.0      NA        100
             Sodium (mg)       2314.0  1944.0  3289.7      NA        100
               Zinc (mg)         25.1    22.2    44.7     100        100
        Cholesterol (mg)        389.1   238.0   550.2      NA         NA
          Selenium (mg)         165.5   128.6   234.8     100        100
         Vitamin B6 (mg)          3.1     2.5     4.0     100        100
       Vitamin B12 (mg)           8.6     6.5    11.8     100        100

         Percent energy from fat 30.4
     Percent energy from protein 21.7
Percent energy from carbohydrate 47.9
     Percent energy from alcohol  0.0
```

Preg.hitot2:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       35
[10,] Poultryfisheggsleg   12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      13986.5 13491.2 14812.7      NA         NA
             Energy (kJ)      14459.9 13954.1 15275.8      NA         NA
             Protein (g)        179.3   170.2   187.4     100        100
                 Fat (g)        102.0    91.6   112.1      NA         NA
        Carbohydrate (g)        418.4   391.3   441.1      NA         NA
              Sugars (g)        144.2   127.0   164.9      NA         NA
              Starch (g)        271.6   247.1   295.8      NA         NA
               Fibre (g)         61.1    54.3    69.8      NA        100
             Alcohol (g)            0     0.0     0.0      NA         NA
       Saturated fat (g)         31.9    27.2    35.6      NA         NA
 Monounsaturated fat (g)         35.6    32.2    40.1      NA         NA
 Polyunsaturated fat (g)         26.6    23.7    31.0      NA         NA
       Linoleic acid (g)         24.0    21.5    27.6      NA        100
Alpha linolenic acid (g)          1.9     1.5     2.7      NA        100
  LC n3 fatty acids (mg)        426.6   164.0   889.5      NA        100
  Vitamin A equivs (mcg)       1647.6  1241.8  2011.9     100        100
           Retinol (mcg)        532.2   425.8   682.0      NA         NA
      Provitamin A (mcg)       6640.1  4476.7  8619.7      NA         NA
            Thiamin (mg)          2.9     2.6     3.4     100        100
         Riboflavin (mg)          3.4     2.9     3.9     100        100
             Niacin (mg)         86.5    78.6    95.5     100        100
      Folate (mcg total)        776.0   634.9   872.6      NA         NA
     Folate equivs (mcg)       1247.8  1086.3  1396.9     100        100
          Vitamin C (mg)        161.0   106.3   217.7     100        100
         Vitamin D (mcg)          4.9     3.5     7.8      NA         45
          Vitamin E (mg)         17.9    13.4    21.8      NA        100
            Calcium (mg)       1463.7  1292.0  1698.1     100        100
               Iron (mg)         23.5    21.0    26.2      93          0
            Iodine (mcg)        303.3   259.0   368.1     100        100
          Magnesium (mg)        693.6   641.5   753.6     100        100
         Phosphorus (mg)       2870.2  2731.1  3080.7     100        100
          Potassium (mg)       5653.6  5234.5  6084.3      NA        100
             Sodium (mg)       2598.6  2181.5  3281.6      NA        100
               Zinc (mg)         24.2    21.2    44.3     100        100
        Cholesterol (mg)        424.1   276.4   714.6      NA         NA
          Selenium (mcg)        152.1   124.8   203.4     100        100
         Vitamin B6 (mg)          2.7     2.2     3.6     100        100
       Vitamin B12 (mcg)          8.6     6.8    15.0     100        100

         Percent energy from fat 26.7
     Percent energy from protein 21.6
Percent energy from carbohydrate 51.7
     Percent energy from alcohol  0.0
```

Preg.hitot3:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            21
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             17
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      14048.2 13441.6 14498.8      NA         NA
             Energy (kJ)      14520.5 13899.9 14975.3      NA         NA
             Protein (g)        181.6   171.3   192.8     100        100
                 Fat (g)        120.0   112.2   129.2      NA         NA
        Carbohydrate (g)        384.1   364.5   410.1      NA         NA
              Sugars (g)        133.9   115.1   150.1      NA         NA
              Starch (g)        248.1   220.9   270.2      NA         NA
               Fibre (g)         62.9    54.7    78.5      NA        100
             Alcohol (g)            0     0.0     0.0      NA         NA
       Saturated fat (g)         31.4    28.3    34.7      NA         NA
 Monounsaturated fat (g)         47.4    43.2    52.7      NA         NA
 Polyunsaturated fat (g)         32.6    28.6    38.2      NA         NA
       Linoleic acid (g)         30.3    26.5    35.2      NA        100
Alpha linolenic acid (g)          1.7     1.2     2.6      NA        100
  LC n3 fatty acids (mg)        442.9   131.0  1010.7      NA        100
  Vitamin A equivs (mcg)       1600.4  1211.5  1944.0     100        100
           Retinol (mcg)        459.3   381.3   567.5      NA         NA
      Provitamin A (mcg)       6799.2  4528.7  8968.1      NA         NA
            Thiamin (mg)          3.2     2.8     3.8     100        100
         Riboflavin (mg)          3.4     3.0     3.8     100        100
             Niacin (mg)         91.6    84.7   100.3     100        100
      Folate (mcg total)        810.7   686.2   921.1      NA         NA
     Folate equivs (mcg)       1247.4  1092.4  1428.9     100        100
          Vitamin C (mg)        169.1   118.6   217.1     100        100
         Vitamin D (mcg)          4.5     3.1     7.2      NA         28
          Vitamin E (mg)         22.5    17.1    26.2      NA        100
            Calcium (mg)       1445.9  1280.9  1590.2     100        100
               Iron (mg)         23.5    21.6    26.9      95          0
            Iodine (mcg)        295.7   247.1   369.0     100        100
          Magnesium (mg)        765.8   711.9   859.4     100        100
         Phosphorus (mg)       2977.0  2791.7  3230.4     100        100
          Potassium (mg)       6040.4  5655.8  6495.4      NA        100
             Sodium (mg)       2332.0  1862.5  3477.7      NA        100
               Zinc (mg)         25.9    22.2    44.4     100        100
        Cholesterol (mg)        406.1   246.2   593.5      NA         NA
          Selenium (mcg)        179.9   128.3   251.9     100        100
         Vitamin B6 (mg)          3.0     2.4     4.2     100        100
       Vitamin B12 (mcg)          8.7     6.3    14.7     100        100

         Percent energy from fat 31.4
     Percent energy from protein 21.7
Percent energy from carbohydrate 46.9
     Percent energy from alcohol  0.0
```

Preg.hitot4:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            14
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      13978.8 13100.6 14516.4      NA         NA
             Energy (kJ)      14435.9 13531.7 14994.4      NA         NA
             Protein (g)        176.6   166.6   188.9     100        100
                 Fat (g)        115.9   102.6   124.9      NA         NA
        Carbohydrate (g)        390.8   367.3   409.4      NA         NA
              Sugars (g)        145.7   128.1   160.9      NA         NA
              Starch (g)        242.6   222.2   265.4      NA         NA
               Fibre (g)         59.2    50.9    70.8      NA        100
             Alcohol (g)            0     0.0     0.0      NA         NA
       Saturated fat (g)         33.8    29.1    37.5      NA         NA
 Monounsaturated fat (g)         43.6    37.1    49.4      NA         NA
 Polyunsaturated fat (g)         30.0    26.8    35.1      NA         NA
       Linoleic acid (g)         27.6    24.6    32.2      NA        100
Alpha linolenic acid (g)          1.8     1.4     2.8      NA        100
  LC n3 fatty acids (mg)        436.9   164.9  1174.6      NA        100
  Vitamin A equivs (mcg)       1693.1  1386.8  2050.5     100        100
           Retinol (mcg)        532.3   418.5   661.1      NA         NA
      Provitamin A (mcg)       6915.9  4993.6  9211.2      NA         NA
            Thiamin (mg)          3.0     2.6     3.5     100        100
         Riboflavin (mg)          3.4     3.0     3.9     100        100
             Niacin (mg)         88.3    79.6    94.1     100        100
      Folate (mcg total)        776.1   683.3   876.6      NA         NA
     Folate equivs (mcg)       1216.5  1060.9  1359.7     100        100
          Vitamin C (mg)        176.4   135.9   245.3     100        100
         Vitamin D (mcg)          4.9     3.5     8.1      NA         40
          Vitamin E (mg)         21.1    16.2    25.8      NA        100
            Calcium (mg)       1444.5  1270.8  1623.4     100        100
               Iron (mg)         22.9    20.8    26.2      83          0
            Iodine (mcg)        293.7   253.5   358.5     100        100
          Magnesium (mg)        714.1   664.8   794.8     100        100
         Phosphorus (mg)       2881.0  2697.2  3132.6     100        100
          Potassium (mg)       5738.1  5358.2  6092.5      NA        100
             Sodium (mg)       2540.6  2106.8  3550.8      NA        100
               Zinc (mg)         24.5    21.0    43.5     100        100
        Cholesterol (mg)        420.6   277.2   656.5      NA         NA
          Selenium (mcg)        163.0   129.3   206.9     100        100
         Vitamin B6 (mg)          3.0     2.2     4.0     100        100
       Vitamin B12 (mcg)          8.7     7.1    14.0     100        100

         Percent energy from fat 30.9
     Percent energy from protein 21.2
Percent energy from carbohydrate 47.9
     Percent energy from alcohol  0.0
```

Preg.hitot5:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           21
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            9
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      13905.0 13363.3 14403.9      NA         NA
             Energy (kJ)      14383.1 13831.6 14895.5      NA         NA
             Protein (g)        176.0   165.3   189.0     100        100
                 Fat (g)        109.0   100.4   119.0      NA         NA
        Carbohydrate (g)        403.6   374.5   426.4      NA         NA
              Sugars (g)        140.3   126.1   159.7      NA         NA
              Starch (g)        261.0   237.8   285.9      NA         NA
               Fibre (g)         65.6    54.1    80.3      NA        100
             Alcohol (g)            0     0.0     0.0      NA         NA
       Saturated fat (g)         32.5    29.5    36.5      NA         NA
 Monounsaturated fat (g)         38.5    33.6    43.1      NA         NA
 Polyunsaturated fat (g)         29.7    26.2    33.1      NA         NA
       Linoleic acid (g)         27.1    24.2    30.0      NA        100
Alpha linolenic acid (g)          1.8     1.5     2.5      NA        100
  LC n3 fatty acids (mg)        498.8   134.9  1129.6      NA        100
  Vitamin A equivs (mcg)       1807.2  1349.4  2200.6     100        100
           Retinol (mcg)        601.6   526.8   758.3      NA         NA
      Provitamin A (mcg)       7190.9  4706.5  9885.1      NA         NA
            Thiamin (mg)          3.0     2.6     3.4     100        100
          Riboflavin (mg)         3.4     2.9     3.9     100        100
             Niacin (mg)         87.5    80.4    94.8     100        100
      Folate (mcg total)        780.2   684.8   902.2      NA         NA
     Folate equivs (mcg)       1218.6  1057.1  1371.1     100        100
          Vitamin C (mg)        215.6   164.2   275.2     100        100
          Vitamin D (mcg)         5.5     4.1     8.5      NA         59
          Vitamin E (mg)         19.7    15.9    24.8      NA        100
            Calcium (mg)       1449.2  1298.6  1602.8     100        100
               Iron (mg)         23.6    21.0    26.2      96          0
            Iodine (mcg)        300.1   253.3   357.0     100        100
          Magnesium (mg)        708.0   665.4   763.1     100        100
          Phosphorus (mg)       2888.3  2729.0  3073.0     100        100
          Potassium (mg)        6430.8  6061.6  6925.2      NA        100
             Sodium (mg)        2527.0  2195.1  3382.7      NA        100
               Zinc (mg)         25.0    21.0    44.5     100        100
        Cholesterol (mg)        414.9   279.5   721.2      NA         NA
          Selenium (mcg)        152.2   119.7   200.0     100        100
          Vitamin B6 (mg)         2.9     2.4     4.2     100        100
        Vitamin B12 (mcg)         8.9     7.0    12.7     100        100

         Percent energy from fat 28.9
     Percent energy from protein 21.3
Percent energy from carbohydrate 49.8
     Percent energy from alcohol  0.0
```

Preg.hitot6:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            9
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       35
[10,] Poultryfisheggsleg   12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             24
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      14010.1 13434.7 14537.6      NA         NA
             Energy (kJ)      14449.5 13855.8 14969.6      NA         NA
             Protein (g)        174.7   165.7   186.6     100        100
                 Fat (g)        107.7    99.8   117.3      NA         NA
        Carbohydrate (g)        412.0   392.7   441.3      NA         NA
              Sugars (g)        143.3   130.0   161.9      NA         NA
              Starch (g)        266.1   246.6   287.9      NA         NA
               Fibre (g)         56.6    50.1    66.9      NA        100
             Alcohol (g)            0     0.0     0.0      NA         NA
       Saturated fat (g)         32.9    29.6    37.3      NA         NA
 Monounsaturated fat (g)         38.6    33.9    42.6      NA         NA
 Polyunsaturated fat (g)         28.2    25.4    31.5      NA         NA
       Linoleic acid (g)         25.7    23.2    29.0      NA        100
Alpha linolenic acid (g)          1.8     1.5     2.3      NA        100
  LC n3 fatty acids (mg)        449.3   166.6   965.0      NA        100
  Vitamin A equivs (mcg)       1675.6  1323.5  2035.8     100        100
           Retinol (mcg)        562.4   476.1   660.3      NA         NA
      Provitamin A (mcg)       6625.2  4684.8  8787.6      NA         NA
            Thiamin (mg)          2.9     2.4     3.3     100        100
         Riboflavin (mg)          3.4     2.8     3.9     100        100
             Niacin (mg)         85.8    78.7    93.2     100        100
      Folate (mcg total)        734.3   638.5   841.3      NA         NA
     Folate equivs (mcg)       1202.0  1032.1  1363.8     100        100
          Vitamin C (mg)        166.1   116.8   261.4     100        100
         Vitamin D (mcg)          5.1     3.9     8.2      NA         48
          Vitamin E (mg)         19.0    14.8    23.2      NA        100
            Calcium (mg)       1437.5  1249.9  1643.1     100        100
               Iron (mg)         22.4    20.6    25.1      64          0
            Iodine (mcg)        306.5   263.9   375.3     100        100
          Magnesium (mg)        671.5   631.4   746.7     100        100
         Phosphorus (mg)       2795.6  2634.6  2993.3     100        100
          Potassium (mg)       5470.0  5121.8  5899.0      NA        100
             Sodium (mg)       2682.1  2112.0  3576.4      NA        100
               Zinc (mg)         23.7    20.7    34.0     100        100
        Cholesterol (mg)        415.9   279.8   624.0      NA         NA
          Selenium (mcg)        154.6   122.9   210.3     100        100
         Vitamin B6 (mg)          2.6     2.2     3.6     100        100
       Vitamin B12 (mcg)          8.9     7.1    15.9     100        100

         Percent energy from fat 28.2
     Percent energy from protein 21.0
Percent energy from carbohydrate 50.8
     Percent energy from alcohol  0.0
```

A15.19 Sample *7-day Total Diets* Lactation Women 19-50years mid energy level

Average height 165cm; light to moderate activity PAL 1.7

Lact.avtot1:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            10
 [4,] Legumes              7
 [5,] NutsSeeds            10
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       24
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11106.9 10649.3 11714.3      NA         NA
             Energy (kJ)      11530.7 11062.7 12169.3      NA         NA
             Protein (g)        136.3   128.3   144.4     100        100
                 Fat (g)         86.4    76.8    97.5      NA         NA
        Carbohydrate (g)        332.1   309.3   356.4      NA         NA
              Sugars (g)        105.8    95.9   120.1      NA         NA
              Starch (g)        224.9   205.6   252.9      NA         NA
               Fibre (g)         57.3    50.6    68.9      NA        100
             Alcohol (g)          0.0     0.0     0.0      NA         NA
       Saturated fat (g)         23.7    20.3    27.1      NA         NA
 Monounsaturated fat (g)         31.5    26.4    36.9      NA         NA
 Polyunsaturated fat (g)         24.9    21.5    30.2      NA         NA
       Linoleic acid (g)         23.1    20.3    27.9      NA        100
Alpha linolenic acid (g)          1.4     1.2     2.1      NA         96
  LC n3 fatty acids (mg)        274.6    79.0   729.6      NA         78
  Vitamin A equivs (mcg)       1910.6  1365.6  2335.1     100        100
           Retinol (mcg)        442.6   383.0   528.0      NA         NA
      Provitamin A (mcg)       8755.6  5605.8 11175.3      NA         NA
            Thiamin (mg)          2.7     2.3     3.0     100        100
          Riboflavin (mg)         3.0     2.6     3.4     100        100
             Niacin (mg)         70.4    65.4    76.0     100        100
      Folate (mcg total)        694.8   577.9   789.2      NA         NA
     Folate equivs (mcg)       1118.6   967.6  1268.7     100        100
          Vitamin C (mg)        157.4   112.1   201.1     100        100
          Vitamin D (mcg)         4.0     3.0     6.1      NA         12
          Vitamin E (mg)         16.5    13.4    19.9      NA        100
            Calcium (mg)       1336.9  1172.3  1484.9     100        100
               Iron (mg)         19.4    17.4    21.4     100        100
            Iodine (mcg)        266.2   225.7   312.5     100         40
          Magnesium (mg)        617.0   576.7   661.1     100        100
          Phosphorus (mg)       2421.2  2232.5  2644.0     100        100
          Potassium (mg)        5281.8  4995.9  5636.9      NA        100
             Sodium (mg)        2013.2  1624.4  2834.5      NA        100
               Zinc (mg)         19.1    16.7    29.4     100        100
        Cholesterol (mg)        254.7   158.4   450.3      NA         NA
          Selenium (mcg)        120.2    92.4   181.4     100        100
          Vitamin B6 (mg)         2.6     1.9     3.6     100         98
       Vitamin B12 (mcg)          6.7     5.3    10.4     100        100

         Percent energy from fat 28.4
     Percent energy from protein 20.6
Percent energy from carbohydrate 51.0
     Percent energy from alcohol  0.0
```

Lact.avtot2:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             18
 [7,] TotalFruit           14
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           17
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11362.2 11029.5 11891.9      NA         NA
             Energy (kJ)      11758.9 11413.8 12260.3      NA         NA
             Protein (g)        138.8   131.1   148.9     100        100
                 Fat (g)         86.3    78.2    95.7      NA         NA
        Carbohydrate (g)        341.3   319.6   362.3      NA         NA
              Sugars (g)        121.9   108.4   134.9      NA         NA
              Starch (g)        217.7   197.4   236.7      NA         NA
               Fibre (g)         53.3    44.7    66.6      NA        100
             Alcohol (g)            0     0.0     0.0      NA         NA
       Saturated fat (g)         26.4    23.3    30.4      NA         NA
 Monounsaturated fat (g)         30.2    25.2    35.8      NA         NA
 Polyunsaturated fat (g)         23.4    20.6    26.7      NA         NA
       Linoleic acid (g)         21.5    19.0    24.6      NA        100
Alpha linolenic acid (g)          1.5     1.2     2.1      NA         98
  LC n3 fatty acids (mg)        276.5    83.0   700.3      NA         82
  Vitamin A equivs (mcg)       1583.3  1271.6  2034.0     100        100
           Retinol (mcg)        483.9   427.1   589.6      NA         NA
      Provitamin A (mcg)       6528.6  4446.4  9067.4      NA         NA
            Thiamin (mg)          2.6     2.2     2.9     100        100
         Riboflavin (mg)          3.2     2.9     3.6     100        100
             Niacin (mg)         70.5    65.4    76.5     100        100
      Folate (mcg total)        677.2   585.2   765.9      NA         NA
     Folate equivs (mcg)       1087.0   952.4  1200.8     100        100
          Vitamin C (mg)        152.4   112.1   200.2     100        100
         Vitamin D (mcg)          4.2     3.3     6.3      NA         16
          Vitamin E (mg)         15.4    12.7    18.7      NA        100
            Calcium (mg)       1455.6  1301.1  1633.6     100        100
               Iron (mg)         18.8    16.8    21.6     100        100
            Iodine (mcg)        287.7   246.1   342.6     100         84
          Magnesium (mg)        603.1   557.5   659.3     100        100
         Phosphorus (mg)       2476.8  2323.6  2643.5     100        100
          Potassium (mg)       5299.4  5011.1  5628.0      NA        100
             Sodium (mg)       2165.9  1861.1  2912.2      NA        100
               Zinc (mg)         19.0    16.6    29.5     100        100
        Cholesterol (mg)        264.0   169.8   474.0      NA         NA
          Selenium (mcg)        114.6    88.2   151.7     100        100
         Vitamin B6 (mg)          2.5     1.9     3.5     100         94
       Vitamin B12 (mcg)          7.4     6.0    12.6     100        100

         Percent energy from fat 27.8
     Percent energy from protein 20.6
Percent energy from carbohydrate 51.6
     Percent energy from alcohol  0.0
```

Lact.avtot3:

```
     AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            10
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           17
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11268.1 10763.7 12026.0      NA         NA
             Energy (kJ)      11659.4 11122.7 12455.5      NA         NA
             Protein (g)        135.2   126.0   142.3     100        100
                 Fat (g)         90.6    81.2    96.9      NA         NA
        Carbohydrate (g)        330.6   312.9   365.5      NA         NA
              Sugars (g)        132.2   116.7   148.5      NA         NA
              Starch (g)        196.3   179.8   218.4      NA         NA
               Fibre (g)         50.8    43.9    57.7      NA        100
             Alcohol (g)            0     0.0     0.0      NA         NA
       Saturated fat (g)         26.8    23.4    29.6      NA         NA
 Monounsaturated fat (g)         32.8    28.2    37.4      NA         NA
 Polyunsaturated fat (g)         24.4    22.1    27.1      NA         NA
       Linoleic acid (g)         22.6    20.5    25.0      NA        100
Alpha linolenic acid (g)          1.5     1.2     2.0      NA         99
  LC n3 fatty acids (mg)        270.0    75.1   968.6      NA         75
  Vitamin A equivs (mcg)       1578.8  1216.7  2005.1     100        100
           Retinol (mcg)        481.8   428.2   558.2      NA         NA
      Provitamin A (mcg)       6526.6  4527.5  8837.8      NA         NA
            Thiamin (mg)          2.4     2.1     2.8     100        100
         Riboflavin (mg)          3.1     2.8     3.5     100        100
             Niacin (mg)         67.7    62.5    74.6     100        100
      Folate (mcg total)        690.9   621.6   823.1      NA         NA
     Folate equivs (mcg)       1050.3   929.6  1266.6     100        100
          Vitamin C (mg)        156.8   118.9   203.9     100        100
         Vitamin D (mcg)          4.2     3.2     7.4      NA         18
          Vitamin E (mg)         16.5    13.5    19.8      NA        100
            Calcium (mg)       1407.8  1296.2  1595.4     100        100
               Iron (mg)         17.8    15.7    19.7     100        100
            Iodine (mcg)        271.2   225.8   313.1     100         53
          Magnesium (mg)        590.6   550.1   652.5     100        100
         Phosphorus (mg)       2386.7  2248.8  2519.3     100        100
          Potassium (mg)       4980.7  4697.8  5338.4      NA        100
             Sodium (mg)       2025.5  1608.1  2809.4      NA        100
               Zinc (mg)         18.4    16.4    38.4     100        100
        Cholesterol (mg)        271.7   176.4   402.1      NA         NA
          Selenium (mcg)        114.3    85.7   162.6     100        100
         Vitamin B6 (mg)          2.3     1.9     3.0     100         84
       Vitamin B12 (mcg)          7.2     5.9    10.8     100        100

         Percent energy from fat 29.4
     Percent energy from protein 20.2
Percent energy from carbohydrate 50.4
     Percent energy from alcohol  0.0
```

Lact.avtot4:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11268.1 10880.8 11805.0      NA         NA
             Energy (kJ)      11660.7 11245.0 12225.8      NA         NA
             Protein (g)        134.8   127.0   143.9     100        100
                 Fat (g)         84.6    75.9    92.7      NA         NA
        Carbohydrate (g)        343.8   327.8   362.5      NA         NA
              Sugars (g)        114.0    99.6   132.4      NA         NA
              Starch (g)        228.2   213.4   246.3      NA         NA
               Fibre (g)         53.0    45.4    71.2      NA        100
             Alcohol (g)            0     0.0     0.0      NA         NA
       Saturated fat (g)         25.5    21.6    28.2      NA         NA
 Monounsaturated fat (g)         29.8    24.7    35.9      NA         NA
 Polyunsaturated fat (g)         23.1    20.7    26.7      NA         NA
       Linoleic acid (g)         21.2    19.2    24.2      NA        100
Alpha linolenic acid (g)          1.5     1.2     2.2      NA         99
  LC n3 fatty acids (mg)        288.6    86.1   786.4      NA         81
  Vitamin A equivs (mcg)       1601.8  1221.1  2012.5     100        100
           Retinol (mcg)        466.8   409.3   562.3      NA         NA
      Provitamin A (mcg)       6755.5  4640.7  8897.1      NA         NA
            Thiamin (mg)          2.4     2.0     2.8     100        100
         Riboflavin (mg)          2.9     2.5     3.2     100        100
             Niacin (mg)         68.0    61.9    73.2     100        100
      Folate (mcg total)        643.6   566.1   731.4      NA         NA
     Folate equivs (mcg)       1036.7   877.9  1175.0     100        100
          Vitamin C (mg)        161.9   116.0   203.4     100        100
         Vitamin D (mcg)          4.3     3.2     6.6      NA         17
          Vitamin E (mg)         15.4    12.1    20.1      NA        100
            Calcium (mg)       1307.4  1169.2  1422.8     100        100
               Iron (mg)         18.2    16.0    20.6     100        100
            Iodine (mcg)        262.0   228.5   303.1     100         28
          Magnesium (mg)        573.4   535.8   623.8     100        100
         Phosphorus (mg)       2346.6  2195.0  2474.8     100        100
          Potassium (mg)       5118.2  4802.8  5497.1      NA        100
             Sodium (mg)       2111.2  1793.0  3055.7      NA        100
               Zinc (mg)         18.2    16.4    29.4     100        100
        Cholesterol (mg)        265.7   168.6   444.1      NA         NA
          Selenium (mcg)        113.6    81.3   151.2     100        100
         Vitamin B6 (mg)          2.4     1.8     3.5     100         88
       Vitamin B12 (mcg)          6.7     5.7     9.3     100        100

         Percent energy from fat 27.8
     Percent energy from protein 20.1
Percent energy from carbohydrate 52.1
     Percent energy from alcohol  0.0
```

Lact.avtot5:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              5
 [5,] NutsSeeds            12
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11223.5 10810.0 11874.6      NA         NA
             Energy (kJ)      11605.7 11195.5 12256.5      NA         NA
             Protein (g)        134.5   127.1   142.4     100        100
                 Fat (g)         96.3    87.8   105.1      NA         NA
        Carbohydrate (g)        313.9   295.9   349.0      NA         NA
              Sugars (g)        118.4   105.8   136.6      NA         NA
              Starch (g)        193.6   169.2   221.2      NA         NA
               Fibre (g)         49.5    43.7    61.8      NA        100
             Alcohol (g)            0     0.0     0.0      NA         NA
       Saturated fat (g)         28.0    24.5    31.9      NA         NA
 Monounsaturated fat (g)         35.7    32.2    42.8      NA         NA
 Polyunsaturated fat (g)         25.9    23.1    29.2      NA         NA
       Linoleic acid (g)         24.1    21.7    27.0      NA        100
Alpha linolenic acid (g)          1.4     1.1     2.0      NA         97
  LC n3 fatty acids (mg)        281.4    76.1   984.9      NA         80
  Vitamin A equivs (mcg)       1601.5  1185.0  2031.0     100        100
           Retinol (mcg)        478.8   422.6   554.2      NA         NA
      Provitamin A (mcg)       6684.5  4447.1  9502.0      NA         NA
            Thiamin (mg)          2.5     2.2     2.8     100        100
         Riboflavin (mg)          3.0     2.6     3.3     100        100
             Niacin (mg)         68.1    63.2    75.1     100        100
      Folate (mcg total)        661.8   586.3   757.8      NA         NA
     Folate equivs (mcg)       1021.5   888.2  1154.0     100        100
          Vitamin C (mg)        164.2   122.4   209.9     100        100
         Vitamin D (mcg)          4.2     3.1     7.1      NA         17
          Vitamin E (mg)         17.3    13.8    21.0      NA        100
            Calcium (mg)       1328.0  1199.8  1506.3     100        100
               Iron (mg)         18.2    15.6    22.5     100        100
            Iodine (mcg)        252.8   222.3   289.4     100          8
          Magnesium (mg)        590.4   550.4   644.0     100        100
         Phosphorus (mg)       2354.1  2229.1  2510.6     100        100
          Potassium (mg)       4782.3  4472.9  5173.4      NA        100
             Sodium (mg)       2118.4  1712.2  3046.5      NA        100
               Zinc (mg)         18.4    16.0    29.2     100        100
        Cholesterol (mg)        270.1   180.0   403.7      NA         NA
          Selenium (mcg)        123.6    86.6   185.7     100        100
         Vitamin B6 (mg)          2.4     1.9     3.1     100         92
       Vitamin B12 (mcg)          6.6     5.5    11.8     100        100

         Percent energy from fat 32.0
     Percent energy from protein 20.1
Percent energy from carbohydrate 47.9
     Percent energy from alcohol  0.0
```

Lact.avtot6:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              5
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11176.1 10673.9 11687.6      NA         NA
             Energy (kJ)      11542.5 11007.9 12073.1      NA         NA
             Protein (g)        130.1   120.9   138.6     100        100
                 Fat (g)         88.1    81.3   100.0      NA         NA
        Carbohydrate (g)        332.5   301.6   350.5      NA         NA
              Sugars (g)        122.9    96.7   138.9      NA         NA
              Starch (g)        207.7   187.0   229.1      NA         NA
               Fibre (g)         49.4    40.4    63.7      NA        100
             Alcohol (g)            0     0.0     0.0      NA         NA
       Saturated fat (g)         28.0    25.3    33.0      NA         NA
 Monounsaturated fat (g)         30.8    27.6    37.2      NA         NA
 Polyunsaturated fat (g)         22.8    20.4    27.4      NA         NA
       Linoleic acid (g)         21.0    18.8    24.7      NA        100
Alpha linolenic acid (g)          1.4     1.2     1.9      NA         97
  LC n3 fatty acids (mg)        275.9    70.4   637.3      NA         75
  Vitamin A equivs (mcg)       1566.2  1221.5  1897.2     100        100
            Retinol (mcg)        492.5   431.7   567.5      NA         NA
      Provitamin A (mcg)        6391.5  4241.5  8445.8      NA         NA
             Thiamin (mg)          2.4     2.1     2.8     100        100
           Riboflavin (mg)         2.9     2.4     3.3     100        100
               Niacin (mg)        66.0    59.1    70.1     100        100
      Folate (mcg total)         616.0   520.2   734.7      NA         NA
     Folate equivs (mcg)         978.9   836.1  1223.3     100        100
          Vitamin C (mg)         156.3   110.3   212.5     100        100
           Vitamin D (mcg)         4.2     3.2     6.6      NA         18
           Vitamin E (mg)         15.0    11.8    18.1      NA        100
             Calcium (mg)       1285.3  1157.8  1426.7     100        100
                Iron (mg)         17.6    16.1    19.4     100        100
             Iodine (mcg)        253.9   214.3   298.7     100         25
           Magnesium (mg)        552.9   513.3   605.9     100        100
           Phosphorus (mg)      2277.7  2152.3  2473.5     100        100
            Potassium (mg)      4915.8  4658.1  5301.9      NA        100
               Sodium (mg)      2172.8  1727.4  3209.7      NA        100
                 Zinc (mg)         18.7    15.4    37.8     100        100
        Cholesterol (mg)         279.6   185.9   396.8      NA         NA
           Selenium (mcg)        106.3    81.4   167.5     100        100
           Vitamin B6 (mg)         2.2     1.7     2.9     100         77
        Vitamin B12 (mcg)          6.8     5.6    10.2     100        100

         Percent energy from fat 29.0
     Percent energy from protein 19.6
Percent energy from carbohydrate 51.4
     Percent energy from alcohol  0.0
```

A15.20 Sample *7-day Total diets* Lactation Women 19-50 years higher energy level

180cm tall, high activity PAL 2

Lact.hitot1:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            21
 [6,] OtherVeg             28
 [7,] TotalFruit           28
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      14120.0 13626.3 14689.5      NA         NA
             Energy (kJ)      14677.6 14175.8 15308.3      NA         NA
             Protein (g)        161.0   153.9   170.7     100        100
                 Fat (g)        124.3   114.5   136.2      NA         NA
        Carbohydrate (g)        401.7   379.4   423.2      NA         NA
              Sugars (g)        147.9   134.1   161.3      NA         NA
              Starch (g)        251.3   231.3   270.1      NA         NA
               Fibre (g)         73.4    65.6    85.2      NA        100
             Alcohol (g)          0.0     0.0     0.0      NA         NA
       Saturated fat (g)         30.6    26.8    35.2      NA         NA
 Monounsaturated fat (g)         48.0    43.5    56.0      NA         NA
 Polyunsaturated fat (g)         37.2    33.3    43.2      NA         NA
       Linoleic acid (g)         34.9    31.5    40.0      NA        100
Alpha linolenic acid (g)          2.0     1.5     3.0      NA        100
  LC n3 fatty acids (mg)        260.2    78.0   866.9      NA         73
  Vitamin A equivs (mcg)       1812.0  1352.8  2331.1     100        100
           Retinol (mcg)        535.3   469.9   662.6      NA         NA
      Provitamin A (mcg)       7614.7  5115.5 10731.9      NA         NA
            Thiamin (mg)          3.2     2.9     3.6     100        100
         Riboflavin (mg)          3.3     2.9     3.9     100        100
             Niacin (mg)         82.7    76.8    89.3     100        100
      Folate (mcg total)        909.6   822.0  1006.9      NA         NA
     Folate equivs (mcg)       1351.6  1208.9  1485.9     100        100
          Vitamin C (mg)        223.5   167.8   295.0     100        100
         Vitamin D (mcg)          4.5     3.5     7.1      NA         26
          Vitamin E (mg)         25.5    21.5    30.1      NA        100
            Calcium (mg)       1495.5  1306.0  1683.0     100        100
               Iron (mg)         23.9    21.6    26.7     100        100
            Iodine (mcg)        280.0   243.0   324.2     100         68
          Magnesium (mg)        808.1   752.0   937.5     100        100
         Phosphorus (mg)       2855.7  2707.4  3023.7     100        100
          Potassium (mg)       6517.0  6041.6  7015.4      NA        100
             Sodium (mg)       2243.1  1884.0  3153.5      NA        100
               Zinc (mg)         22.0    19.8    32.1     100        100
        Cholesterol (mg)        262.7   163.2   459.9      NA         NA
          Selenium (mcg)        158.5   106.5   205.8     100        100
         Vitamin B6 (mg)          3.2     2.5     4.2     100        100
       Vitamin B12 (mcg)          6.8     5.5    11.2     100        100

         Percent energy from fat 32.0
     Percent energy from protein 19.1
Percent energy from carbohydrate 48.9
     Percent energy from alcohol  0.0
```

Lact.hitot2:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           11
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            14
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    56
 [9,] RefinedCereals       35
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      14097.1 13697.2 14799.1      NA         NA
             Energy (kJ)      14608.4 14195.4 15300.5      NA         NA
             Protein (g)        160.0   151.8   168.9     100        100
                 Fat (g)        107.8    98.4   119.5      NA         NA
        Carbohydrate (g)        433.5   407.9   462.0      NA         NA
              Sugars (g)        142.9   129.9   166.0      NA         NA
              Starch (g)        288.4   268.1   311.5      NA         NA
               Fibre (g)         67.0    59.2    80.4      NA        100
             Alcohol (g)          0.0     0.0     0.0      NA         NA
       Saturated fat (g)         29.8    26.9    34.4      NA         NA
 Monounsaturated fat (g)         39.6    35.7    45.4      NA         NA
 Polyunsaturated fat (g)         30.7    26.8    36.8      NA         NA
       Linoleic acid (g)         28.4    24.9    34.1      NA        100
Alpha linolenic acid (g)          1.9     1.5     2.8      NA        100
  LC n3 fatty acids (mg)        302.9    84.3   800.9      NA         84
  Vitamin A equivs (mcg)       1634.5  1320.2  1965.8     100        100
           Retinol (mcg)        490.3   428.5   582.7      NA         NA
      Provitamin A (mcg)       6817.5  4917.6  8935.7      NA         NA
            Thiamin (mg)          3.2     2.9     3.6     100        100
         Riboflavin (mg)          3.3     2.8     3.7     100        100
             Niacin (mg)         81.0    71.5    88.2     100        100
      Folate (mcg total)        825.7   731.4   920.6      NA         NA
     Folate equivs (mcg)       1343.6  1195.8  1523.7     100        100
          Vitamin C (mg)        166.6   113.0   223.2     100        100
         Vitamin D (mcg)          4.3     3.1     7.2      NA         17
          Vitamin E (mg)         20.0    15.1    24.4      NA        100
            Calcium (mg)       1514.3  1373.3  1703.0     100        100
               Iron (mg)         23.7    22.0    26.9     100        100
            Iodine (mcg)        305.3   267.2   390.3     100         98
          Magnesium (mg)        750.7   707.1   823.1     100        100
         Phosphorus (mg)       2819.3  2641.4  2950.2     100        100
          Potassium (mg)       5751.8  5439.9  6164.7      NA        100
             Sodium (mg)       2580.3  2202.1  3556.3      NA        100
               Zinc (mg)         22.5    19.4    32.5     100        100
        Cholesterol (mg)        276.6   173.1   405.3      NA         NA
          Selenium (mcg)        145.7   113.5   196.9     100        100
         Vitamin B6 (mg)          2.7     2.2     3.8     100        100
       Vitamin B12 (mcg)          7.2     5.8     9.8     100        100

         Percent energy from fat 28.0
     Percent energy from protein 19.1
Percent energy from carbohydrate 52.9
     Percent energy from alcohol  0.0
```

Lact.hitot3:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            18
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       35
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      13998.7 13428.2 14393.1      NA         NA
             Energy (kJ)      14460.6 13911.4 14872.1      NA         NA
             Protein (g)        153.5   147.2   163.8     100        100
                 Fat (g)        115.7   106.9   125.0      NA         NA
        Carbohydrate (g)        415.4   386.8   442.2      NA         NA
              Sugars (g)        145.6   125.1   171.4      NA         NA
              Starch (g)        267.2   244.8   291.9      NA         NA
               Fibre (g)         60.0    53.6    71.2      NA        100
             Alcohol (g)          0.0     0.0     0.0      NA         NA
       Saturated fat (g)         31.8    29.0    35.4      NA         NA
 Monounsaturated fat (g)         44.3    40.0    49.4      NA         NA
 Polyunsaturated fat (g)         31.8    28.7    37.0      NA         NA
       Linoleic acid (g)         29.7    27.0    34.3      NA        100
Alpha linolenic acid (g)          1.7     1.3     2.4      NA        100
  LC n3 fatty acids (mg)        262.6    88.4   788.3      NA         80
  Vitamin A equivs (mcg)       1595.5  1190.8  2087.3     100        100
           Retinol (mcg)        493.7   431.2   603.4      NA         NA
      Provitamin A (mcg)       6563.8  3967.1  9339.9      NA         NA
            Thiamin (mg)          3.0     2.5     3.4     100        100
         Riboflavin (mg)          3.3     2.8     4.0     100        100
             Niacin (mg)         79.3    71.2    85.8     100        100
      Folate (mcg total)        781.8   673.4   897.8      NA         NA
     Folate equivs (mcg)       1248.2  1048.0  1419.4     100        100
          Vitamin C (mg)        161.5   112.0   226.5     100        100
         Vitamin D (mcg)          4.1     3.0     7.5      NA          9
          Vitamin E (mg)         21.5    16.9    27.1      NA        100
            Calcium (mg)       1439.4  1217.7  1616.3     100        100
               Iron (mg)         21.6    19.4    25.8     100        100
            Iodine (mcg)        289.8   255.1   375.2     100         91
          Magnesium (mg)        715.2   667.1   760.9     100        100
         Phosphorus (mg)       2697.6  2514.6  2914.3     100        100
          Potassium (mg)       5336.6  5005.2  5652.1      NA        100
             Sodium (mg)       2494.0  2082.8  3433.1      NA        100
               Zinc (mg)         21.4    17.9    31.8     100        100
        Cholesterol (mg)        277.1   174.9   452.5      NA         NA
          Selenium (mcg)        147.2   105.7   207.9     100        100
         Vitamin B6 (mg)          2.6     2.1     3.6     100        100
       Vitamin B12 (mcg)          7.2     5.4    16.5     100        100

         Percent energy from fat 30.6
     Percent energy from protein 18.5
Percent energy from carbohydrate 50.9
     Percent energy from alcohol  0.0
```

Lact.hitot4:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            14
 [6,] OtherVeg             11
 [7,] TotalFruit           28
 [8,] WholegrainCereals    56
 [9,] RefinedCereals       33
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      14219.5 13763.3 14708.2      NA         NA
             Energy (kJ)      14726.1 14249.0 15202.2      NA         NA
             Protein (g)        156.0   148.5   165.2     100        100
                 Fat (g)        108.6   100.7   119.7      NA         NA
        Carbohydrate (g)        442.2   415.0   473.9      NA         NA
              Sugars (g)        164.3   147.6   191.3      NA         NA
              Starch (g)        274.8   253.4   298.2      NA         NA
               Fibre (g)         65.6    58.4    74.8      NA        100
             Alcohol (g)          0.0     0.0     0.0      NA         NA
       Saturated fat (g)         31.1    27.6    35.2      NA         NA
 Monounsaturated fat (g)         40.1    35.5    44.6      NA         NA
 Polyunsaturated fat (g)         29.6    25.5    36.8      NA         NA
       Linoleic acid (g)         27.5    23.8    33.7      NA        100
Alpha linolenic acid (g)          1.8     1.4     2.7      NA        100
  LC n3 fatty acids (mg)        273.5    61.8   914.6      NA         82
  Vitamin A equivs (mcg)       1661.2  1198.5  2043.8     100        100
           Retinol (mcg)        501.1   420.4   648.5      NA         NA
      Provitamin A (mcg)       6914.2  4451.7  9186.3      NA         NA
            Thiamin (mg)          3.2     2.7     3.6     100        100
         Riboflavin (mg)          3.4     2.9     3.9     100        100
             Niacin (mg)         80.7    74.5    87.9     100        100
      Folate (mcg total)        831.9   713.2   949.8      NA         NA
     Folate equivs (mcg)       1345.5  1194.6  1513.0     100        100
          Vitamin C (mg)        206.5   153.8   272.1     100        100
         Vitamin D (mcg)          4.2     3.1     7.6      NA         15
          Vitamin E (mg)         20.1    15.8    24.9      NA        100
            Calcium (mg)       1502.0  1371.7  1645.2     100        100
               Iron (mg)         22.7    20.7    25.0     100        100
            Iodine (mcg)        304.6   257.0   388.1     100         97
          Magnesium (mg)        733.3   675.7   780.4     100        100
         Phosphorus (mg)       2753.9  2598.8  2937.1     100        100
          Potassium (mg)       5742.7  5344.1  6166.6      NA        100
             Sodium (mg)       2630.0  2191.7  3448.7      NA        100
               Zinc (mg)         21.2    19.4    31.4     100        100
        Cholesterol (mg)        282.1   178.3   533.3      NA         NA
          Selenium (mcg)        140.7   102.4   198.4     100        100
         Vitamin B6 (mg)          2.8     2.2     3.5     100        100
       Vitamin B12 (mcg)          6.8     5.5     9.9     100        100

         Percent energy from fat 28.2
     Percent energy from protein 18.4
Percent energy from carbohydrate 53.4
     Percent energy from alcohol  0.0
```

Lact.hitot5:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            17
 [6,] OtherVeg             21
 [7,] TotalFruit           24
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      14186.2 13736.8 14688.3      NA         NA
             Energy (kJ)      14696.5 14237.8 15197.3      NA         NA
             Protein (g)        154.4   145.5   168.8     100        100
                 Fat (g)        121.4   113.0   129.8      NA         NA
        Carbohydrate (g)        411.7   392.3   437.3      NA         NA
              Sugars (g)        154.6   135.6   176.0      NA         NA
              Starch (g)        254.1   236.4   273.7      NA         NA
               Fibre (g)         68.3    58.9    89.3      NA        100
             Alcohol (g)          0.0     0.0     0.0      NA         NA
       Saturated fat (g)         33.4    29.7    37.2      NA         NA
 Monounsaturated fat (g)         45.3    41.5    50.3      NA         NA
 Polyunsaturated fat (g)         34.5    29.8    38.3      NA         NA
       Linoleic acid (g)         32.2    28.0    35.3      NA        100
Alpha linolenic acid (g)          1.9     1.5     2.7      NA        100
  LC n3 fatty acids (mg)        271.6    92.8   835.8      NA         76
  Vitamin A equivs (mcg)       1820.1  1328.5  2256.8     100        100
           Retinol (mcg)        570.7   494.1   685.5      NA         NA
      Provitamin A (mcg)       7446.6  4673.6 10107.3      NA         NA
            Thiamin (mg)          3.1     2.8     3.4     100        100
         Riboflavin (mg)          3.3     3.0     3.7     100        100
             Niacin (mg)         80.4    72.9    86.8     100        100
      Folate (mcg total)        830.2   745.9   980.1      NA         NA
     Folate equivs (mcg)       1267.8  1125.8  1412.3     100        100
          Vitamin C (mg)        233.1   187.1   298.0     100        100
         Vitamin D (mcg)          4.6     3.6     7.0      NA         31
          Vitamin E (mg)         22.8    19.2    26.7      NA        100
            Calcium (mg)       1459.4  1338.8  1653.9     100        100
               Iron (mg)         22.7    20.2    25.7     100        100
            Iodine (mcg)        283.0   248.1   322.2     100         74
          Magnesium (mg)        744.0   686.0   794.6     100        100
         Phosphorus (mg)       2751.0  2553.4  2920.4     100        100
          Potassium (mg)       6161.9  5467.8  6553.8      NA        100
             Sodium (mg)       2423.2  2052.9  3123.8      NA        100
               Zinc (mg)         21.7    19.0    31.9     100        100
        Cholesterol (mg)        273.5   172.6   462.8      NA         NA
          Selenium (mcg)        143.2   107.5   201.8     100        100
         Vitamin B6 (mg)          3.1     2.5     3.8     100        100
       Vitamin B12 (mcg)          7.0     5.5    11.7     100        100

         Percent energy from fat 31.3
     Percent energy from protein 18.3
Percent energy from carbohydrate 50.4
     Percent energy from alcohol  0.0
```

Lact.hitot6:

```
      AllFoodGroups Nservings
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            14
 [4,] Legumes              14
 [5,] NutsSeeds            12
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    56
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             24
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      14120.9 13505.4 14612.8      NA         NA
             Energy (kJ)      14668.5 14054.0 15181.5      NA         NA
             Protein (g)        161.2   153.6   171.7     100        100
                 Fat (g)        109.2   101.5   121.6      NA         NA
        Carbohydrate (g)        429.1   401.4   460.8      NA         NA
              Sugars (g)        153.7   137.6   171.2      NA         NA
              Starch (g)        272.9   250.7   298.1      NA         NA
               Fibre (g)         72.3    63.3    83.8      NA        100
             Alcohol (g)          0.0     0.0     0.0      NA         NA
       Saturated fat (g)         31.5    28.4    37.5      NA         NA
 Monounsaturated fat (g)         39.2    34.8    44.6      NA         NA
 Polyunsaturated fat (g)         30.7    27.7    35.4      NA         NA
       Linoleic acid (g)         28.3    25.7    32.2      NA        100
Alpha linolenic acid (g)          1.9     1.5     2.7      NA        100
  LC n3 fatty acids (mg)        340.9    87.0   756.4      NA         85
  Vitamin A equivs (mcg)       2474.2  2034.7  2847.3     100        100
           Retinol (mcg)        524.2   464.7   611.3      NA         NA
      Provitamin A (mcg)      11651.8  8940.0 13716.5      NA         NA
            Thiamin (mg)          3.2     2.9     3.7     100        100
         Riboflavin (mg)          3.4     3.1     3.8     100        100
             Niacin (mg)         81.7    75.8    88.8     100        100
      Folate (mcg total)        860.4   783.9   964.2      NA         NA
     Folate equivs (mcg)       1347.7  1199.0  1527.0     100        100
          Vitamin C (mg)        216.6   169.8   280.8     100        100
         Vitamin D (mcg)          4.7     3.4     6.9      NA         38
          Vitamin E (mg)         20.2    16.0    24.0      NA        100
            Calcium (mg)       1558.4  1391.1  1751.5     100        100
               Iron (mg)         24.2    22.2    26.8     100        100
            Iodine (mcg)        299.3   258.6   358.7     100         93
          Magnesium (mg)        766.4   718.3   850.0     100        100
         Phosphorus (mg)       2863.5  2693.0  3048.1     100        100
          Potassium (mg)       6351.5  6033.5  6832.2      NA        100
             Sodium (mg)       2644.4  2240.0  3705.6      NA        100
               Zinc (mg)         22.0    20.0    31.9     100        100
        Cholesterol (mg)        264.2   167.7   420.6      NA         NA
          Selenium (mcg)        141.7   105.0   208.7     100        100
         Vitamin B6 (mg)          2.9     2.4     3.8     100        100
       Vitamin B12 (mcg)          6.9     5.6    10.1     100        100

         Percent energy from fat 28.3
     Percent energy from protein 19.1
Percent energy from carbohydrate 52.6
     Percent energy from alcohol  0.0
```

A15.21 Sample *7-day Total Diets* Boys 2-3 years mid energy level

Average age 2.5yrs and light to moderate activity (ave energy for 2yrs and PAL 1.7 for 3 yrs)

Boys2to3.avtot1:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           3.5
 [2,] GreenBrassicas       3.5
 [3,] OrangeVeg            3.5
 [4,] Legumes              3
 [5,] NutsSeeds            0
 [6,] OtherVeg             10
 [7,] TotalFruit           14
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           2
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       5416.1  5209.0  5674.5      NA         NA
             Energy (kJ)       5624.6  5405.9  5887.9      NA         NA
             Protein (g)         66.5    62.3    70.8     100        100
                 Fat (g)         33.3    30.3    38.2      NA         NA
        Carbohydrate (g)        181.8   174.5   191.5      NA         NA
              Sugars (g)         73.6    64.3    79.8      NA         NA
              Starch (g)        107.0    98.2   115.4      NA         NA
               Fibre (g)         27.8    24.0    33.8      NA        100
       Saturated fat (g)         11.3    10.3    12.9      NA         NA
 Monounsaturated fat (g)         10.4     8.8    12.8      NA         NA
 Polyunsaturated fat (g)          8.8     8.0     9.8      NA         NA
       Linoleic acid (g)          7.9     7.2     8.7      NA        100
Alpha linolenic acid (g)          0.7     0.6     0.8      NA        100
  LC n3 fatty acids (mg)        109.4    42.6   422.0      NA        100
  Vitamin A equivs (mcg)        853.3   666.3  1076.6     100        100
           Retinol (mcg)        229.7   198.7   271.4      NA         NA
      Provitamin A (mcg)       3680.6  2608.7  4970.6      NA         NA
             Thiamin (mg)          1.2     1.0     1.3     100        100
         Riboflavin (mg)           1.7     1.5     1.9     100        100
              Niacin (mg)         31.6    29.3    33.7     100        100
      Folate (mcg total)        350.0   298.3   408.2      NA         NA
     Folate equivs (mcg)        537.8   455.8   610.9     100        100
          Vitamin C (mg)         97.4    63.6   125.5     100        100
         Vitamin D (mcg)          2.0     1.6     3.4      NA          0
          Vitamin E (mg)          6.3     5.1     7.5      NA        100
            Calcium (mg)        753.7   695.7   852.8     100        100
               Iron (mg)          9.1     8.1    10.1     100         59
            Iodine (mcg)        130.1   107.9   152.7     100        100
          Magnesium (mg)        272.9   252.8   295.5     100        100
         Phosphorus (mg)       1176.3  1112.8  1273.6     100        100
          Potassium (mg)       2606.4  2446.8  2812.4      NA        100
             Sodium (mg)        998.2   839.9  1164.4      NA        100
               Zinc (mg)          8.7     8.0    13.7     100        100
        Cholesterol (mg)        129.8    80.9   217.5      NA         NA
          Selenium (mcg)         47.2    38.5    58.0     100        100
         Vitamin B6 (mg)          1.3     0.9     2.1     100        100
       Vitamin B12 (mcg)          3.9     3.3     5.3     100        100

         Percent energy from fat 22.5
     Percent energy from protein 20.6
Percent energy from carbohydrate 56.9
```

Boys2to3.avtot2:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           2.5
 [2,] GreenBrassicas       3.5
 [3,] OrangeVeg            3.5
 [4,] Legumes              2
 [5,] NutsSeeds            0
 [6,] OtherVeg             7
 [7,] TotalFruit           7
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       5437.1  5137.2  5669.5      NA         NA
             Energy (kJ)       5621.6  5311.6  5861.5      NA         NA
             Protein (g)         66.7    63.2    69.7     100        100
                 Fat (g)         31.6    28.1    35.5      NA         NA
        Carbohydrate (g)        186.2   176.3   196.0      NA         NA
              Sugars (g)         56.5    51.6    61.8      NA         NA
              Starch (g)        128.9   118.9   139.0      NA         NA
               Fibre (g)         24.5    21.1    29.5      NA        100
       Saturated fat (g)         10.2     8.9    11.6      NA         NA
 Monounsaturated fat (g)         10.0     8.3    11.9      NA         NA
 Polyunsaturated fat (g)          8.7     7.9     9.5      NA         NA
       Linoleic acid (g)          7.8     7.0     8.6      NA        100
Alpha linolenic acid (g)          0.7     0.6     0.8      NA        100
  LC n3 fatty acids (mg)        114.2    35.1   339.3      NA         98
  Vitamin A equivs (mcg)        799.5   628.3   961.4     100        100
           Retinol (mcg)        216.4   187.0   262.4      NA         NA
      Provitamin A (mcg)       3443.3  2389.9  4513.2      NA         NA
            Thiamin (mg)          1.2     1.1     1.4     100        100
         Riboflavin (mg)          1.6     1.4     1.8     100        100
             Niacin (mg)         32.0    28.2    35.1     100        100
      Folate (mcg total)        300.9   239.8   344.6      NA         NA
     Folate equivs (mcg)        523.3   442.2   591.1     100        100
          Vitamin C (mg)         66.4    46.7    85.0     100        100
         Vitamin D (mcg)          1.9     1.4     3.0      NA          0
          Vitamin E (mg)          5.7     4.7     6.7      NA         96
            Calcium (mg)        714.7   628.4   793.5     100        100
               Iron (mg)          9.0     7.9    10.3     100         44
            Iodine (mcg)        135.6   119.6   154.4     100        100
          Magnesium (mg)        255.1   233.6   271.5     100        100
         Phosphorus (mg)       1154.3  1093.4  1216.7     100        100
          Potassium (mg)       2219.0  2048.7  2414.2      NA        100
             Sodium (mg)       1057.5   910.8  1280.3      NA        100
               Zinc (mg)          8.3     7.6     9.0     100        100
        Cholesterol (mg)        129.2    80.5   229.3      NA         NA
          Selenium (mcg)         48.4    41.2    55.8     100        100
         Vitamin B6 (mg)          1.1     0.8     1.6     100        100
       Vitamin B12 (mcg)          4.0     3.4     4.5     100        100

         Percent energy from fat 21.4
     Percent energy from protein 20.7
Percent energy from carbohydrate 57.9
```

.Boys2to3.avtot3:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       3.5
 [3,] OrangeVeg            3.5
 [4,] Legumes              3
 [5,] NutsSeeds            0
 [6,] OtherVeg             21
 [7,] TotalFruit           12
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       9
[10,] Poultryfisheggsleg   3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       5461.4  5178.0  5732.1      NA         NA
             Energy (kJ)       5676.9  5372.6  5955.4      NA         NA
             Protein (g)         65.8    61.6   124.3     100        100
                 Fat (g)         40.1    35.5    46.6      NA         NA
        Carbohydrate (g)        171.1   162.4   182.0      NA         NA
              Sugars (g)         77.2    69.6    85.3      NA         NA
              Starch (g)         92.7    84.1   103.1      NA         NA
               Fibre (g)         31.4    26.1    40.2      NA        100
       Saturated fat (g)         13.1    11.7    15.1      NA         NA
 Monounsaturated fat (g)         13.0    10.5    16.3      NA         NA
 Polyunsaturated fat (g)         10.9    10.1    12.1      NA         NA
       Linoleic acid (g)          9.9     9.1    10.9      NA        100
Alpha linolenic acid (g)          0.8     0.7     1.0      NA        100
  LC n3 fatty acids (mg)        115.7    37.4   418.2      NA         99
  Vitamin A equivs (mcg)       1001.8   818.6  1177.9     100        100
           Retinol (mcg)        271.8   236.2   315.7      NA         NA
      Provitamin A (mcg)       4320.0  3282.9  5242.5      NA         NA
            Thiamin (mg)          1.2     1.1     1.3     100        100
         Riboflavin (mg)          1.7     1.4     2.0     100        100
             Niacin (mg)         32.1    29.1    35.4     100        100
      Folate (mcg total)        359.5   295.4   406.9      NA         NA
     Folate equivs (mcg)        515.0   438.7   583.9     100        100
          Vitamin C (mg)        128.3    90.5   176.9     100        100
         Vitamin D (mcg)          2.2     1.8     3.0      NA          0
          Vitamin E (mg)          8.0     6.9     9.7      NA        100
            Calcium (mg)        722.9   652.1   805.1     100        100
               Iron (mg)          9.3     8.4    10.4     100         79
            Iodine (mcg)        120.7   105.9   137.0     100        100
          Magnesium (mg)        281.4   255.5   304.1     100        100
         Phosphorus (mg)       1179.3  1106.3  1251.6     100        100
          Potassium (mg)       2993.4  2786.0  3188.3      NA        100
             Sodium (mg)       1012.5   808.6  1181.5      NA        100
               Zinc (mg)          9.5     8.0    88.8     100        100
        Cholesterol (mg)        129.5    87.2   217.6      NA         NA
          Selenium (mg)         46.9    39.6    59.8     100        100
         Vitamin B6 (mg)          1.6     1.0     2.0     100        100
       Vitamin B12 (mg)           3.8     3.4     4.8     100        100

         Percent energy from fat 26.7
     Percent energy from protein 20.1
Percent energy from carbohydrate 53.2
```

Boys2to3.avtot4:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           3.5
 [2,] GreenBrassicas       3.5
 [3,] OrangeVeg            3.5
 [4,] Legumes              2
 [5,] NutsSeeds            0
 [6,] OtherVeg             14
 [7,] TotalFruit           7
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       5464.9  5241.7  5811.0      NA         NA
             Energy (kJ)       5651.7  5430.0  5996.5      NA         NA
             Protein (g)         65.3    62.0    68.7     100        100
                 Fat (g)         39.6    36.1    43.9      NA         NA
        Carbohydrate (g)        172.1   163.2   187.6      NA         NA
              Sugars (g)         63.7    55.8    71.0      NA         NA
              Starch (g)        107.5    98.9   116.0      NA         NA
               Fibre (g)         25.6    21.8    33.4      NA        100
       Saturated fat (g)         13.1    11.6    14.7      NA         NA
 Monounsaturated fat (g)         12.7    10.8    14.7      NA         NA
 Polyunsaturated fat (g)         10.7    10.0    11.7      NA         NA
       Linoleic acid (g)          9.7     9.1    10.6      NA        100
Alpha linolenic acid (g)          0.8     0.6     0.9      NA        100
  LC n3 fatty acids (mg)        115.9    36.6   323.7      NA         99
  Vitamin A equivs (mcg)        924.4   797.4  1104.0     100        100
           Retinol (mcg)        276.6   246.3   317.5      NA         NA
      Provitamin A (mcg)       3834.4  3026.4  4845.2      NA         NA
            Thiamin (mg)          1.2     1.0     1.4     100        100
         Riboflavin (mg)          1.7     1.4     1.9     100        100
             Niacin (mg)         32.0    29.4    34.9     100        100
      Folate (mcg total)        313.3   270.4   364.4      NA         NA
     Folate equivs (mcg)        503.8   435.1   568.0     100        100
          Vitamin C (mg)         92.5    71.3   131.3     100        100
         Vitamin D (mcg)          2.2     1.8     3.1      NA          0
          Vitamin E (mg)          7.1     5.8     8.2      NA        100
            Calcium (mg)        720.6   651.9   794.2     100        100
               Iron (mg)          8.9     8.0    10.1     100         41
            Iodine (mcg)        130.9   110.3   149.9     100        100
          Magnesium (mg)        260.3   238.8   286.4     100        100
         Phosphorus (mg)       1159.2  1101.8  1226.7     100        100
          Potassium (mg)       2461.4  2306.2  2661.2      NA        100
             Sodium (mg)       1077.0   905.4  1280.5      NA        100
               Zinc (mg)          8.4     7.6    13.8     100        100
        Cholesterol (mg)        132.2    85.6   212.5      NA         NA
          Selenium (mcg)         47.5    41.7    59.4     100        100
         Vitamin B6 (mg)          1.3     0.9     1.7     100        100
       Vitamin B12 (mcg)          3.9     3.4     4.9     100        100

         Percent energy from fat 26.6
     Percent energy from protein 20.1
Percent energy from carbohydrate 53.3
```

Boys2to3.avtot5:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           2.5
 [2,] GreenBrassicas       3.5
 [3,] OrangeVeg            3.5
 [4,] Legumes              4
 [5,] NutsSeeds            0
 [6,] OtherVeg             10
 [7,] TotalFruit           21
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       9
[10,] Poultryfisheggsleg   3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       5447.0  5207.2  5739.1      NA         NA
             Energy (kJ)       5677.2  5422.6  5965.2      NA         NA
             Protein (g)         65.5    60.0   124.2     100        100
                 Fat (g)         34.6    30.9    39.6      NA         NA
        Carbohydrate (g)        183.7   171.5   195.1      NA         NA
              Sugars (g)         94.2    86.8   103.1      NA         NA
              Starch (g)         88.0    77.4    94.8      NA         NA
               Fibre (g)         30.3    26.9    35.2      NA        100
       Saturated fat (g)         11.8    10.7    13.6      NA         NA
 Monounsaturated fat (g)         10.9     9.2    13.2      NA         NA
 Polyunsaturated fat (g)          8.9     8.0    10.1      NA         NA
       Linoleic acid (g)          8.0     7.2     9.0      NA        100
Alpha linolenic acid (g)          0.8     0.6     0.9      NA        100
  LC n3 fatty acids (mg)        107.6    30.0   316.7      NA         99
  Vitamin A equivs (mcg)        902.2   788.8  1099.9     100        100
            Retinol (mcg)       228.7   197.4   266.0      NA         NA
      Provitamin A (mcg)       3985.4  3265.1  5154.9      NA         NA
            Thiamin (mg)          1.2     1.0     1.3     100        100
         Riboflavin (mg)          1.7     1.4     1.8     100        100
             Niacin (mg)         30.5    27.8    33.0     100        100
      Folate (mcg total)        384.2   331.0   433.1      NA         NA
     Folate equivs (mcg)        538.2   477.7   598.8     100        100
          Vitamin C (mg)        118.7    81.0   149.9     100        100
         Vitamin D (mcg)          1.9     1.5     2.9      NA          0
          Vitamin E (mg)          6.8     5.0     8.4      NA        100
            Calcium (mg)        722.7   645.4   808.5     100        100
               Iron (mg)          9.1     8.3    10.4     100         55
            Iodine (mcg)        120.8   104.2   139.6     100        100
          Magnesium (mg)        282.7   261.3   305.9     100        100
         Phosphorus (mg)       1140.7  1081.0  1220.1     100        100
          Potassium (mg)       2821.9  2593.1  3054.4      NA        100
             Sodium (mg)        949.7   805.5  1119.8      NA        100
               Zinc (mg)         10.0     7.8    88.9     100        100
        Cholesterol (mg)        125.1    83.4   212.0      NA         NA
          Selenium (mcg)         44.0    35.7    53.3     100        100
         Vitamin B6 (mg)          1.4     1.0     1.9     100        100
       Vitamin B12 (mcg)          3.7     3.2     4.3     100        100

         Percent energy from fat 23
     Percent energy from protein 20
Percent energy from carbohydrate 57
```

Boys2to3.avtot6:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       3.5
 [3,] OrangeVeg            3.5
 [4,] Legumes              2
 [5,] NutsSeeds            0
 [6,] OtherVeg             7
 [7,] TotalFruit           21
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       9
[10,] Poultryfisheggsleg   3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       5488.8  5283.2  5781.4      NA         NA
             Energy (kJ)       5711.8  5487.5  6063.3      NA         NA
             Protein (g)         64.6    59.8   121.9     100        100
                 Fat (g)         34.0    30.8    40.1      NA         NA
        Carbohydrate (g)        188.4   179.6   199.7      NA         NA
              Sugars (g)         94.2    86.3   101.3      NA         NA
              Starch (g)         92.7    84.7   102.0      NA         NA
               Fibre (g)         31.5    25.9    42.2      NA        100
       Saturated fat (g)         11.8    10.3    13.1      NA         NA
 Monounsaturated fat (g)         10.7     8.9    13.9      NA         NA
 Polyunsaturated fat (g)          8.6     7.8     9.7      NA         NA
       Linoleic acid (g)          7.6     6.9     8.7      NA        100
Alpha linolenic acid (g)          0.7     0.6     0.8      NA        100
  LC n3 fatty acids (mg)        122.5    41.1   364.4      NA        100
  Vitamin A equivs (mcg)        904.9   708.2  1079.1     100        100
           Retinol (mcg)        233.1   204.0   275.2      NA         NA
      Provitamin A (mcg)       3981.8  2936.0  5113.6      NA         NA
            Thiamin (mg)          1.2     1.0     1.3     100        100
         Riboflavin (mg)          1.7     1.5     1.9     100        100
             Niacin (mg)         30.9    27.8    33.5     100        100
      Folate (mcg total)        372.7   306.2   429.1      NA         NA
     Folate equivs (mcg)        528.2   445.8   604.4     100        100
          Vitamin C (mg)        119.2    89.3   157.0     100        100
         Vitamin D (mcg)          2.0     1.5     3.0      NA          0
          Vitamin E (mg)          6.4     5.6     7.9      NA        100
            Calcium (mg)        714.2   654.6   803.2     100        100
               Iron (mg)          8.9     7.9     9.8     100         43
            Iodine (mcg)        122.3   103.7   139.3     100        100
          Magnesium (mg)        279.9   257.7   303.9     100        100
         Phosphorus (mg)       1140.0  1075.5  1211.5     100        100
          Potassium (mg)       2946.4  2733.0  3156.1      NA        100
             Sodium (mg)        960.5   789.3  1148.5      NA        100
               Zinc (mg)         10.0     7.6    88.5     100        100
        Cholesterol (mg)        130.4    88.5   197.3      NA         NA
          Selenium (mcg)         43.4    35.4    49.6     100        100
         Vitamin B6 (mg)          1.3     1.0     1.9     100        100
       Vitamin B12 (mcg)          3.7     3.2     5.1     100        100

         Percent energy from fat 22.5
     Percent energy from protein 19.6
Percent energy from carbohydrate 57.9
```

A15.22 Sample *7-day Total Diets* Boys 2-3years higher energy level

Higher age 3years, high activity PAL 2

Boys2to3.hitot1:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            0
 [6,] OtherVeg             10
 [7,] TotalFruit           10
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6635.9  6404.6  6964.7      NA         NA
             Energy (kJ)       6902.7  6666.3  7238.2      NA         NA
             Protein (g)         84.3    80.8    87.5     100        100
                 Fat (g)         44.1    40.8    50.0      NA         NA
        Carbohydrate (g)        212.5   204.5   223.7      NA         NA
              Sugars (g)         81.2    73.6    90.0      NA         NA
              Starch (g)        130.2   121.9   138.2      NA         NA
               Fibre (g)         37.7    31.6    45.2      NA        100
       Saturated fat (g)         15.2    14.1    17.1      NA         NA
 Monounsaturated fat (g)         13.4    11.6    16.2      NA         NA
 Polyunsaturated fat (g)         11.9    10.9    13.5      NA         NA
       Linoleic acid (g)         10.8     9.9    12.2      NA        100
Alpha linolenic acid (g)          1.0     0.8     1.1      NA        100
  LC n3 fatty acids (mg)        125.9    44.3   600.6      NA        100
  Vitamin A equivs (mcg)       1429.7  1187.6  1724.6     100        100
            Retinol (mcg)        317.9   287.2   356.2      NA         NA
      Provitamin A (mcg)       6580.4  5209.0  8216.2      NA         NA
            Thiamin (mg)          1.6     1.4     1.7     100        100
         Riboflavin (mg)          2.2     1.8     2.5     100        100
             Niacin (mg)         39.7    36.1    42.8     100        100
      Folate (mcg total)        447.4   408.9   500.8      NA         NA
     Folate equivs (mcg)        683.6   616.9   768.9     100        100
          Vitamin C (mg)        114.8    83.3   139.9     100        100
         Vitamin D (mcg)          2.8     2.3     4.9      NA          0
          Vitamin E (mg)          7.7     6.1     9.0      NA        100
            Calcium (mg)       1066.3   996.2  1141.4     100        100
               Iron (mg)         11.7    10.6    12.7     100        100
            Iodine (mcg)        174.9   146.3   199.0     100        100
          Magnesium (mg)        358.3   335.0   380.4     100        100
         Phosphorus (mg)       1564.5  1493.5  1637.8     100        100
          Potassium (mg)       3397.7  3180.0  3579.5      NA        100
             Sodium (mg)       1328.8  1195.6  1630.0      NA        100
               Zinc (mg)         10.9    10.3    11.5     100        100
        Cholesterol (mg)        149.7   107.7   236.6      NA         NA
          Selenium (mg)         56.5    50.1    65.5     100        100
         Vitamin B6 (mg)          1.5     1.1     2.1     100        100
       Vitamin B12 (mcg)          5.1     4.7     5.9     100        100

         Percent energy from fat 24.2
     Percent energy from protein 21.3
Percent energy from carbohydrate 54.5
```

Boys2to3.hitot2:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           3.5
 [2,] GreenBrassicas       3.5
 [3,] OrangeVeg            3.5
 [4,] Legumes              3
 [5,] NutsSeeds            0
 [6,] OtherVeg             7
 [7,] TotalFruit           7
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6669.3  6394.0  6908.9      NA         NA
             Energy (kJ)       6894.0  6600.6  7155.7      NA         NA
             Protein (g)         76.3    73.1    80.4     100        100
                 Fat (g)         39.0    35.1    43.4      NA         NA
        Carbohydrate (g)        233.1   219.7   246.7      NA         NA
              Sugars (g)         60.6    54.8    68.4      NA         NA
              Starch (g)        171.8   160.8   185.2      NA         NA
               Fibre (g)         30.4    26.1    37.4      NA        100
       Saturated fat (g)         12.0    10.8    13.4      NA         NA
 Monounsaturated fat (g)         12.3    10.5    14.2      NA         NA
 Polyunsaturated fat (g)         11.5    10.5    12.7      NA         NA
       Linoleic acid (g)         10.4     9.5    11.3      NA        100
Alpha linolenic acid (g)          0.9     0.7     1.1      NA        100
  LC n3 fatty acids (mg)        120.0    38.4   353.8      NA         98
  Vitamin A equivs (mcg)        860.3   690.0  1002.5     100        100
           Retinol (mcg)        264.7   235.3   300.5      NA         NA
      Provitamin A (mcg)       3522.2  2586.1  4335.3      NA         NA
            Thiamin (mg)          1.5     1.3     1.8     100        100
         Riboflavin (mg)          1.8     1.6     2.1     100        100
             Niacin (mg)         37.3    34.4    39.8     100        100
      Folate (mcg total)        346.7   305.9   397.1      NA         NA
     Folate equivs (mcg)        641.9   557.8   713.7     100        100
          Vitamin C (mg)         71.0    46.2    94.2     100        100
         Vitamin D (mcg)          2.2     1.8     2.8      NA          0
          Vitamin E (mg)          6.8     5.5     8.3      NA        100
            Calcium (mg)        782.4   696.1   872.9     100        100
               Iron (mg)         10.9     9.7    12.2     100        100
            Iodine (mcg)        158.2   128.4   181.5     100        100
          Magnesium (mg)        303.5   284.2   334.6     100        100
         Phosphorus (mg)       1327.9  1236.5  1421.8     100        100
          Potassium (mg)       2473.2  2323.2  2697.1      NA        100
             Sodium (mg)       1311.8  1085.2  1633.8      NA        100
               Zinc (mg)          9.5     9.0    14.5     100        100
        Cholesterol (mg)        126.9    85.5   188.3      NA         NA
          Selenium (mcg)         57.0    49.1    66.6     100        100
         Vitamin B6 (mg)          1.2     0.9     1.6     100        100
       Vitamin B12 (mcg)          4.3     3.7     5.8     100        100

         Percent energy from fat 21.6
     Percent energy from protein 19.4
Percent energy from carbohydrate 59.1
```

Boys2to3.hitot3:

```
      AllFoodGroups   N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       4.5
 [3,] OrangeVeg            3.5
 [4,] Legumes              3.5
 [5,] NutsSeeds            0
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    22
 [9,] RefinedCereals       21
[10,] AllOtherMeatEggsLeg  3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6635.3  6338.5  6841.5      NA         NA
             Energy (kJ)       6883.5  6573.3  7099.9      NA         NA
             Protein (g)         74.3    71.3    77.3     100        100
                 Fat (g)         41.6    37.0    46.0      NA         NA
        Carbohydrate (g)        228.1   216.8   239.1      NA         NA
              Sugars (g)         82.5    73.1    95.5      NA         NA
              Starch (g)        144.3   134.5   153.2      NA         NA
               Fibre (g)         34.9    29.4    46.6      NA        100
       Saturated fat (g)         13.5    11.7    15.0      NA         NA
 Monounsaturated fat (g)         13.2    10.8    16.1      NA         NA
 Polyunsaturated fat (g)         11.5    10.4    12.4      NA         NA
       Linoleic acid (g)         10.4     9.5    11.2      NA        100
Alpha linolenic acid (g)          0.9     0.8     1.0      NA        100
  LC n3 fatty acids (mg)        120.1    34.1   336.2      NA         98
  Vitamin A equivs (mcg)        979.6   785.3  1154.6     100        100
            Retinol (mcg)       276.1   238.4   327.6      NA         NA
      Provitamin A (mcg)       4167.5  3095.3  5174.7      NA         NA
            Thiamin (mg)          1.4     1.3     1.6     100        100
         Riboflavin (mg)          1.8     1.6     2.0     100        100
             Niacin (mg)         36.2    33.9    38.6     100        100
      Folate (mcg total)        391.3   327.3   440.1      NA         NA
     Folate equivs (mcg)        620.9   534.2   719.8     100        100
          Vitamin C (mg)        123.4    93.4   173.1     100        100
         Vitamin D (mcg)          2.2     1.8     3.2      NA          0
          Vitamin E (mg)          7.9     6.6     9.9      NA        100
            Calcium (mg)        773.8   712.5   845.9     100        100
               Iron (mg)         10.8     9.8    11.9     100        100
            Iodine (mcg)        141.8   121.4   161.9     100        100
          Magnesium (mg)        316.0   295.0   346.2     100        100
         Phosphorus (mg)       1313.6  1247.0  1378.1     100        100
          Potassium (mg)       3077.1  2885.6  3340.1      NA        100
             Sodium (mg)       1215.5  1011.3  1418.5      NA        100
               Zinc (mg)          9.5     8.8    10.1     100        100
        Cholesterol (mg)        130.7    80.6   244.9      NA         NA
          Selenium (mcg)         53.5    45.8    64.8     100        100
         Vitamin B6 (mg)          1.5     1.1     2.1     100        100
       Vitamin B12 (mcg)          4.1     3.6     4.8     100        100

         Percent energy from fat 23.0
     Percent energy from protein 18.8
Percent energy from carbohydrate 58.2
```

Boys2to3.hitot4:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            0
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6662.7  6415.7  6909.3      NA         NA
             Energy (kJ)       6953.8  6696.0  7204.8      NA         NA
             Protein (g)         78.3    74.1    83.4     100        100
                 Fat (g)         43.1    39.1    47.4      NA         NA
        Carbohydrate (g)        222.6   209.2   236.4      NA         NA
              Sugars (g)         87.3    75.5    95.2      NA         NA
              Starch (g)        134.0   121.8   146.6      NA         NA
               Fibre (g)         40.8    34.2    48.5      NA        100
       Saturated fat (g)         13.8    12.3    15.5      NA         NA
 Monounsaturated fat (g)         13.5    11.6    15.4      NA         NA
 Polyunsaturated fat (g)         12.3    10.8    13.7      NA         NA
       Linoleic acid (g)         11.1     9.8    12.3      NA        100
Alpha linolenic acid (g)          0.9     0.8     1.1      NA        100
  LC n3 fatty acids (mg)        119.0    42.4   381.7      NA        100
  Vitamin A equivs (mcg)       1427.0  1182.1  1787.3     100        100
            Retinol (mcg)        280.7   234.1   321.0      NA         NA
      Provitamin A (mcg)       6832.6  5423.4  9046.5      NA         NA
            Thiamin (mg)          1.6     1.4     1.8     100        100
         Riboflavin (mg)          2.0     1.8     2.2     100        100
             Niacin (mg)         38.5    35.5    42.4     100        100
      Folate (mcg total)        450.5   405.8   522.9      NA         NA
     Folate equivs (mcg)        679.2   592.7   762.8     100        100
          Vitamin C (mg)        138.8   105.2   181.8     100        100
         Vitamin D (mcg)          2.3     1.8     3.3      NA          0
          Vitamin E (mg)          8.4     7.3     9.8      NA        100
            Calcium (mg)        838.6   758.2   899.9     100        100
               Iron (mg)         12.3    11.4    13.6     100        100
            Iodine (mcg)        145.9   126.0   165.9     100        100
          Magnesium (mg)        360.9   328.2   383.8     100        100
         Phosphorus (mg)       1422.3  1344.2  1484.7     100        100
          Potassium (mg)       3444.3  3213.8  3693.0      NA        100
             Sodium (mg)       1226.4  1076.0  1450.5      NA        100
               Zinc (mg)         10.4     9.8    15.0     100        100
        Cholesterol (mg)        137.2    86.4   197.4      NA         NA
          Selenium (mcg)         55.2    43.7    67.4     100        100
         Vitamin B6 (mg)          1.7     1.2     2.2     100        100
       Vitamin B12 (mcg)          3.9     3.4     5.0     100        100

         Percent energy from fat 23.5
     Percent energy from protein 19.6
Percent energy from carbohydrate 56.8
```

Boys2to3.hitot5:

```
      AllFoodGroups    N.serves
 [1,] StarchyVeg           2.5
 [2,] GreenBrassicas       4.5
 [3,] OrangeVeg            3.5
 [4,] Legumes              2
 [5,] NutsSeeds            0
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    22
 [9,] RefinedCereals       21
[10,] AllOtherMeatEggsLeg  3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6724.9  6495.1  6962.4      NA         NA
             Energy (kJ)       6984.0  6739.8  7245.4      NA         NA
             Protein (g)         74.3    69.0   132.8     100        100
                 Fat (g)         41.4    37.3    47.5      NA         NA
         Carbohydrate (g)       236.3   224.1   247.6      NA         NA
               Sugars (g)        97.8    88.9   104.8      NA         NA
               Starch (g)       136.9   126.4   148.4      NA         NA
                Fibre (g)        33.9    29.8    41.1      NA        100
        Saturated fat (g)        13.4    11.7    15.4      NA         NA
 Monounsaturated fat (g)         13.2    11.0    16.4      NA         NA
 Polyunsaturated fat (g)         11.2    10.5    12.3      NA         NA
        Linoleic acid (g)        10.1     9.5    11.2      NA        100
Alpha linolenic acid (g)          0.9     0.7     1.1      NA        100
  LC n3 fatty acids (mg)        107.4    35.0   327.0      NA         99
  Vitamin A equivs (mcg)        975.4   815.9  1138.1     100        100
           Retinol (mcg)        278.1   246.3   331.0      NA         NA
       Provitamin A (mcg)      4136.7  3244.0  5038.7      NA         NA
             Thiamin (mg)         1.4     1.2     1.6     100        100
          Riboflavin (mg)         1.9     1.6     2.0     100        100
              Niacin (mg)        35.4    32.0    37.6     100        100
       Folate (mcg total)        414.3   358.7   482.6      NA         NA
      Folate equivs (mcg)        638.5   558.8   717.0     100        100
          Vitamin C (mg)         135.2   104.8   184.2     100        100
          Vitamin D (mcg)          2.2     1.7     3.2      NA          0
           Vitamin E (mg)          8.2     7.1     9.8      NA        100
             Calcium (mg)        773.0   714.8   842.4     100        100
                Iron (mg)         10.6     9.6    12.0     100        100
             Iodine (mcg)        142.1   122.2   159.2     100        100
           Magnesium (mg)        312.6   292.5   334.9     100        100
          Phosphorus (mg)       1282.3  1216.2  1338.4     100        100
           Potassium (mg)       3024.6  2783.9  3197.0      NA        100
              Sodium (mg)       1195.9  1052.6  1371.1      NA        100
                Zinc (mg)         11.8     8.7    89.7     100        100
         Cholesterol (mg)        131.9    85.8   219.2      NA         NA
           Selenium (mcg)         51.8    43.7    61.0     100        100
          Vitamin B6 (mg)          1.5     1.1     2.2     100        100
        Vitamin B12 (mcg)          4.0     3.6     4.7     100        100

         Percent energy from fat 22.4
     Percent energy from protein 18.5
Percent energy from carbohydrate 59.1
```

Boys2to3.hitot6:

```
      AllFoodGroups   N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       8
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            0
 [6,] OtherVeg             14
 [7,] TotalFruit           17
 [8,] WholegrainCereals    26
 [9,] RefinedCereals       14
[10,] AllOtherMeatEggsLeg  3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6710.4  6482.5  6992.8      NA         NA
             Energy (kJ)       7013.2  6759.5  7303.8      NA         NA
             Protein (g)         80.0    74.9   136.9     100        100
                 Fat (g)         43.1    37.9    48.6      NA         NA
        Carbohydrate (g)        225.6   216.9   238.4      NA         NA
              Sugars (g)         93.8    84.5   103.0      NA         NA
              Starch (g)        130.4   122.7   141.4      NA         NA
               Fibre (g)         41.9    34.6    50.4      NA        100
       Saturated fat (g)         13.8    12.0    15.4      NA         NA
 Monounsaturated fat (g)         13.4    10.8    16.4      NA         NA
 Polyunsaturated fat (g)         12.3    11.2    13.9      NA         NA
       Linoleic acid (g)         11.1    10.1    12.8      NA        100
Alpha linolenic acid (g)          1.0     0.8     1.2      NA        100
  LC n3 fatty acids (mg)        114.7    32.7   379.5      NA         98
  Vitamin A equivs (mcg)       1435.6  1227.6  1647.0     100        100
            Retinol (mcg)        283.3   254.6   335.9      NA         NA
      Provitamin A (mcg)       6864.2  5479.9  8137.2      NA         NA
             Thiamin (mg)          1.6     1.4     1.8     100        100
          Riboflavin (mg)          2.0     1.7     2.3     100        100
              Niacin (mg)         37.9    34.6    40.7     100        100
      Folate (mcg total)         470.1   398.1   530.5      NA         NA
     Folate equivs (mcg)         687.7   598.3   761.2     100        100
          Vitamin C (mg)         152.8   119.8   195.7     100        100
          Vitamin D (mcg)          2.2     1.8     3.4      NA          0
           Vitamin E (mg)          8.6     7.3    10.4      NA        100
             Calcium (mg)        838.1   767.7   916.8     100        100
                Iron (mg)         12.4    11.3    13.6     100        100
             Iodine (mcg)        143.0   125.2   159.4     100        100
           Magnesium (mg)        361.9   336.3   385.8     100        100
          Phosphorus (mg)       1412.7  1349.7  1476.5     100        100
           Potassium (mg)       3545.2  3302.4  3805.9      NA        100
              Sodium (mg)       1215.1  1009.6  1416.5      NA        100
                Zinc (mg)         12.9     9.5    90.6     100        100
        Cholesterol (mg)        138.0    88.5   214.6      NA         NA
          Selenium (mcg)         53.8    44.5    62.5     100        100
          Vitamin B6 (mg)         1.7     1.3     2.1     100        100
        Vitamin B12 (mcg)         3.9     3.4     4.9     100        100

         Percent energy from fat 23.2
     Percent energy from protein 19.8
Percent energy from carbohydrate 57.0
```

A15.23 Summary *7-day Total Diets* Boys 4-8 years mid energy level

Average age 6years, light to moderate activityPAL 1.7

Boys4to8.avtot1:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           3.5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              4
 [5,] NutsSeeds            0
 [6,] OtherVeg             10.5
 [7,] TotalFruit           10.5
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           2
[14,] MidFatDairy          0
[15,] LoFatDairy           12
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6884.4  6675.9  7181.6      NA         NA
             Energy (kJ)       7148.4  6938.6  7455.0      NA         NA
             Protein (g)         89.2    85.9    93.1     100        100
                 Fat (g)         43.5    39.3    47.6      NA         NA
        Carbohydrate (g)        223.7   211.2   236.1      NA         NA
              Sugars (g)         74.5    67.9    81.4      NA         NA
              Starch (g)        148.3   134.3   161.1      NA         NA
               Fibre (g)         34.6    31.2    40.2      NA        100
       Saturated fat (g)         14.2    12.8    15.4      NA         NA
 Monounsaturated fat (g)         13.7    11.8    15.5      NA         NA
 Polyunsaturated fat (g)         11.8    10.7    13.0      NA         NA
       Linoleic acid (g)         10.6     9.7    11.8      NA        100
Alpha linolenic acid (g)          0.9     0.8     1.1      NA         99
  LC n3 fatty acids (mg)        145.0    64.3   372.9      NA        100
  Vitamin A equivs (mcg)       1370.3  1160.1  1519.1     100        100
            Retinol (mcg)        299.1   262.9   361.4      NA         NA
      Provitamin A (mcg)       6385.2  5126.9  7402.1      NA         NA
            Thiamin (mg)          1.7     1.5     1.9     100        100
         Riboflavin (mg)          2.2     2.0     2.5     100        100
             Niacin (mg)         44.2    41.1    48.7     100        100
      Folate (mcg total)        452.5   390.6   504.1      NA         NA
     Folate equivs (mcg)        747.2   673.7   826.2     100        100
          Vitamin C (mg)        108.4    87.8   130.1     100        100
         Vitamin D (mcg)          2.6     2.1     3.6      NA          0
          Vitamin E (mg)          8.0     6.2     9.2      NA        100
            Calcium (mg)        928.5   859.0  1009.9     100        100
               Iron (mg)         12.6    11.5    13.9     100        100
            Iodine (mcg)        176.4   157.0   200.3     100        100
          Magnesium (mg)        349.0   327.2   383.1     100        100
         Phosphorus (mg)       1521.6  1448.1  1602.2     100        100
          Potassium (mg)       3111.7  2957.6  3291.0      NA        100
             Sodium (mg)       1406.2  1172.8  1546.9      NA        100
               Zinc (mg)         12.0    10.7    17.1     100        100
        Cholesterol (mg)        188.4   113.4   317.9      NA         NA
          Selenium (mcg)         66.2    56.3    75.0     100        100
         Vitamin B6 (mg)          1.7     1.2     2.4     100        100
       Vitamin B12 (mcg)          5.1     4.4     6.2     100        100

         Percent energy from fat 23.1
     Percent energy from protein 21.8
Percent energy from carbohydrate 55.2
```

Boys4to8.avtot2:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            0
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           2
[14,] MidFatDairy          0
[15,] LoFatDairy           12
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6689.7  6404.7  7051.4      NA         NA
             Energy (kJ)       6994.5  6713.3  7381.3      NA         NA
             Protein (g)         86.4    82.5    90.6     100        100
                 Fat (g)         42.6    38.9    50.3      NA         NA
        Carbohydrate (g)        217.3   206.9   232.3      NA         NA
              Sugars (g)        100.1    93.1   108.2      NA         NA
              Starch (g)        115.6   106.7   126.5      NA         NA
               Fibre (g)         40.5    33.9    48.2      NA        100
       Saturated fat (g)         14.0    12.4    15.7      NA         NA
 Monounsaturated fat (g)         13.7    11.1    18.0      NA         NA
 Polyunsaturated fat (g)         11.2    10.2    12.5      NA         NA
       Linoleic acid (g)         10.1     9.2    11.1      NA        100
Alpha linolenic acid (g)          0.8     0.7     1.0      NA         75
  LC n3 fatty acids (mg)        154.0    53.9   402.7      NA         99
  Vitamin A equivs (mcg)       1532.5  1290.4  1752.0     100        100
           Retinol (mcg)        297.8   255.0   349.9      NA         NA
      Provitamin A (mcg)       7368.1  5776.5  8713.4      NA         NA
            Thiamin (mg)          1.6     1.4     1.8     100        100
         Riboflavin (mg)          2.3     2.0     2.6     100        100
             Niacin (mg)         42.7    39.7    45.3     100        100
      Folate (mcg total)        521.0   467.2   574.8      NA         NA
     Folate equivs (mcg)        726.9   642.5   803.5     100        100
          Vitamin C (mg)        207.0   165.2   261.8     100        100
         Vitamin D (mcg)          2.6     2.0     3.9      NA          0
          Vitamin E (mg)          9.1     7.3    10.9      NA        100
            Calcium (mg)        919.0   837.3   988.5     100        100
               Iron (mg)         12.3    11.4    14.0     100        100
            Iodine (mcg)        156.3   135.8   182.8     100        100
          Magnesium (mg)        363.3   339.6   405.3     100        100
         Phosphorus (mg)       1503.7  1433.0  1597.9     100        100
          Potassium (mg)       3964.4  3733.4  4262.3      NA        100
             Sodium (mg)       1201.8  1047.0  1378.6      NA        100
               Zinc (mg)         12.0    11.0    22.3     100        100
        Cholesterol (mg)        188.8   123.5   278.9      NA         NA
          Selenium (mcg)         61.2    51.4    71.1     100        100
         Vitamin B6 (mg)          2.4     1.8     3.0     100        100
       Vitamin B12 (mcg)          4.9     4.2     6.9     100        100

         Percent energy from fat 23.1
     Percent energy from protein 21.5
Percent energy from carbohydrate 55.4
```

Boys4to8.avtot3:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            0
 [6,] OtherVeg             21
 [7,] TotalFruit           7
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           2
[14,] MidFatDairy          0
[15,] LoFatDairy           12
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6787.8  6565.5  7063.3      NA         NA
             Energy (kJ)       7031.0  6801.2  7325.4      NA         NA
             Protein (g)         87.7    83.5   144.2     100        100
                 Fat (g)         46.2    41.1    51.5      NA         NA
        Carbohydrate (g)        214.1   202.5   227.8      NA         NA
              Sugars (g)         72.7    66.4    80.6      NA         NA
              Starch (g)        140.6   131.0   151.2      NA         NA
               Fibre (g)         32.9    28.3    41.0      NA        100
       Saturated fat (g)         15.8    13.8    17.8      NA         NA
 Monounsaturated fat (g)         15.0    12.5    17.7      NA         NA
 Polyunsaturated fat (g)         11.6    10.5    13.1      NA         NA
       Linoleic acid (g)         10.4     9.5    11.5      NA        100
Alpha linolenic acid (g)          0.9     0.7     1.2      NA         80
  LC n3 fatty acids (mg)        155.9    63.1   327.8      NA        100
  Vitamin A equivs (mcg)       1446.6  1187.5  1627.1     100        100
           Retinol (mcg)        309.1   271.1   369.0      NA         NA
      Provitamin A (mcg)       6775.3  5421.7  7784.7      NA         NA
            Thiamin (mg)          1.5     1.3     1.7     100        100
         Riboflavin (mg)          2.1     1.9     2.4     100        100
             Niacin (mg)         43.3    40.5    46.7     100        100
      Folate (mcg total)        411.5   362.5   461.2      NA         NA
     Folate equivs (mcg)        655.9   575.1   731.0     100        100
          Vitamin C (mg)        128.5   105.4   155.6     100        100
         Vitamin D (mcg)          2.6     2.1     3.4      NA          0
          Vitamin E (mg)          8.4     6.7     9.6      NA        100
            Calcium (mg)        892.7   824.0   955.4     100        100
               Iron (mg)         11.6    10.1    13.1     100        100
            Iodine (mcg)        165.0   140.2   186.3     100        100
          Magnesium (mg)        326.7   302.5   347.8     100        100
         Phosphorus (mg)       1490.6  1425.4  1588.3     100        100
          Potassium (mg)       3327.9  3157.5  3483.9      NA        100
             Sodium (mg)       1383.6  1220.7  1634.3      NA        100
               Zinc (mg)         12.4    10.4    91.1     100        100
        Cholesterol (mg)        191.6   131.9   289.9      NA         NA
          Selenium (mcg)         65.4    57.3    77.2     100        100
         Vitamin B6 (mg)          2.2     1.5     3.1     100        100
       Vitamin B12 (mcg)          5.2     4.2     6.6     100        100

         Percent energy from fat 24.9
     Percent energy from protein 21.7
Percent energy from carbohydrate 53.4
```

Boys4to8.avtot4:

```
      AllFoodGroups   N.serves
 [1,] StarchyVeg           8
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            0
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    20
 [9,] RefinedCereals       10
[10,] AllOtherMeatEggsLeg  5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           0
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6736.8  6459.8  7042.0      NA         NA
             Energy (kJ)       7039.0  6749.2  7351.5      NA         NA
             Protein (g)         87.4    84.8    90.7     100        100
                 Fat (g)         43.6    39.8    51.0      NA         NA
        Carbohydrate (g)        217.4   205.8   228.3      NA         NA
              Sugars (g)        108.5   101.7   116.1      NA         NA
              Starch (g)        107.2    96.8   115.4      NA         NA
               Fibre (g)         40.3    36.1    48.6      NA        100
       Saturated fat (g)         14.0    12.9    16.1      NA         NA
 Monounsaturated fat (g)         14.0    11.7    17.5      NA         NA
 Polyunsaturated fat (g)         11.9    10.8    13.1      NA         NA
       Linoleic acid (g)         10.7     9.6    11.8      NA        100
Alpha linolenic acid (g)          0.9     0.8     1.1      NA         99
  LC n3 fatty acids (mg)        149.5    68.7   317.8      NA        100
  Vitamin A equivs (mcg)       1480.4  1203.5  1654.8     100        100
           Retinol (mcg)        294.8   240.6   343.7      NA         NA
      Provitamin A (mcg)       7084.7  5278.3  8038.3      NA         NA
            Thiamin (mg)          1.5     1.3     1.7     100        100
         Riboflavin (mg)          2.3     2.1     2.5     100        100
             Niacin (mg)         43.1    39.9    46.7     100        100
      Folate (mcg total)        533.7   470.1   597.9      NA         NA
     Folate equivs (mcg)        715.4   655.5   806.3     100        100
          Vitamin C (mg)        175.1   147.4   223.9     100        100
         Vitamin D (mcg)          2.3     1.9     3.2      NA          0
          Vitamin E (mg)          9.3     7.8    10.6      NA        100
            Calcium (mg)        918.9   872.0   999.8     100        100
               Iron (mg)         12.3    11.2    13.9     100        100
            Iodine (mcg)        163.4   140.7   181.4     100        100
          Magnesium (mg)        376.6   354.7   399.8     100        100
         Phosphorus (mg)       1530.4  1475.5  1589.1     100        100
          Potassium (mg)       4101.3  3930.6  4374.1      NA        100
             Sodium (mg)       1137.2  1000.9  1300.0      NA        100
               Zinc (mg)         11.8    10.9    17.4     100        100
        Cholesterol (mg)        187.2   115.5   278.3      NA         NA
          Selenium (mcg)         61.5    53.5    75.6     100        100
         Vitamin B6 (mg)          2.4     1.7     3.2     100        100
       Vitamin B12 (mcg)          5.1     4.4     6.3     100        100

         Percent energy from fat 23.4
     Percent energy from protein 21.6
Percent energy from carbohydrate 55.0
```

Boys4to8.avtot5:

```
      AllFoodGroups    N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              9
 [5,] NutsSeeds            0
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       10
[10,] AllOtherMeatEggsLeg  5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           0
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6633.3  6371.8  6960.8      NA         NA
             Energy (kJ)       6933.3  6661.3  7270.5      NA         NA
             Protein (g)         89.7    83.4   147.8     100        100
                 Fat (g)         42.7    38.4    49.8      NA         NA
        Carbohydrate (g)        213.2   203.2   231.6      NA         NA
              Sugars (g)        106.5    98.0   113.7      NA         NA
              Starch (g)        105.1    97.5   116.6      NA         NA
               Fibre (g)         39.4    34.9    48.2      NA        100
       Saturated fat (g)         13.7    12.2    16.1      NA         NA
 Monounsaturated fat (g)         13.3    11.2    17.2      NA         NA
 Polyunsaturated fat (g)         11.9    10.9    13.4      NA         NA
       Linoleic acid (g)         10.7     9.8    12.1      NA        100
Alpha linolenic acid (g)          1.0     0.8     1.2      NA        100
  LC n3 fatty acids (mg)        150.5    57.1   360.1      NA        100
  Vitamin A equivs (mcg)       1414.8  1213.9  1688.5     100        100
           Retinol (mcg)        294.2   255.3   351.1      NA         NA
      Provitamin A (mcg)       6697.3  5532.5  8347.8      NA         NA
             Thiamin (mg)          1.5     1.3     1.6     100        100
          Riboflavin (mg)          2.2     2.0     2.4     100        100
              Niacin (mg)         42.0    39.1    45.4     100        100
      Folate (mcg total)        527.3   447.5   608.6      NA         NA
     Folate equivs (mcg)        702.0   626.1   814.2     100        100
          Vitamin C (mg)        158.0   125.3   206.9     100        100
          Vitamin D (mcg)         2.3     1.8     3.1      NA          0
           Vitamin E (mg)         8.8     7.4    10.2      NA        100
             Calcium (mg)       911.2   823.4   979.7     100        100
                Iron (mg)        12.2    11.1    13.2     100        100
             Iodine (mcg)       161.6   140.4   180.7     100        100
           Magnesium (mg)       369.6   350.2   403.0     100        100
          Phosphorus (mg)      1508.9  1455.6  1573.0     100        100
           Potassium (mg)      3910.2  3739.5  4112.9      NA        100
              Sodium (mg)      1130.6   968.1  1320.8      NA        100
                Zinc (mg)         15.0    10.6    91.8     100        100
        Cholesterol (mg)        185.8   123.8   287.6      NA         NA
          Selenium (mcg)         61.3    49.3    72.2     100        100
          Vitamin B6 (mg)         2.1     1.5     2.6     100        100
        Vitamin B12 (mcg)         5.1     4.5     6.5     100        100

         Percent energy from fat 23.2
     Percent energy from protein 22.4
Percent energy from carbohydrate 54.4
```

Boys4to8.avtot6:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            0
 [6,] OtherVeg             10.5
 [7,] TotalFruit           25
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       9
[10,] Poultryfisheggsleg   5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           2
[14,] MidFatDairy          0
[15,] LoFatDairy           12
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6645.1  6410.1  6850.3      NA         NA
             Energy (kJ)       6940.9  6698.5  7166.8      NA         NA
             Protein (g)         85.6    80.5   144.2     100        100
                 Fat (g)         44.5    40.3    49.5      NA         NA
        Carbohydrate (g)        212.6   202.5   226.4      NA         NA
              Sugars (g)        110.3   102.3   119.9      NA         NA
              Starch (g)        100.4    92.6   108.3      NA         NA
               Fibre (g)         39.4    34.2    48.8      NA        100
       Saturated fat (g)         15.4    13.6    16.7      NA         NA
 Monounsaturated fat (g)         13.8    12.0    16.3      NA         NA
 Polyunsaturated fat (g)         11.5    10.4    12.6      NA         NA
       Linoleic acid (g)         10.3     9.4    11.3      NA        100
Alpha linolenic acid (g)          1.0     0.8     1.1      NA        100
  LC n3 fatty acids (mg)        149.8    57.1   345.5      NA        100
  Vitamin A equivs (mcg)       1461.3  1232.3  1707.5     100        100
           Retinol (mcg)        310.2   267.8   380.8      NA         NA
      Provitamin A (mcg)       6868.2  5476.4  8348.4      NA         NA
            Thiamin (mg)          1.4     1.2     1.6     100        100
         Riboflavin (mg)          2.1     1.8     2.3     100        100
             Niacin (mg)         40.6    36.3    45.8     100        100
      Folate (mcg total)        517.7   452.9   580.8      NA         NA
     Folate equivs (mcg)        686.2   607.3   756.8     100        100
          Vitamin C (mg)        158.6   124.7   191.9     100        100
         Vitamin D (mcg)          2.6     2.1     3.3      NA          0
          Vitamin E (mg)          8.7     7.6    10.4      NA        100
            Calcium (mg)        894.2   828.2   951.6     100        100
               Iron (mg)         11.6    10.5    12.6     100        100
            Iodine (mcg)        147.7   127.5   171.0     100        100
          Magnesium (mg)        354.7   331.2   376.8     100        100
         Phosphorus (mg)       1456.8  1378.0  1518.5     100        100
          Potassium (mg)       3763.7  3587.7  3929.5      NA        100
             Sodium (mg)       1156.5   988.9  1284.9      NA        100
               Zinc (mg)         12.2    10.5    92.0     100        100
        Cholesterol (mg)        190.8   134.7   344.7      NA         NA
          Selenium (mcg)         58.8    50.1    66.8     100        100
         Vitamin B6 (mg)          1.9     1.4     2.5     100        100
       Vitamin B12 (mcg)          4.8     4.1     5.6     100        100

         Percent energy from fat 24.2
     Percent energy from protein 21.4
Percent energy from carbohydrate 54.4
```

A15.24 Summary *7-day Total Diets* Boys 4-8 years higher energy level Higher age 8yrs, heavy activity PAL 2

Boys4to8.hitot1:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            0
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       17
[10,] Poultryfisheggsleg   11
[11,] RedMeats             10
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           2
[14,] MidFatDairy          0
[15,] LoFatDairy           12
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8792.4  8481.3  9085.6      NA         NA
             Energy (kJ)       9202.3  8875.6  9507.9      NA         NA
             Protein (g)        132.0   127.1   136.0     100        100
                 Fat (g)         52.2    46.9    58.7      NA         NA
        Carbohydrate (g)        275.1   265.3   289.4      NA         NA
              Sugars (g)        111.0   103.6   117.3      NA         NA
              Starch (g)        162.4   152.5   174.1      NA         NA
               Fibre (g)         53.7    48.5    61.5      NA        100
       Saturated fat (g)         17.1    15.2    18.9      NA         NA
 Monounsaturated fat (g)         17.5    14.9    20.5      NA         NA
 Polyunsaturated fat (g)         12.6    11.5    13.9      NA         NA
       Linoleic acid (g)         10.9     9.8    12.2      NA        100
Alpha linolenic acid (g)          1.1     0.9     1.2      NA        100
  LC n3 fatty acids (mg)        286.8   147.6   561.3      NA        100
  Vitamin A equivs (mcg)       2376.0  1995.4  2657.5     100        100
            Retinol (mcg)        291.6   231.6   346.7      NA         NA
      Provitamin A (mcg)      12464.5 10317.1 14070.7      NA         NA
             Thiamin (mg)          2.3     2.1     2.5     100        100
          Riboflavin (mg)          2.9     2.6     3.1     100        100
              Niacin (mg)         64.9    61.6    70.3     100        100
      Folate (mcg total)         664.6   594.1   743.4      NA         NA
     Folate equivs (mcg)         977.6   894.4  1069.7     100        100
          Vitamin C (mg)         212.1   176.6   257.7     100        100
          Vitamin D (mcg)          2.9     2.3     4.3      NA          0
           Vitamin E (mg)         10.8     9.0    13.2      NA        100
             Calcium (mg)       1098.5  1032.2  1194.2     100        100
                Iron (mg)         18.4    17.1    19.8     100        100
             Iodine (mcg)        197.2   172.1   224.2     100        100
           Magnesium (mg)        505.1   474.5   545.7     100        100
          Phosphorus (mg)       2093.0  2016.3  2163.5     100        100
           Potassium (mg)       5000.7  4804.1  5195.3      NA        100
              Sodium (mg)       1648.6  1466.2  1821.5      NA        100
                Zinc (mg)         17.9    16.5    23.7     100        100
         Cholesterol (mg)        329.9   214.4   450.9      NA         NA
           Selenium (mcg)        100.8    83.4   115.1     100        100
          Vitamin B6 (mg)          3.0     2.3     4.0     100        100
        Vitamin B12 (mcg)          6.5     5.5     7.8     100        100

          Percent energy from fat 21.5
     Percent energy from protein 25.0
Percent energy from carbohydrate 53.5
```

Boys4to8.hitot2:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            0
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       35
[10,] Poultryfisheggsleg   5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           2
[14,] MidFatDairy          0
[15,] LoFatDairy           12
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8880.2  8552.8  9249.2      NA         NA
             Energy (kJ)       9233.9  8902.6  9631.0      NA         NA
             Protein (g)        107.0   101.4   110.7     100        100
                 Fat (g)         48.6    43.3    54.3      NA         NA
        Carbohydrate (g)        312.9   299.2   332.1      NA         NA
              Sugars (g)         89.3    81.6    96.1      NA         NA
              Starch (g)        222.4   211.3   237.9      NA         NA
               Fibre (g)         46.6    41.9    52.3      NA        100
       Saturated fat (g)         15.1    13.1    16.7      NA         NA
 Monounsaturated fat (g)         15.4    13.2    18.6      NA         NA
 Polyunsaturated fat (g)         13.6    12.6    15.1      NA         NA
       Linoleic acid (g)         12.1    11.2    13.4      NA        100
Alpha linolenic acid (g)          1.2     1.0     1.4      NA        100
  LC n3 fatty acids (mg)        149.6    60.7   321.8      NA        100
  Vitamin A equivs (mcg)       1427.0  1199.0  1606.7     100        100
           Retinol (mcg)        303.2   262.4   347.0      NA         NA
      Provitamin A (mcg)       6704.5  5385.2  7750.7      NA         NA
            Thiamin (mg)          2.3     2.1     2.5     100        100
         Riboflavin (mg)          2.6     2.2     2.9     100        100
             Niacin (mg)         54.0    50.0    56.9     100        100
      Folate (mcg total)        565.9   499.4   632.0      NA         NA
     Folate equivs (mcg)        976.6   876.1  1109.0     100        100
          Vitamin C (mg)        132.7   102.8   169.7     100        100
         Vitamin D (mcg)          2.6     2.1     3.2      NA          0
          Vitamin E (mg)          9.2     7.7    10.5      NA        100
            Calcium (mg)       1041.1   950.0  1126.5     100        100
               Iron (mg)         16.4    15.0    17.7     100        100
            Iodine (mcg)        208.8   181.5   227.9     100        100
          Magnesium (mg)        442.8   417.5   467.2     100        100
         Phosphorus (mg)       1822.3  1740.2  1909.1     100        100
          Potassium (mg)       3855.0  3707.1  4051.3      NA        100
             Sodium (mg)       1790.4  1536.7  2044.7      NA        100
               Zinc (mg)         14.0    12.7    19.2     100        100
        Cholesterol (mg)        190.2   119.2   281.8      NA         NA
          Selenium (mcg)         81.0    72.7    94.6     100        100
         Vitamin B6 (mg)          2.2     1.7     2.8     100        100
       Vitamin B12 (mcg)          5.5     4.7     6.4     100        100

         Percent energy from fat 20.0
     Percent energy from protein 20.3
Percent energy from carbohydrate 59.7
```

Boys4to8.hitot3:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            14
 [4,] Legumes              7
 [5,] NutsSeeds            0
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   11
[11,] RedMeats             10
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           2
[14,] MidFatDairy          0
[15,] LoFatDairy           12
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8830.8  8514.8  9200.2      NA         NA
             Energy (kJ)       9231.2  8910.9  9606.7      NA         NA
             Protein (g)        130.5   124.2   186.9     100        100
                 Fat (g)         57.8    53.2    63.6      NA         NA
        Carbohydrate (g)        267.1   253.1   279.0      NA         NA
              Sugars (g)        114.6   106.0   124.2      NA         NA
              Starch (g)        150.7   138.1   162.8      NA         NA
               Fibre (g)         54.0    46.5    68.1      NA        100
       Saturated fat (g)         19.4    17.9    21.5      NA         NA
 Monounsaturated fat (g)         19.0    16.5    22.4      NA         NA
 Polyunsaturated fat (g)         14.2    13.2    16.6      NA         NA
       Linoleic acid (g)         12.4    11.6    14.5      NA        100
Alpha linolenic acid (g)          1.1     1.0     1.5      NA        100
  LC n3 fatty acids (mg)        293.0   139.1   706.5      NA        100
  Vitamin A equivs (mcg)       2495.9  2070.7  2889.4     100        100
           Retinol (mcg)        355.1   294.1   433.2      NA         NA
      Provitamin A (mcg)      12808.7 10423.9 15056.9      NA         NA
            Thiamin (mg)          2.1     1.9     2.4     100        100
         Riboflavin (mg)          2.8     2.4     3.0     100        100
             Niacin (mg)         63.3    59.4    66.9     100        100
      Folate (mcg total)        645.4   568.7   704.0      NA         NA
     Folate equivs (mcg)        900.0   802.9   975.5     100        100
          Vitamin C (mg)        227.7   177.6   269.9     100        100
         Vitamin D (mcg)          3.2     2.6     5.0      NA          1
          Vitamin E (mg)         11.6    10.3    13.3      NA        100
            Calcium (mg)       1058.2   988.5  1152.3     100        100
               Iron (mg)         17.7    16.4    19.0     100        100
            Iodine (mcg)        185.8   163.0   212.6     100        100
          Magnesium (mg)        492.2   456.6   540.7     100        100
         Phosphorus (mg)       2065.6  1988.9  2161.9     100        100
          Potassium (mg)       5339.3  5095.5  5645.8      NA        100
             Sodium (mg)       1604.6  1422.2  1854.6      NA        100
               Zinc (mg)         18.6    16.5    97.3     100        100
        Cholesterol (mg)        351.2   227.3   480.5      NA         NA
          Selenium (mg)         99.5    85.4   115.3     100        100
         Vitamin B6 (mg)          2.9     2.2     3.8     100        100
       Vitamin B12 (mg)           6.6     5.8     9.0     100        100

         Percent energy from fat 23.7
     Percent energy from protein 24.6
Percent energy from carbohydrate 51.7
```

Boys4to8.hitot4:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            14
 [4,] Legumes              10
 [5,] NutsSeeds            0
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           2
[14,] MidFatDairy          0
[15,] LoFatDairy           12
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8789.7  8512.7  9055.3      NA         NA
             Energy (kJ)       9187.5  8887.6  9462.5      NA         NA
             Protein (g)        109.3   105.0   113.8     100        100
                 Fat (g)         50.7    43.2    54.8      NA         NA
        Carbohydrate (g)        300.5   287.6   311.8      NA         NA
              Sugars (g)         97.9    90.7   105.2      NA         NA
              Starch (g)        201.4   192.1   210.2      NA         NA
               Fibre (g)         55.1    47.2    66.1      NA        100
       Saturated fat (g)         16.5    14.2    17.7      NA         NA
 Monounsaturated fat (g)         15.8    12.5    18.2      NA         NA
 Polyunsaturated fat (g)         13.9    12.6    15.2      NA         NA
       Linoleic acid (g)         12.4    11.2    13.5      NA        100
Alpha linolenic acid (g)          1.2     1.0     1.4      NA        100
  LC n3 fatty acids (mg)        156.0    61.6   348.3      NA        100
  Vitamin A equivs (mcg)       2370.6  2042.2  2661.4     100        100
            Retinol (mcg)        311.8   273.5   367.7      NA         NA
      Provitamin A (mcg)      12313.8 10416.5 14028.9      NA         NA
            Thiamin (mg)          2.2     2.0     2.4     100        100
         Riboflavin (mg)          2.5     2.4     2.8     100        100
             Niacin (mg)         53.6    50.2    56.7     100        100
      Folate (mcg total)        608.4   535.7   691.5      NA         NA
     Folate equivs (mcg)        935.6   831.1  1039.0     100        100
          Vitamin C (mg)        191.3   159.7   236.6     100        100
         Vitamin D (mcg)          2.6     2.2     3.7      NA          0
          Vitamin E (mg)          9.8     8.4    11.3      NA        100
            Calcium (mg)       1065.0  1003.3  1147.9     100        100
               Iron (mg)         16.9    15.7    18.5     100        100
            Iodine (mcg)        189.6   171.0   216.2     100        100
          Magnesium (mg)        471.3   446.1   494.9     100        100
         Phosphorus (mg)       1888.4  1790.0  1963.9     100        100
          Potassium (mg)       4713.0  4454.4  4905.9      NA        100
             Sodium (mg)       1692.5  1462.7  1907.5      NA        100
               Zinc (mg)         14.4    13.6    19.8     100        100
        Cholesterol (mg)        192.4   125.1   283.3      NA         NA
          Selenium (mcg)         77.4    68.4    87.3     100        100
         Vitamin B6 (mg)          2.4     1.9     3.1     100        100
       Vitamin B12 (mcg)          5.3     4.8     6.6     100        100

         Percent energy from fat 21.0
     Percent energy from protein 20.8
Percent energy from carbohydrate 58.2
```

Boys4to8.hitot5:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            14
 [4,] Legumes              10
 [5,] NutsSeeds            0
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           2
[14,] MidFatDairy          0
[15,] LoFatDairy           12
[16,] PolyMarg             17
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8653.8  8360.8  8907.9      NA         NA
             Energy (kJ)       9043.6  8746.7  9299.5      NA         NA
             Protein (g)        108.5   103.0   167.6     100        100
                 Fat (g)         56.0    51.2    60.8      NA         NA
        Carbohydrate (g)        283.8   270.2   298.0      NA         NA
              Sugars (g)        103.2    93.7   113.3      NA         NA
              Starch (g)        179.3   166.4   190.9      NA         NA
               Fibre (g)         53.3    46.5    62.4      NA        100
       Saturated fat (g)         18.7    16.8    20.5      NA         NA
 Monounsaturated fat (g)         17.4    15.5    20.1      NA         NA
 Polyunsaturated fat (g)         15.2    14.2    16.4      NA         NA
       Linoleic acid (g)         13.7    12.8    14.8      NA        100
Alpha linolenic acid (g)          1.2     1.0     1.4      NA        100
  LC n3 fatty acids (mg)        143.8    67.9   348.7      NA        100
  Vitamin A equivs (mcg)       2423.8  2121.9  2766.6     100        100
           Retinol (mcg)        357.7   315.9   411.7      NA         NA
      Provitamin A (mcg)      12359.3 10638.9 14277.8      NA         NA
            Thiamin (mg)          2.1     1.9     2.3     100        100
         Riboflavin (mg)          2.5     2.3     2.8     100        100
             Niacin (mg)         52.3    49.8    55.5     100        100
      Folate (mcg total)        599.9   551.4   676.8      NA         NA
     Folate equivs (mcg)        894.6   815.7   968.7     100        100
          Vitamin C (mg)        193.3   153.6   228.0     100        100
         Vitamin D (mcg)          2.8     2.4     3.5      NA          0
          Vitamin E (mg)         10.3     8.9    11.6      NA        100
            Calcium (mg)       1060.0  1000.9  1133.0     100        100
               Iron (mg)         16.5    15.2    17.9     100        100
            Iodine (mcg)        184.2   163.6   213.7     100        100
          Magnesium (mg)        463.4   434.7   491.5     100        100
         Phosphorus (mg)       1860.9  1791.2  1951.1     100        100
          Potassium (mg)       4715.7  4494.1  4903.6      NA        100
             Sodium (mg)       1687.9  1492.8  1957.4      NA        100
               Zinc (mg)         16.9    13.3    94.7     100        100
        Cholesterol (mg)        198.9   141.2   312.6      NA         NA
          Selenium (mcg)         75.3    68.6    88.4     100        100
         Vitamin B6 (mg)          2.4     1.9     3.0     100        100
       Vitamin B12 (mcg)          5.3     4.6     6.8     100        100

         Percent energy from fat 23.4
     Percent energy from protein 20.8
Percent energy from carbohydrate 55.7
```

Boys4to8.hitot6:

```
             AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            14
 [4,] Legumes              14
 [5,] NutsSeeds            0
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    22.5
 [9,] RefinedCereals       19
[10,] AllOtherMeatEggsLeg  5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           0
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8876.6  8563.6  9154.7      NA         NA
             Energy (kJ)       9306.2  8979.0  9589.5      NA         NA
             Protein (g)        111.5   104.5   168.2     100        100
                 Fat (g)         58.5    53.4    65.5      NA         NA
        Carbohydrate (g)        290.8   277.4   305.5      NA         NA
              Sugars (g)        123.4   115.1   132.8      NA         NA
              Starch (g)        165.6   153.9   181.6      NA         NA
               Fibre (g)         57.9    50.8    67.1      NA        100
       Saturated fat (g)         18.1    16.8    20.2      NA         NA
 Monounsaturated fat (g)         18.2    15.9    21.3      NA         NA
 Polyunsaturated fat (g)         17.4    15.8    19.0      NA         NA
       Linoleic acid (g)         15.7    14.3    17.0      NA        100
Alpha linolenic acid (g)          1.4     1.2     1.6      NA        100
  LC n3 fatty acids (mg)        138.9    61.4   307.3      NA        100
  Vitamin A equivs (mcg)       2546.3  2281.9  2869.1     100        100
           Retinol (mcg)        385.8   346.5   449.8      NA         NA
      Provitamin A (mcg)      12937.6 11443.9 14845.2      NA         NA
            Thiamin (mg)          2.0     1.9     2.3     100        100
         Riboflavin (mg)          2.6     2.4     2.9     100        100
             Niacin (mg)         52.7    49.6    56.2     100        100
      Folate (mcg total)        681.3   621.9   764.6      NA         NA
     Folate equivs (mcg)        925.6   844.9  1025.0     100        100
          Vitamin C (mg)        229.8   185.5   267.5     100        100
         Vitamin D (mcg)          2.8     2.3     3.5      NA          0
          Vitamin E (mg)         12.3    10.7    13.6      NA        100
            Calcium (mg)       1059.0   984.2  1143.1     100        100
               Iron (mg)         16.9    15.6    18.6     100        100
            Iodine (mcg)        182.4   163.9   202.8     100        100
          Magnesium (mg)        493.2   458.1   531.7     100        100
         Phosphorus (mg)       1891.2  1798.0  1962.5     100        100
          Potassium (mg)       5308.5  5039.6  5542.6      NA        100
             Sodium (mg)       1528.5  1310.5  1774.9      NA        100
               Zinc (mg)         19.2    13.5    95.2     100        100
        Cholesterol (mg)        191.2   129.2   292.3      NA         NA
          Selenium (mcg)         73.5    61.9    83.4     100        100
         Vitamin B6 (mg)          2.8     2.1     3.9     100        100
       Vitamin B12 (mcg)          5.3     4.6     6.8     100        100

         Percent energy from fat 23.7
     Percent energy from protein 20.7
Percent energy from carbohydrate 55.6
```

A15.25 Summary *7-day Total Diets* Boys 9-11 years mid energy level

Average age 10yrs, light to moderate activityPAL 1.7

Boys9to11.avtot1:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
```

	Daily intake	minimum	maximum	met EAR	met RDI/AI
Energy excl fibre (kJ)	8473.0	8132.4	8852.4	NA	NA
Energy (kJ)	8768.9	8423.1	9159.6	NA	NA
Protein (g)	111.0	106.8	114.7	100	100
Fat (g)	64.9	59.8	70.2	NA	NA
Carbohydrate (g)	249.2	234.1	261.7	NA	NA
Sugars (g)	94.8	86.7	102.3	NA	NA
Starch (g)	153.3	139.1	164.5	NA	NA
Fibre (g)	38.9	33.9	47.9	NA	100
Saturated fat (g)	19.8	17.7	23.1	NA	NA
Monounsaturated fat (g)	23.5	21.0	26.8	NA	NA
Polyunsaturated fat (g)	16.6	15.5	17.9	NA	NA
Linoleic acid (g)	15.3	14.2	16.4	NA	100
Alpha linolenic acid (g)	1.0	0.8	1.2	NA	48
LC n3 fatty acids (mg)	185.3	76.6	405.6	NA	100
Vitamin A equivs (mcg)	1423.6	1181.0	1756.7	100	100
Retinol (mcg)	345.0	300.9	419.7	NA	NA
Provitamin A (mcg)	6434.6	5220.4	8260.8	NA	NA
Thiamin (mg)	2.0	1.7	2.2	100	100
Riboflavin (mg)	2.7	2.4	3.0	100	100
Niacin (mg)	56.8	53.5	60.9	100	100
Folate (mcg total)	560.8	508.3	615.7	NA	NA
Folate equivs (mcg)	808.1	729.7	882.4	100	100
Vitamin C (mg)	139.1	106.1	180.0	100	100
Vitamin D (mcg)	3.1	2.4	3.9	NA	0
Vitamin E (mg)	11.7	10.0	13.6	NA	100
Calcium (mg)	1092.7	1015.1	1180.9	100	100
Iron (mg)	14.0	12.7	15.4	100	100
Iodine (mcg)	194.3	172.1	215.4	100	100
Magnesium (mg)	435.4	408.1	459.2	100	100
Phosphorus (mg)	1890.0	1795.1	1972.9	100	100
Potassium (mg)	3945.7	3770.8	4156.0	NA	100
Sodium (mg)	1433.5	1205.6	1668.6	NA	100
Zinc (mg)	14.4	13.6	15.2	100	100
Cholesterol (mg)	231.5	162.5	381.9	NA	NA
Selenium (mcg)	78.5	69.6	100.9	100	100
Vitamin B6 (mg)	2.1	1.6	2.9	100	100
Vitamin B12 (mcg)	6.1	5.5	6.8	100	100

```
         Percent energy from fat 28
     Percent energy from protein 22
Percent energy from carbohydrate 50
```

Boys9to11.avtot2:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            5
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8392.3  8099.3  8707.1      NA         NA
             Energy (kJ)       8720.9  8410.0  9041.2      NA         NA
             Protein (g)        109.3   106.2   112.9     100        100
                 Fat (g)         61.0    57.0    66.8      NA         NA
        Carbohydrate (g)        254.7   242.3   268.1      NA         NA
              Sugars (g)        113.7    99.2   124.4      NA         NA
              Starch (g)        139.5   128.1   148.6      NA         NA
               Fibre (g)         45.7    39.4    54.2      NA        100
       Saturated fat (g)         19.3    17.8    22.4      NA         NA
 Monounsaturated fat (g)         21.6    19.3    25.1      NA         NA
 Polyunsaturated fat (g)         15.3    14.4    16.7      NA         NA
       Linoleic acid (g)         14.0    13.2    15.3      NA        100
Alpha linolenic acid (g)          1.0     0.8     1.1      NA         27
  LC n3 fatty acids (mg)        184.1    87.3   432.1      NA        100
  Vitamin A equivs (mcg)       1495.4  1215.2  1788.4     100        100
           Retinol (mcg)        346.2   307.0   415.1      NA         NA
      Provitamin A (mcg)       6864.9  5153.9  8519.6      NA         NA
            Thiamin (mg)          1.9     1.7     2.1     100        100
         Riboflavin (mg)          2.7     2.4     3.0     100        100
             Niacin (mg)         56.5    52.3    59.5     100        100
      Folate (mcg total)        602.7   548.3   673.9      NA         NA
     Folate equivs (mcg)        819.2   735.9   910.3     100        100
          Vitamin C (mg)        191.0   161.9   256.0     100        100
         Vitamin D (mcg)          3.2     2.6     4.1      NA          0
          Vitamin E (mg)         11.9    10.5    13.8      NA        100
            Calcium (mg)       1102.6  1016.1  1178.1     100        100
               Iron (mg)         14.3    12.9    16.2     100        100
            Iodine (mcg)        187.5   164.7   202.2     100        100
          Magnesium (mg)        451.3   423.5   476.3     100        100
         Phosphorus (mg)       1905.2  1835.0  1969.2     100        100
          Potassium (mg)       4708.2  4489.0  4906.0      NA        100
             Sodium (mg)       1345.4  1189.0  1513.0      NA        100
               Zinc (mg)         14.5    13.7    15.3     100        100
        Cholesterol (mg)        232.6   164.4   342.9      NA         NA
          Selenium (mcg)         75.2    60.9    92.7     100        100
         Vitamin B6 (mg)          2.3     1.9     3.0     100        100
       Vitamin B12 (mcg)          5.9     5.1     6.6     100        100

         Percent energy from fat 26.5
     Percent energy from protein 21.8
Percent energy from carbohydrate 51.7
```

Boys9to11.avtot3:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              5
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8456.2  8172.8  8822.9      NA         NA
             Energy (kJ)       8765.9  8467.5  9142.1      NA         NA
             Protein (g)        113.1   107.7   172.4     100        100
                 Fat (g)         68.9    63.0    76.1      NA         NA
        Carbohydrate (g)        238.3   226.7   251.6      NA         NA
              Sugars (g)        103.2    95.5   115.9      NA         NA
              Starch (g)        133.9   121.9   142.6      NA         NA
               Fibre (g)         41.1    37.2    52.4      NA        100
       Saturated fat (g)         21.7    19.7    24.5      NA         NA
 Monounsaturated fat (g)         24.9    22.2    28.0      NA         NA
 Polyunsaturated fat (g)         17.1    15.8    18.3      NA         NA
       Linoleic acid (g)         15.7    14.4    16.8      NA        100
Alpha linolenic acid (g)          1.0     0.8     1.1      NA         48
  LC n3 fatty acids (mg)        199.8    94.6   416.0      NA        100
  Vitamin A equivs (mcg)       1490.1  1229.9  1708.6     100        100
            Retinol (mcg)        362.4   306.0   427.9      NA         NA
      Provitamin A (mcg)       6729.0  5353.3  8121.5      NA         NA
            Thiamin (mg)          2.0     1.7     2.2     100        100
         Riboflavin (mg)          2.7     2.5     3.0     100        100
             Niacin (mg)         57.1    54.3    62.7     100        100
      Folate (mcg total)        591.9   542.0   669.7      NA         NA
     Folate equivs (mcg)        806.3   734.2   904.6     100        100
          Vitamin C (mg)        155.6   123.9   207.7     100        100
         Vitamin D (mcg)          3.3     2.8     4.3      NA          0
          Vitamin E (mg)         12.6    10.8    14.1      NA        100
            Calcium (mg)       1114.2  1027.2  1210.8     100        100
               Iron (mg)         14.5    13.4    16.4     100        100
            Iodine (mcg)        189.1   170.9   209.6     100        100
          Magnesium (mg)        451.3   429.6   473.1     100        100
         Phosphorus (mg)       1929.0  1855.7  2016.6     100        100
          Potassium (mg)       4218.2  4018.4  4516.1      NA        100
             Sodium (mg)       1415.3  1208.4  1670.7      NA        100
               Zinc (mg)         15.6    14.0    94.8     100        100
        Cholesterol (mg)        246.3   172.5   346.0      NA         NA
          Selenium (mcg)         78.8    68.5   100.1     100        100
         Vitamin B6 (mg)          2.3     1.8     3.2     100        100
       Vitamin B12 (mcg)          6.0     5.3     6.8     100        100

         Percent energy from fat 29.7
     Percent energy from protein 22.4
Percent energy from carbohydrate 48.0
```

Boys9to11.avtot4:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              4
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    23
 [9,] RefinedCereals       12
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8528.1  8321.9  8828.7      NA         NA
             Energy (kJ)       8858.3  8637.0  9167.7      NA         NA
             Protein (g)        114.1   107.6   171.4     100        100
                 Fat (g)         67.6    62.0    73.6      NA         NA
        Carbohydrate (g)        246.7   234.0   259.6      NA         NA
              Sugars (g)        118.0   108.8   127.1      NA         NA
              Starch (g)        127.2   115.9   137.9      NA         NA
               Fibre (g)         45.4    40.4    54.5      NA        100
       Saturated fat (g)         21.2    19.3    23.0      NA         NA
 Monounsaturated fat (g)         24.5    21.7    28.2      NA         NA
 Polyunsaturated fat (g)         16.8    15.3    18.4      NA         NA
       Linoleic acid (g)         15.4    14.2    17.0      NA        100
Alpha linolenic acid (g)          1.0     0.8     1.1      NA         42
  LC n3 fatty acids (mg)        205.9    77.7   518.3      NA        100
  Vitamin A equivs (mcg)       1527.0  1221.9  1780.7     100        100
            Retinol (mcg)        355.8   309.3   427.9      NA         NA
      Provitamin A (mcg)       6991.8  5246.8  8433.1      NA         NA
            Thiamin (mg)          1.9     1.6     2.1     100        100
         Riboflavin (mg)          2.7     2.4     2.9     100        100
             Niacin (mg)         56.5    52.4    59.8     100        100
      Folate (mcg total)        607.9   554.9   665.3      NA         NA
     Folate equivs (mcg)        786.5   703.4   864.7     100        100
          Vitamin C (mg)        193.9   161.5   245.9     100        100
         Vitamin D (mcg)          3.3     2.7     4.4      NA          0
          Vitamin E (mg)         12.6    10.8    14.9      NA        100
            Calcium (mg)       1090.4  1014.1  1171.7     100        100
               Iron (mg)         14.1    13.1    15.8     100        100
            Iodine (mcg)        178.6   155.0   204.8     100        100
          Magnesium (mg)        457.3   427.3   499.1     100        100
         Phosphorus (mg)       1910.8  1843.7  1982.4     100        100
          Potassium (mg)       4780.2  4527.1  5099.3      NA        100
             Sodium (mg)       1329.6  1137.0  1538.5      NA        100
               Zinc (mg)         18.6    13.7    94.9     100        100
        Cholesterol (mg)        236.4   171.1   345.1      NA         NA
          Selenium (mcg)         76.5    67.7    95.0     100        100
         Vitamin B6 (mg)          2.4     1.8     3.2     100        100
       Vitamin B12 (mcg)          5.9     5.2     6.4     100        100

         Percent energy from fat 28.7
     Percent energy from protein 22.2
Percent energy from carbohydrate 49.1
```

Boys9to11.avtot5:

```
      AllFoodGroups    N.serves
 [1,] StarchyVeg           10
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            4
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    26.5
 [9,] RefinedCereals       16
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           0
[14,] MidFatDairy          0
[15,] LoFatDairy           17
[16,] PolyMarg             7
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8442.1  8179.4  8750.1      NA         NA
             Energy (kJ)       8764.7  8477.8  9086.8      NA         NA
             Protein (g)        112.6   105.6   170.6     100        100
                 Fat (g)         53.8    46.7    60.9      NA         NA
        Carbohydrate (g)        273.1   258.4   289.6      NA         NA
              Sugars (g)        127.9   119.4   139.0      NA         NA
              Starch (g)        143.5   133.9   155.9      NA         NA
               Fibre (g)         43.1    37.5    56.0      NA        100
       Saturated fat (g)         17.6    15.9    19.7      NA         NA
 Monounsaturated fat (g)         19.6    16.0    23.6      NA         NA
 Polyunsaturated fat (g)         12.0    10.6    12.9      NA         NA
       Linoleic acid (g)         10.8     9.6    11.7      NA         98
Alpha linolenic acid (g)          0.8     0.7     1.1      NA          2
  LC n3 fatty acids (mg)        208.0    81.8   385.2      NA        100
  Vitamin A equivs (mcg)       1429.7  1007.4  1667.9     100        100
            Retinol (mcg)        269.1   227.9   315.2      NA         NA
      Provitamin A (mcg)       6943.0  4681.7  8467.1      NA         NA
            Thiamin (mg)          1.9     1.7     2.1     100        100
         Riboflavin (mg)          2.9     2.6     3.1     100        100
             Niacin (mg)         57.3    53.2    61.4     100        100
      Folate (mcg total)        606.3   532.9   686.5      NA         NA
     Folate equivs (mcg)        818.0   730.4   887.9     100        100
          Vitamin C (mg)        186.9   144.9   229.7     100        100
         Vitamin D (mcg)          2.5     2.0     3.5      NA          0
          Vitamin E (mg)         10.3     8.5    11.8      NA         97
            Calcium (mg)       1127.8  1049.6  1205.2     100        100
               Iron (mg)         14.3    13.1    15.8     100        100
            Iodine (mcg)        206.7   184.8   238.7     100        100
          Magnesium (mg)        448.7   413.2   474.1     100        100
         Phosphorus (mg)       1930.2  1861.8  1995.5     100        100
          Potassium (mg)       4657.8  4423.2  4845.3      NA        100
             Sodium (mg)       1409.4  1184.8  1631.4      NA        100
               Zinc (mg)         16.8    13.4    95.3     100        100
        Cholesterol (mg)        231.2   172.0   309.5      NA         NA
          Selenium (mcg)         76.9    66.9   101.6     100        100
         Vitamin B6 (mg)          2.3     1.9     3.4     100        100
       Vitamin B12 (mcg)          6.3     5.7     7.0     100        100

         Percent energy from fat 23.1
     Percent energy from protein 22.3
Percent energy from carbohydrate 54.6
```

Boys9to11.avtot6:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              4
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    25
 [9,] RefinedCereals       14
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           0
[14,] MidFatDairy          0
[15,] LoFatDairy           17
[16,] PolyMarg             7
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8150.4  7892.2  8505.0      NA         NA
             Energy (kJ)       8454.2  8171.6  8825.5      NA         NA
             Protein (g)        116.2   107.5   225.4     100        100
                 Fat (g)         59.3    52.3    64.8      NA         NA
        Carbohydrate (g)        242.7   232.2   251.6      NA         NA
              Sugars (g)        110.9   102.0   121.2      NA         NA
              Starch (g)        130.4   119.5   140.2      NA         NA
               Fibre (g)         40.0    35.3    48.5      NA        100
       Saturated fat (g)         18.3    15.7    20.8      NA         NA
 Monounsaturated fat (g)         22.6    19.3    25.3      NA         NA
 Polyunsaturated fat (g)         13.9    12.6    15.4      NA         NA
       Linoleic acid (g)         12.8    11.7    14.3      NA        100
Alpha linolenic acid (g)          0.8     0.7     1.1      NA          4
  LC n3 fatty acids (mg)        178.4    72.0   433.0      NA        100
  Vitamin A equivs (mcg)       1370.6  1139.0  1659.7     100        100
           Retinol (mcg)        263.3   224.2   335.3      NA         NA
      Provitamin A (mcg)       6624.3  5270.2  8413.7      NA         NA
            Thiamin (mg)          1.9     1.7     2.1     100        100
         Riboflavin (mg)          2.8     2.5     3.0     100        100
             Niacin (mg)         57.6    54.3    61.5     100        100
      Folate (mcg total)        588.8   536.2   658.7      NA         NA
     Folate equivs (mcg)        786.0   714.9   871.0     100        100
          Vitamin C (mg)        160.4   121.7   216.9     100        100
         Vitamin D (mcg)          2.4     1.8     3.6      NA          0
          Vitamin E (mg)         11.1     9.7    12.7      NA        100
            Calcium (mg)       1105.7  1041.7  1177.4     100        100
               Iron (mg)         14.1    12.5    15.6     100        100
            Iodine (mcg)        199.4   180.8   221.5     100        100
          Magnesium (mg)        447.8   422.2   474.5     100        100
         Phosphorus (mg)       1918.9  1836.5  1995.9     100        100
          Potassium (mg)       4317.9  4073.8  4502.3      NA        100
             Sodium (mg)       1342.8  1148.1  1629.8      NA        100
               Zinc (mg)         20.9    13.6   175.0     100        100
        Cholesterol (mg)        227.8   166.4   356.8      NA         NA
          Selenium (mcg)         76.9    67.2    97.1     100        100
         Vitamin B6 (mg)          2.2     1.7     3.0     100        100
       Vitamin B12 (mcg)          6.2     5.5     6.9     100        100

         Percent energy from fat 26.3
     Percent energy from protein 23.6
Percent energy from carbohydrate 50.1
```

A15.26 Summary *7-day Total Diets* Boys 9-11 years higher energy level

Higher age 10yrs, heavy activity PAL 2.0

Boys9to11.hitot1:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              5
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10507.6 10008.5 10873.3      NA         NA
             Energy (kJ)      10902.3 10389.4 11258.3      NA         NA
             Protein (g)        126.3   122.9   130.9     100        100
                 Fat (g)         76.6    70.4    83.9      NA         NA
        Carbohydrate (g)        328.6   313.5   345.9      NA         NA
              Sugars (g)        118.5   110.0   126.6      NA         NA
              Starch (g)        208.6   195.5   219.5      NA         NA
               Fibre (g)         53.4    47.8    63.7      NA        100
       Saturated fat (g)         22.3    20.3    24.9      NA         NA
 Monounsaturated fat (g)         27.2    24.3    31.0      NA         NA
 Polyunsaturated fat (g)         21.2    19.5    22.8      NA         NA
       Linoleic acid (g)         19.5    18.1    21.2      NA        100
Alpha linolenic acid (g)          1.3     1.1     1.5      NA        100
  LC n3 fatty acids (mg)        211.7    85.0   481.0      NA        100
  Vitamin A equivs (mcg)       1589.5  1307.1  1843.5     100        100
           Retinol (mcg)        423.8   376.9   509.3      NA         NA
      Provitamin A (mcg)       6956.9  5113.9  8675.6      NA         NA
            Thiamin (mg)          2.5     2.2     2.7     100        100
         Riboflavin (mg)          3.0     2.7     3.3     100        100
             Niacin (mg)         65.2    61.5    67.8     100        100
      Folate (mcg total)        691.5   624.9   754.5      NA         NA
     Folate equivs (mcg)       1009.6   914.3  1102.5     100        100
          Vitamin C (mg)        190.4   148.1   244.6     100        100
         Vitamin D (mcg)          3.8     3.2     5.1      NA          1
          Vitamin E (mg)         14.8    13.0    17.2      NA        100
            Calcium (mg)       1209.3  1135.0  1294.8     100        100
               Iron (mg)         17.6    16.3    19.0     100        100
            Iodine (mcg)        216.8   193.8   239.3     100        100
          Magnesium (mg)        534.3   509.2   559.6     100        100
         Phosphorus (mg)       2187.4  2112.1  2265.5     100        100
          Potassium (mg)       5045.6  4861.3  5323.3      NA        100
             Sodium (mg)       1743.5  1465.5  2031.1      NA        100
               Zinc (mg)         16.5    15.5    17.2     100        100
        Cholesterol (mg)        234.3   160.6   362.6      NA         NA
          Selenium (mcg)         90.4    80.3   112.7     100        100
         Vitamin B6 (mg)          2.6     2.0     3.3     100        100
       Vitamin B12 (mcg)          6.3     5.7     7.0     100        100

         Percent energy from fat 26.7
     Percent energy from protein 20.2
Percent energy from carbohydrate 53.1
```

Boys9to11.hitot2:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            10
 [6,] OtherVeg             28
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          4
[15,] LoFatDairy           17
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10517.1 10160.3 10887.0      NA         NA
             Energy (kJ)      10917.3 10551.6 11306.5      NA         NA
             Protein (g)        132.9   129.8   137.3     100        100
                 Fat (g)         88.2    81.5    97.6      NA         NA
        Carbohydrate (g)        297.8   285.4   313.7      NA         NA
              Sugars (g)        136.2   128.3   148.8      NA         NA
              Starch (g)        160.1   149.7   172.5      NA         NA
               Fibre (g)         54.4    48.4    69.0      NA        100
       Saturated fat (g)         27.1    25.0    29.8      NA         NA
 Monounsaturated fat (g)         31.6    27.5    36.7      NA         NA
 Polyunsaturated fat (g)         23.1    21.5    24.7      NA         NA
       Linoleic acid (g)         21.5    20.1    22.7      NA        100
Alpha linolenic acid (g)          1.3     1.1     1.4      NA        100
  LC n3 fatty acids (mg)        198.6    90.4   562.9      NA        100
  Vitamin A equivs (mcg)       1719.1  1498.1  2051.7     100        100
            Retinol (mcg)        511.4   466.9   578.3      NA         NA
      Provitamin A (mcg)        7207.1  6007.4  9279.3      NA         NA
             Thiamin (mg)          2.4     2.2     2.7     100        100
          Riboflavin (mg)          3.5     3.2     3.9     100        100
              Niacin (mg)         69.0    65.7    72.7     100        100
      Folate (mcg total)         779.3   712.9   853.2      NA         NA
     Folate equivs (mcg)        1025.9   949.0  1114.4     100        100
          Vitamin C (mg)         208.7   161.1   248.3     100        100
          Vitamin D (mcg)          4.6     4.0     6.3      NA         13
           Vitamin E (mg)         16.3    13.9    18.6      NA        100
             Calcium (mg)        1461.2  1359.6  1573.7     100        100
                Iron (mg)         17.4    15.9    18.9     100        100
             Iodine (mcg)        250.8   226.9   277.3     100        100
           Magnesium (mg)        582.8   551.2   609.4     100        100
          Phosphorus (mg)        2415.0  2326.2  2522.5     100        100
           Potassium (mg)        5663.4  5336.1  5952.9      NA        100
              Sodium (mg)        1612.5  1423.9  1801.0      NA        100
                Zinc (mg)         17.6    16.5    18.6     100        100
        Cholesterol (mg)         251.2   180.2   355.2      NA         NA
          Selenium (mcg)         90.0    77.5   125.6     100        100
          Vitamin B6 (mg)          3.0     2.3     3.6     100        100
        Vitamin B12 (mcg)          7.4     6.8     8.1     100        100

         Percent energy from fat 30.5
     Percent energy from protein 21.1
Percent energy from carbohydrate 48.3
```

Boys9to11.hitot3:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           14
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10630.2 10245.2 10964.8      NA         NA
             Energy (kJ)      11003.1 10622.8 11334.8      NA         NA
             Protein (g)        131.7   122.7   188.4     100        100
                 Fat (g)         83.4    75.9    88.6      NA         NA
        Carbohydrate (g)        319.7   304.4   333.0      NA         NA
              Sugars (g)        113.9   102.5   126.3      NA         NA
              Starch (g)        204.5   189.9   218.5      NA         NA
               Fibre (g)         48.7    44.0    56.1      NA        100
       Saturated fat (g)         25.7    23.7    29.2      NA         NA
 Monounsaturated fat (g)         29.6    26.4    33.1      NA         NA
 Polyunsaturated fat (g)         22.0    20.0    23.5      NA         NA
       Linoleic acid (g)         20.2    18.5    21.6      NA        100
Alpha linolenic acid (g)          1.4     1.1     1.6      NA        100
  LC n3 fatty acids (mg)        198.5    84.7   527.4      NA        100
  Vitamin A equivs (mcg)       1581.5  1387.9  1856.3     100        100
           Retinol (mcg)        453.2   403.7   522.7      NA         NA
      Provitamin A (mcg)       6736.1  5583.5  8260.6      NA         NA
             Thiamin (mg)          2.4     2.2     2.9     100        100
         Riboflavin (mg)           3.1     2.7     3.3     100        100
              Niacin (mg)         64.9    60.4    68.9     100        100
      Folate (mcg total)        664.5   587.2   733.4      NA         NA
     Folate equivs (mcg)        975.2   875.8  1086.1     100        100
          Vitamin C (mg)        158.2   122.3   194.8     100        100
         Vitamin D (mcg)          3.8     3.2     5.1      NA          2
          Vitamin E (mg)         14.7    13.1    17.0      NA        100
            Calcium (mg)       1230.9  1156.9  1324.2     100        100
               Iron (mg)         17.7    16.4    19.2     100        100
            Iodine (mcg)        219.9   202.9   239.7     100        100
          Magnesium (mg)        524.9   490.9   556.9     100        100
         Phosphorus (mg)       2205.0  2128.8  2296.5     100        100
          Potassium (mg)       4564.3  4253.5  4859.0      NA        100
             Sodium (mg)       1891.3  1677.4  2116.6      NA        100
               Zinc (mg)         21.5    15.6    97.1     100        100
        Cholesterol (mg)        245.9   179.2   352.5      NA         NA
          Selenium (mg)         92.5    82.4   112.0     100        100
         Vitamin B6 (mg)         2.5     2.0     3.1     100        100
       Vitamin B12 (mg)          6.4     5.6     7.1     100        100

         Percent energy from fat 28.5
     Percent energy from protein 20.7
Percent energy from carbohydrate 50.7
```

Boys9to11.hitot4:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            10
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       12
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          5
[15,] LoFatDairy           21
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10705.0 10415.4 11219.3      NA         NA
             Energy (kJ)      11058.5 10749.9 11578.8      NA         NA
             Protein (g)        141.4   131.6   197.5     100        100
                 Fat (g)         95.8    90.3   101.9      NA         NA
        Carbohydrate (g)        288.9   276.8   307.4      NA         NA
              Sugars (g)        139.4   127.8   149.7      NA         NA
              Starch (g)        148.1   138.8   165.0      NA         NA
               Fibre (g)         46.0    40.9    53.5      NA        100
       Saturated fat (g)         31.9    29.9    34.4      NA         NA
 Monounsaturated fat (g)         33.8    31.5    36.9      NA         NA
 Polyunsaturated fat (g)         23.4    22.0    25.2      NA         NA
       Linoleic acid (g)         21.7    20.5    23.6      NA        100
Alpha linolenic acid (g)          1.3     1.2     1.6      NA        100
  LC n3 fatty acids (mg)        195.8    84.1   501.6      NA        100
  Vitamin A equivs (mcg)       1719.7  1419.4  1948.3     100        100
            Retinol (mcg)        580.9   533.6   623.6      NA         NA
      Provitamin A (mcg)        6781.8  5235.9  8309.6      NA         NA
            Thiamin (mg)          2.3     2.0     2.6     100        100
         Riboflavin (mg)          3.9     3.6     4.1     100        100
             Niacin (mg)         69.7    66.7    74.2     100        100
      Folate (mcg total)        742.1   660.0   805.5      NA         NA
     Folate equivs (mcg)        981.9   904.5  1053.6     100        100
          Vitamin C (mg)        159.6   118.3   207.3     100        100
         Vitamin D (mcg)          5.1     4.6     6.2      NA         50
          Vitamin E (mg)         15.7    13.1    18.0      NA        100
            Calcium (mg)       1643.4  1568.6  1726.0     100        100
               Iron (mg)         16.6    14.9    18.1     100        100
            Iodine (mcg)        287.6   262.4   313.3     100        100
          Magnesium (mg)        566.4   534.1   596.3     100        100
         Phosphorus (mg)       2519.7  2438.7  2594.9     100        100
          Potassium (mg)       5175.9  4946.5  5406.3      NA        100
             Sodium (mg)       1799.0  1637.4  2068.9      NA        100
               Zinc (mg)         23.4    16.9    98.4     100        100
        Cholesterol (mg)        282.9   215.7   362.4      NA         NA
          Selenium (mcg)         90.5    80.8   118.7     100        100
         Vitamin B6 (mg)          2.7     2.2     3.4     100        100
       Vitamin B12 (mcg)          8.6     8.0     9.2     100        100

         Percent energy from fat 32.4
     Percent energy from protein 22.0
Percent energy from carbohydrate 45.6
```

Boys9to11.hitot5:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           10
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              3
 [5,] NutsSeeds            4
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             7
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10607.5 10174.2 10914.3      NA         NA
             Energy (kJ)      10981.5 10525.2 11323.9      NA         NA
             Protein (g)        138.3   126.1   194.3     100        100
                 Fat (g)         70.4    64.2    79.6      NA         NA
        Carbohydrate (g)        344.4   326.3   362.7      NA         NA
              Sugars (g)        156.9   143.5   169.1      NA         NA
              Starch (g)        185.6   172.7   196.2      NA         NA
               Fibre (g)         49.3    43.6    56.9      NA        100
       Saturated fat (g)         26.2    23.8    29.1      NA         NA
 Monounsaturated fat (g)         24.7    21.6    29.6      NA         NA
 Polyunsaturated fat (g)         13.8    12.2    15.2      NA         NA
       Linoleic acid (g)         12.4    11.0    13.8      NA        100
Alpha linolenic acid (g)          1.1     0.8     1.3      NA         79
  LC n3 fatty acids (mg)        202.0    93.5   666.8      NA        100
  Vitamin A equivs (mcg)       1540.4  1282.0  1763.1     100        100
           Retinol (mcg)        369.6   325.3   427.6      NA         NA
      Provitamin A (mcg)       6984.0  5494.9  8202.5      NA         NA
            Thiamin (mg)          2.3     2.1     2.6     100        100
         Riboflavin (mg)          3.6     3.3     3.9     100        100
             Niacin (mg)         66.7    63.4    70.7     100        100
      Folate (mcg total)        708.5   652.3   775.2      NA         NA
     Folate equivs (mcg)        993.9   884.3  1080.6     100        100
          Vitamin C (mg)        189.9   147.6   243.6     100        100
         Vitamin D (mcg)          3.4     2.8     5.1      NA          1
          Vitamin E (mg)         11.3     9.5    13.4      NA        100
            Calcium (mg)       1510.1  1434.8  1628.2     100        100
               Iron (mg)         17.2    16.1    18.7     100        100
            Iodine (mcg)        266.4   245.5   291.4     100        100
          Magnesium (mg)        535.2   507.5   565.8     100        100
         Phosphorus (mg)       2389.9  2320.4  2490.9     100        100
          Potassium (mg)       5243.1  4927.0  5501.0      NA        100
             Sodium (mg)       1986.7  1706.1  2250.2      NA        100
               Zinc (mg)         25.9    16.3    97.6     100        100
        Cholesterol (mg)        272.2   207.5   384.8      NA         NA
          Selenium (mcg)         89.6    79.4   117.7     100        100
         Vitamin B6 (mg)          2.6     2.0     3.4     100        100
       Vitamin B12 (mcg)          7.8     7.2     8.7     100        100

         Percent energy from fat 24.0
     Percent energy from protein 21.7
Percent energy from carbohydrate 54.3
```

Boys9to11.hitot6:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           28
 [8,] WholegrainCereals    23
 [9,] RefinedCereals       12
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          4
[15,] LoFatDairy           14
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               10.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10499.5 10198.9 10946.0      NA         NA
             Energy (kJ)      10879.2 10578.1 11326.0      NA         NA
             Protein (g)        129.6   118.8   186.2     100        100
                 Fat (g)         94.0    87.9   103.8      NA         NA
        Carbohydrate (g)        295.1   276.9   309.6      NA         NA
              Sugars (g)        155.3   141.2   171.9      NA         NA
              Starch (g)        137.6   126.6   146.0      NA         NA
               Fibre (g)         51.2    44.2    64.6      NA        100
       Saturated fat (g)         31.1    28.7    34.1      NA         NA
 Monounsaturated fat (g)         32.0    29.1    36.3      NA         NA
 Polyunsaturated fat (g)         24.2    22.7    25.9      NA         NA
       Linoleic acid (g)         22.3    21.1    23.8      NA        100
Alpha linolenic acid (g)          1.5     1.3     1.7      NA        100
  LC n3 fatty acids (mg)        197.7    85.2   493.4      NA        100
  Vitamin A equivs (mcg)       1824.5  1564.6  2061.6     100        100
            Retinol (mcg)        606.8   554.5   671.7      NA         NA
      Provitamin A (mcg)        7273.6  5663.7  8581.4      NA         NA
             Thiamin (mg)          2.0     1.9     2.3     100        100
         Riboflavin (mg)           3.1     2.9     3.5     100        100
              Niacin (mg)         61.1    58.1    64.9     100        100
      Folate (mcg total)         705.8   635.0   772.6      NA         NA
     Folate equivs (mcg)         882.3   794.1   957.0     100        100
          Vitamin C (mg)         218.3   181.5   264.2     100        100
         Vitamin D (mcg)           5.0     4.4     6.2      NA         40
          Vitamin E (mg)          16.5    14.5    19.1      NA        100
            Calcium (mg)        1297.0  1228.1  1392.5     100        100
               Iron (mg)         15.7    14.6    17.1     100        100
            Iodine (mcg)         215.6   201.7   231.9     100        100
          Magnesium (mg)         514.1   486.4   538.9     100        100
         Phosphorus (mg)        2165.3  2076.9  2272.5     100        100
          Potassium (mg)        5424.2  5134.2  5694.2      NA        100
             Sodium (mg)        1647.0  1444.3  1907.8      NA        100
               Zinc (mg)         24.9    14.9    96.9     100        100
        Cholesterol (mg)         269.7   205.4   383.3      NA         NA
          Selenium (mg)          82.3    73.6   102.7     100        100
         Vitamin B6 (mg)          2.7     2.2     3.6     100        100
       Vitamin B12 (mg)           6.9     6.3     7.6     100        100

         Percent energy from fat 32.2
     Percent energy from protein 20.4
Percent energy from carbohydrate 47.3
```

A15.27 Summary 7-day *Total* Diets Boys 12-13years mid energy level

Average age 12.5 yrs, light to moderate activityPAL 1.7

Boys12to13.avtot1:

```
             AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              4
 [5,] NutsSeeds            2
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9941.8  9608.9 10319.4      NA         NA
             Energy (kJ)      10268.8  9940.0 10630.5      NA         NA
             Protein (g)        126.9   122.3   131.9     100        100
                 Fat (g)         69.4    63.9    77.0      NA         NA
        Carbohydrate (g)        310.6   296.5   324.8      NA         NA
              Sugars (g)        114.6   106.3   129.1      NA         NA
              Starch (g)        194.9   182.3   206.5      NA         NA
               Fibre (g)         43.2    37.3    53.4      NA        100
       Saturated fat (g)         23.5    21.5    25.9      NA         NA
 Monounsaturated fat (g)         22.6    20.0    25.8      NA         NA
 Polyunsaturated fat (g)         17.7    16.7    19.1      NA         NA
       Linoleic acid (g)         16.1    15.2    17.2      NA        100
Alpha linolenic acid (g)          1.3     1.2     1.6      NA        100
  LC n3 fatty acids (mg)        197.7    82.4   505.2      NA        100
  Vitamin A equivs (mcg)       1561.1  1314.0  1855.0     100        100
           Retinol (mcg)        479.8   432.6   553.9      NA         NA
      Provitamin A (mcg)       6437.3  4984.1  8332.0      NA         NA
            Thiamin (mg)          2.2     1.9     2.4     100        100
         Riboflavin (mg)          3.4     3.0     3.7     100        100
             Niacin (mg)         62.7    59.3    65.4     100        100
      Folate (mcg total)        626.0   545.7   689.6      NA         NA
     Folate equivs (mcg)        941.0   842.7  1050.7     100        100
          Vitamin C (mg)        135.5   105.6   188.0     100        100
         Vitamin D (mcg)          4.3     3.6     5.8      NA          2
          Vitamin E (mg)         11.5     9.8    13.2      NA        100
            Calcium (mg)       1472.2  1375.5  1567.4     100        100
               Iron (mg)         15.7    14.0    17.0     100        100
            Iodine (mcg)        265.6   234.9   291.9     100        100
          Magnesium (mg)        481.8   459.1   508.8     100        100
         Phosphorus (mg)       2259.8  2186.7  2367.5     100        100
          Potassium (mg)       4464.7  4277.9  4708.0      NA        100
             Sodium (mg)       1824.0  1623.0  2010.6      NA        100
               Zinc (mg)         16.2    15.3    17.0     100        100
        Cholesterol (mg)        251.8   180.2   374.4      NA         NA
          Selenium (mcg)         86.7    77.6    97.2     100        100
         Vitamin B6 (mg)          2.2     1.8     2.8     100        100
       Vitamin B12 (mcg)          7.9     7.4     8.7     100        100

         Percent energy from fat 25.6
     Percent energy from protein 21.5
Percent energy from carbohydrate 52.9
```

Boys12to13.avtot2:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             28
 [7,] TotalFruit           21
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          3
[15,] LoFatDairy           21
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9883.3  9555.4 10203.2      NA         NA
             Energy (kJ)      10239.5  9902.6 10556.3      NA         NA
             Protein (g)        129.2   123.5   134.2     100        100
                 Fat (g)         83.1    77.1    89.2      NA         NA
        Carbohydrate (g)        275.3   264.8   287.9      NA         NA
              Sugars (g)        139.1   130.2   147.6      NA         NA
              Starch (g)        134.6   123.7   143.7      NA         NA
               Fibre (g)         46.6    42.5    53.9      NA        100
       Saturated fat (g)         27.5    25.6    30.2      NA         NA
 Monounsaturated fat (g)         28.7    25.3    31.4      NA         NA
 Polyunsaturated fat (g)         20.7    19.2    21.9      NA         NA
       Linoleic acid (g)         19.1    17.9    20.3      NA        100
Alpha linolenic acid (g)          1.3     1.1     1.4      NA        100
  LC n3 fatty acids (mg)        206.3    90.6   520.8      NA        100
  Vitamin A equivs (mcg)       1740.8  1465.4  1992.4     100        100
            Retinol (mcg)        535.9   490.6   590.1      NA         NA
      Provitamin A (mcg)        7177.2  5555.1  8685.6      NA         NA
            Thiamin (mg)          2.1     1.9     2.3     100        100
         Riboflavin (mg)          3.6     3.3     3.9     100        100
             Niacin (mg)         64.4    61.3    67.6     100        100
      Folate (mcg total)        730.5   656.5   812.5      NA         NA
     Folate equivs (mcg)        945.0   836.5  1029.5     100        100
          Vitamin C (mg)        195.7   159.9   256.2     100        100
         Vitamin D (mcg)          4.8     4.2     6.0      NA         26
          Vitamin E (mg)         15.0    13.2    17.1      NA        100
            Calcium (mg)       1546.8  1481.7  1633.8     100        100
               Iron (mg)         15.5    14.1    16.6     100        100
            Iodine (mcg)        262.1   237.2   289.1     100        100
          Magnesium (mg)        526.7   503.8   557.5     100        100
         Phosphorus (mg)       2340.0  2259.8  2430.9     100        100
          Potassium (mg)       5254.6  5011.5  5561.8      NA        100
             Sodium (mg)       1563.3  1361.5  1758.6      NA        100
               Zinc (mg)         16.7    16.0    17.6     100        100
        Cholesterol (mg)        271.3   190.6   354.0      NA         NA
          Selenium (mcg)         85.1    75.1   121.8     100        100
         Vitamin B6 (mg)          2.8     2.2     3.7     100        100
       Vitamin B12 (mcg)          8.3     7.5     9.0     100        100

         Percent energy from fat 30.7
     Percent energy from protein 21.9
Percent energy from carbohydrate 47.5
```

Boys12to13.avtot3:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9743.4  9460.8 10146.5      NA         NA
             Energy (kJ)      10070.0  9801.5 10464.3      NA         NA
             Protein (g)        131.6   123.6   187.1     100        100
                 Fat (g)         84.2    77.5    92.1      NA         NA
        Carbohydrate (g)        267.1   253.4   281.0      NA         NA
              Sugars (g)        125.9   115.9   135.4      NA         NA
              Starch (g)        139.8   129.3   151.3      NA         NA
               Fibre (g)         42.8    37.6    49.8      NA        100
       Saturated fat (g)         28.1    26.0    31.3      NA         NA
 Monounsaturated fat (g)         29.2    26.3    32.3      NA         NA
 Polyunsaturated fat (g)         20.9    19.4    22.3      NA         NA
       Linoleic acid (g)         19.3    17.8    20.7      NA        100
Alpha linolenic acid (g)          1.3     1.1     1.5      NA        100
  LC n3 fatty acids (mg)        193.1    91.3   430.3      NA        100
  Vitamin A equivs (mcg)       1657.5  1420.4  1877.2     100        100
            Retinol (mcg)        511.0   453.3   579.9      NA         NA
      Provitamin A (mcg)        6834.5  5439.1  8077.5      NA         NA
            Thiamin (mg)          2.0     1.8     2.3     100        100
         Riboflavin (mg)          3.3     3.1     3.7     100        100
             Niacin (mg)         62.7    59.7    65.9     100        100
      Folate (mcg total)        663.6   608.5   775.7      NA         NA
     Folate equivs (mcg)        877.5   795.5  1006.1     100        100
          Vitamin C (mg)        158.5   118.9   195.0     100        100
         Vitamin D (mcg)          4.3     3.7     5.3      NA          4
          Vitamin E (mg)         14.2    12.1    16.1      NA        100
            Calcium (mg)       1448.2  1357.2  1529.4     100        100
               Iron (mg)         15.3    13.8    17.1     100        100
            Iodine (mcg)        242.3   217.7   264.6     100        100
          Magnesium (mg)        499.5   469.3   528.7     100        100
         Phosphorus (mg)       2259.6  2189.4  2358.5     100        100
          Potassium (mg)       4742.0  4551.2  4958.8      NA        100
             Sodium (mg)       1688.7  1451.2  1910.8      NA        100
               Zinc (mg)         22.8    15.6    96.8     100        100
        Cholesterol (mg)        271.1   204.6   369.5      NA         NA
          Selenium (mcg)         84.5    75.1   114.2     100        100
         Vitamin B6 (mg)          2.4     1.8     3.3     100        100
       Vitamin B12 (mcg)          7.7     6.9     8.4     100        100

         Percent energy from fat 31.3
     Percent energy from protein 22.5
Percent energy from carbohydrate 46.2
```

Boys12to13.avtot4:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9881.9  9579.0 10217.3      NA         NA
             Energy (kJ)      10211.7  9904.0 10542.3      NA         NA
             Protein (g)        132.0   124.8   188.2     100        100
                 Fat (g)         83.3    79.0    90.4      NA         NA
        Carbohydrate (g)        275.9   262.6   292.6      NA         NA
              Sugars (g)        124.6   108.8   144.1      NA         NA
              Starch (g)        150.0   141.2   163.0      NA         NA
               Fibre (g)         45.9    39.0    55.1      NA        100
       Saturated fat (g)         27.8    25.7    30.6      NA         NA
 Monounsaturated fat (g)         28.7    27.0    32.2      NA         NA
 Polyunsaturated fat (g)         20.8    19.7    22.2      NA         NA
       Linoleic acid (g)         19.2    18.3    20.6      NA        100
Alpha linolenic acid (g)          1.3     1.1     1.5      NA        100
  LC n3 fatty acids (mg)        203.6    88.9   449.9      NA        100
  Vitamin A equivs (mcg)       1640.5  1407.6  1876.4     100        100
            Retinol (mcg)        508.1   452.2   580.7      NA         NA
      Provitamin A (mcg)        6737.9  5373.9  8372.4      NA         NA
            Thiamin (mg)          2.1     1.8     2.2     100        100
         Riboflavin (mg)          3.3     3.1     3.6     100        100
             Niacin (mg)         63.5    60.3    66.8     100        100
      Folate (mcg total)        660.6   587.4   722.0      NA         NA
     Folate equivs (mcg)        873.7   807.2   940.5     100        100
          Vitamin C (mg)        155.3   122.2   196.2     100        100
         Vitamin D (mcg)          4.4     3.8     5.3      NA          7
          Vitamin E (mg)         13.7    11.4    15.5      NA        100
            Calcium (mg)       1447.3  1345.0  1533.2     100        100
               Iron (mg)         15.5    14.3    16.8     100        100
            Iodine (mcg)        241.2   218.6   265.0     100        100
          Magnesium (mg)        508.9   481.8   532.6     100        100
         Phosphorus (mg)       2288.3  2219.4  2375.1     100        100
          Potassium (mg)       4980.7  4731.4  5289.2      NA        100
             Sodium (mg)       1692.4  1465.1  1912.3      NA        100
               Zinc (mg)         22.1    15.5    96.8     100        100
        Cholesterol (mg)        266.0   201.1   407.0      NA         NA
          Selenium (mcg)         85.0    75.3   110.6     100        100
         Vitamin B6 (mg)          2.3     1.9     3.1     100        100
       Vitamin B12 (mcg)          7.6     7.1     8.8     100        100

         Percent energy from fat 30.6
     Percent energy from protein 22.3
Percent energy from carbohydrate 47.1
```

Boys12to13.avtot5:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           10
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            4
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          4
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9921.1  9475.8 10298.3      NA         NA
             Energy (kJ)      10210.4  9773.7 10591.4      NA         NA
             Protein (g)        126.5   119.8   184.6     100        100
                 Fat (g)         88.2    82.6    94.5      NA         NA
        Carbohydrate (g)        272.0   256.8   288.3      NA         NA
              Sugars (g)        130.7   121.9   142.2      NA         NA
              Starch (g)        139.9   127.2   153.0      NA         NA
               Fibre (g)         38.7    33.3    46.1      NA        100
       Saturated fat (g)         31.6    29.3    34.1      NA         NA
 Monounsaturated fat (g)         28.7    26.7    31.5      NA         NA
 Polyunsaturated fat (g)         21.5    20.2    22.7      NA         NA
       Linoleic acid (g)         19.8    18.8    20.9      NA        100
Alpha linolenic acid (g)          1.4     1.2     1.6      NA        100
  LC n3 fatty acids (mg)        180.2    99.0   446.7      NA        100
  Vitamin A equivs (mcg)       1781.8  1474.2  2037.6     100        100
            Retinol (mcg)        654.7   594.9   732.6      NA         NA
      Provitamin A (mcg)        6703.6  5036.4  8263.5      NA         NA
            Thiamin (mg)          1.9     1.7     2.1     100        100
         Riboflavin (mg)          3.6     3.3     3.9     100        100
             Niacin (mg)         61.1    56.8    64.9     100        100
      Folate (mcg total)        608.4   532.0   691.4      NA         NA
     Folate equivs (mcg)        821.7   755.1   919.4     100        100
          Vitamin C (mg)        146.1   115.5   187.5     100        100
         Vitamin D (mcg)          5.5     4.9     6.6      NA         94
          Vitamin E (mg)         13.5    11.7    15.4      NA        100
            Calcium (mg)       1556.1  1449.1  1634.4     100        100
               Iron (mg)         13.8    12.4    15.2     100        100
            Iodine (mcg)        271.5   245.9   298.1     100        100
          Magnesium (mg)        466.6   436.9   494.9     100        100
         Phosphorus (mg)       2267.0  2194.2  2341.1     100        100
          Potassium (mg)       4725.9  4405.7  4953.9      NA        100
             Sodium (mg)       1765.8  1571.2  2011.1      NA        100
               Zinc (mg)         19.0    15.1    96.4     100        100
        Cholesterol (mg)        290.7   221.5   406.0      NA         NA
          Selenium (mcg)         81.3    70.0   105.7     100        100
         Vitamin B6 (mg)          2.2     1.7     3.0     100        100
       Vitamin B12 (mcg)          8.5     7.9     9.3     100        100

         Percent energy from fat 32.4
     Percent energy from protein 21.4
Percent energy from carbohydrate 46.2
```

Boys12to13.avtot6:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            4
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10045.0  9640.4 10345.7      NA         NA
             Energy (kJ)      10336.2  9935.9 10642.3      NA         NA
             Protein (g)        128.2   117.4   182.9     100        100
                 Fat (g)         90.3    85.1    97.1      NA         NA
        Carbohydrate (g)        277.6   261.6   293.5      NA         NA
              Sugars (g)        134.6   124.5   147.2      NA         NA
              Starch (g)        141.5   128.8   151.2      NA         NA
               Fibre (g)         38.0    33.4    45.9      NA        100
       Saturated fat (g)         32.0    29.9    35.1      NA         NA
 Monounsaturated fat (g)         30.0    27.3    33.9      NA         NA
 Polyunsaturated fat (g)         21.9    21.0    23.0      NA         NA
       Linoleic acid (g)         20.1    19.3    21.3      NA        100
Alpha linolenic acid (g)          1.4     1.3     1.6      NA        100
  LC n3 fatty acids (mg)        215.7    98.8   493.2      NA        100
  Vitamin A equivs (mcg)       1709.4  1466.8  1935.2     100        100
            Retinol (mcg)        612.1   558.8   671.1      NA         NA
      Provitamin A (mcg)       6535.9  4969.3  7715.3      NA         NA
            Thiamin (mg)          1.9     1.7     2.0     100        100
         Riboflavin (mg)          3.3     3.1     3.6     100        100
             Niacin (mg)         59.8    56.3    64.1     100        100
      Folate (mcg total)        596.4   548.4   642.4      NA         NA
     Folate equivs (mcg)        806.6   737.6   868.2     100        100
          Vitamin C (mg)        143.8   114.3   181.6     100        100
         Vitamin D (mcg)          5.0     4.3     6.1      NA         37
          Vitamin E (mg)         14.0    11.6    16.9      NA        100
            Calcium (mg)       1438.2  1361.2  1518.5     100        100
               Iron (mg)         14.2    12.9    15.3     100        100
            Iodine (mcg)        244.4   229.7   260.9     100        100
          Magnesium (mg)        456.2   435.7   480.4     100        100
         Phosphorus (mg)       2183.8  2126.3  2258.3     100        100
          Potassium (mg)       4455.5  4233.0  4671.0      NA        100
             Sodium (mg)       1877.7  1631.9  2092.3      NA        100
               Zinc (mg)         24.5    14.4    96.0     100        100
        Cholesterol (mg)        277.0   209.3   367.8      NA         NA
          Selenium (mcg)         80.9    70.2   102.4     100        100
         Vitamin B6 (mg)          2.1     1.7     2.6     100        100
       Vitamin B12 (mcg)          7.8     7.2     8.4     100        100

         Percent energy from fat 32.6
     Percent energy from protein 21.3
Percent energy from carbohydrate 46.2
```

A15.28 Summary *7-day Total Diets* Boys 12-13years higher energy level

Higher age 13yrs and high activity PAL 2

Boys12to13.hitot1:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       35
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12091.3 11728.6 12490.3      NA         NA
             Energy (kJ)      12496.9 12132.6 12895.2      NA         NA
             Protein (g)        145.6   141.9   149.9     100        100
                 Fat (g)         90.8    86.8    96.2      NA         NA
        Carbohydrate (g)        372.0   354.4   388.5      NA         NA
              Sugars (g)        122.0   111.3   132.6      NA         NA
              Starch (g)        248.8   235.8   261.7      NA         NA
               Fibre (g)         54.9    48.4    62.4      NA        100
       Saturated fat (g)         27.6    25.6    30.2      NA         NA
 Monounsaturated fat (g)         31.0    28.3    33.9      NA         NA
 Polyunsaturated fat (g)         25.5    24.3    26.7      NA         NA
       Linoleic acid (g)         23.5    22.2    24.7      NA        100
Alpha linolenic acid (g)          1.7     1.5     2.0      NA        100
  LC n3 fatty acids (mg)        198.8    85.5   641.3      NA        100
  Vitamin A equivs (mcg)       1656.8  1457.4  1910.9     100        100
           Retinol (mcg)        564.1   516.7   635.6      NA         NA
      Provitamin A (mcg)       6502.6  5411.4  7952.4      NA         NA
             Thiamin (mg)          2.8     2.6     3.1     100        100
         Riboflavin (mg)           3.8     3.4     4.1     100        100
              Niacin (mg)         74.0    69.7    77.5     100        100
      Folate (mcg total)         751.0   689.8   832.9      NA         NA
     Folate equivs (mcg)        1137.7  1024.6  1250.9     100        100
          Vitamin C (mg)         151.5   120.5   194.5     100        100
         Vitamin D (mcg)           4.8     4.1     6.6      NA         19
          Vitamin E (mg)          15.7    13.3    18.0      NA        100
            Calcium (mg)        1575.2  1497.6  1668.0     100        100
               Iron (mg)          19.3    18.2    21.0     100        100
            Iodine (mcg)         287.0   255.4   317.6     100        100
          Magnesium (mg)         595.6   576.8   633.2     100        100
         Phosphorus (mg)        2599.2  2508.8  2688.6     100        100
          Potassium (mg)        5294.6  5065.3  5529.1      NA        100
             Sodium (mg)        2145.1  1964.2  2435.6      NA        100
               Zinc (mg)          18.5    17.8    19.4     100        100
        Cholesterol (mg)         252.7   189.7   365.5      NA         NA
          Selenium (mg)          101.2    90.4   138.1     100        100
         Vitamin B6 (mg)           2.5     2.0     3.1     100        100
       Vitamin B12 (mg)            8.2     7.5     9.0     100        100

         Percent energy from fat 27.6
     Percent energy from protein 20.3
Percent energy from carbohydrate 52.1
```

Boys12to13.hitot2:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           10
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          4
[15,] LoFatDairy           21
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12136.1 11828.3 12523.2      NA         NA
             Energy (kJ)      12527.5 12191.6 12929.2      NA         NA
             Protein (g)        150.0   143.4   207.1     100        100
                 Fat (g)         93.8    88.7   101.9      NA         NA
        Carbohydrate (g)        367.4   350.6   385.0      NA         NA
              Sugars (g)        141.8   124.0   155.3      NA         NA
              Starch (g)        224.3   214.0   238.1      NA         NA
               Fibre (g)         51.6    45.7    60.0      NA        100
       Saturated fat (g)         32.2    30.3    35.2      NA         NA
 Monounsaturated fat (g)         31.8    29.1    35.4      NA         NA
 Polyunsaturated fat (g)         22.6    21.2    24.2      NA         NA
       Linoleic acid (g)         20.8    19.5    22.2      NA        100
Alpha linolenic acid (g)          1.5     1.3     1.9      NA        100
  LC n3 fatty acids (mg)        204.1    95.5   483.2      NA        100
  Vitamin A equivs (mcg)       1683.7  1417.0  1930.9     100        100
            Retinol (mcg)        586.8   517.0   719.2      NA         NA
      Provitamin A (mcg)        6529.8  4942.8  7930.4      NA         NA
            Thiamin (mg)          2.7     2.4     2.9     100        100
         Riboflavin (mg)          4.1     3.7     4.4     100        100
             Niacin (mg)         74.2    69.8    77.9     100        100
      Folate (mcg total)        765.3   707.8   822.0      NA         NA
     Folate equivs (mcg)       1117.5   999.9  1229.9     100        100
          Vitamin C (mg)        145.0   118.4   181.7     100        100
         Vitamin D (mcg)          5.2     4.5     6.4      NA         68
          Vitamin E (mg)         14.6    12.4    17.0      NA        100
            Calcium (mg)       1725.4  1640.6  1820.1     100        100
               Iron (mg)         19.1    17.5    20.7     100        100
            Iodine (mcg)        312.7   289.8   332.8     100        100
          Magnesium (mg)        601.7   571.7   631.8     100        100
         Phosphorus (mg)       2696.1  2599.3  2768.4     100        100
          Potassium (mg)       5292.0  5077.3  5564.6      NA        100
             Sodium (mg)       2184.5  1867.3  2411.2      NA        100
               Zinc (mg)         22.1    18.0    99.4     100        100
        Cholesterol (mg)        289.8   219.5   494.7      NA         NA
          Selenium (mcg)         99.9    89.1   125.8     100        100
         Vitamin B6 (mg)          2.6     2.2     3.5     100        100
       Vitamin B12 (mcg)          8.9     8.2    10.2     100        100

         Percent energy from fat 28.2
     Percent energy from protein 20.8
Percent energy from carbohydrate 51.0
```

Boys12to13.hitot3:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       31
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          4
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12105.6 11734.9 12615.5      NA         NA
             Energy (kJ)      12477.3 12075.1 12991.6      NA         NA
             Protein (g)        149.2   139.9   203.6     100        100
                 Fat (g)         99.6    94.9   106.5      NA         NA
        Carbohydrate (g)        355.9   339.0   375.2      NA         NA
              Sugars (g)        137.7   128.0   148.1      NA         NA
              Starch (g)        216.9   202.0   229.8      NA         NA
               Fibre (g)         48.3    42.5    55.4      NA        100
       Saturated fat (g)         33.5    31.6    36.2      NA         NA
 Monounsaturated fat (g)         33.5    31.1    36.9      NA         NA
 Polyunsaturated fat (g)         25.4    23.7    26.7      NA         NA
       Linoleic acid (g)         23.3    21.8    24.7      NA        100
Alpha linolenic acid (g)          1.7     1.5     1.9      NA        100
  LC n3 fatty acids (mg)        210.9    95.4   448.2      NA        100
  Vitamin A equivs (mcg)       1769.2  1562.0  2053.3     100        100
           Retinol (mcg)        657.3   596.7   724.1      NA         NA
      Provitamin A (mcg)       6618.8  5541.9  8205.2      NA         NA
            Thiamin (mg)          2.5     2.2     2.9     100        100
         Riboflavin (mg)          3.9     3.5     4.3     100        100
             Niacin (mg)         71.1    67.0    74.7     100        100
      Folate (mcg total)        727.8   671.1   787.8      NA         NA
     Folate equivs (mcg)       1051.7   944.1  1154.1     100        100
          Vitamin C (mg)        142.1   115.3   175.3     100        100
         Vitamin D (mcg)          5.6     4.8     6.7      NA         99
          Vitamin E (mg)         15.7    13.5    18.1      NA        100
            Calcium (mg)       1679.3  1584.2  1776.5     100        100
               Iron (mg)         17.8    16.0    19.6     100        100
            Iodine (mcg)        304.8   281.4   333.9     100        100
          Magnesium (mg)        567.2   531.5   597.5     100        100
         Phosphorus (mg)       2597.7  2526.0  2692.6     100        100
          Potassium (mg)       5012.2  4790.6  5264.8      NA        100
             Sodium (mg)       2154.7  1933.7  2428.9      NA        100
               Zinc (mg)         24.7    17.3    99.1     100        100
        Cholesterol (mg)        284.1   218.5   386.1      NA         NA
          Selenium (mcg)         97.6    87.1   121.9     100        100
         Vitamin B6 (mg)          2.5     2.1     3.1     100        100
       Vitamin B12 (mcg)          9.0     8.3     9.9     100        100

         Percent energy from fat 30.0
     Percent energy from protein 20.6
Percent energy from carbohydrate 49.4
```

Boys12to13.hitot4:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            11
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          4
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11983.8 11645.7 12367.0      NA         NA
             Energy (kJ)      12374.0 12023.3 12762.8      NA         NA
             Protein (g)        152.5   137.8   203.4     100        100
                 Fat (g)        111.1   103.3   117.2      NA         NA
        Carbohydrate (g)        326.3   311.8   338.9      NA         NA
              Sugars (g)        165.1   151.9   178.7      NA         NA
              Starch (g)        159.2   148.7   168.9      NA         NA
               Fibre (g)         52.2    44.1    59.9      NA        100
       Saturated fat (g)         37.2    33.8    40.2      NA         NA
 Monounsaturated fat (g)         38.8    35.4    41.6      NA         NA
 Polyunsaturated fat (g)         27.5    26.0    28.8      NA         NA
       Linoleic acid (g)         25.6    24.3    27.0      NA        100
Alpha linolenic acid (g)          1.6     1.4     1.8      NA        100
  LC n3 fatty acids (mg)        199.6    93.1   480.5      NA        100
  Vitamin A equivs (mcg)       1886.3  1590.2  2147.0     100        100
            Retinol (mcg)        681.1   629.8   765.2      NA         NA
      Provitamin A (mcg)        7181.5  5458.9  8641.8      NA         NA
            Thiamin (mg)          2.4     2.1     2.6     100        100
         Riboflavin (mg)          3.8     3.6     4.1     100        100
             Niacin (mg)         71.4    67.9    75.0     100        100
      Folate (mcg total)        784.7   721.9   868.2      NA         NA
     Folate equivs (mcg)        997.0   911.2  1094.3     100        100
          Vitamin C (mg)        198.1   157.9   251.9     100        100
         Vitamin D (mcg)          5.7     5.1     6.8      NA        100
          Vitamin E (mg)         18.3    16.2    20.8      NA        100
            Calcium (mg)       1654.4  1577.6  1753.8     100        100
               Iron (mg)         17.3    15.7    18.7     100        100
            Iodine (mcg)        278.0   257.9   293.9     100        100
          Magnesium (mg)        592.3   567.2   620.2     100        100
         Phosphorus (mg)       2597.2  2534.1  2669.2     100        100
          Potassium (mg)       5831.4  5592.5  6132.7      NA        100
             Sodium (mg)       1977.9  1772.6  2274.8      NA        100
               Zinc (mg)         32.1    17.4    99.7     100        100
        Cholesterol (mg)        294.8   229.3   405.0      NA         NA
          Selenium (mcg)         93.2    83.6   123.2     100        100
         Vitamin B6 (mg)          2.9     2.3     3.6     100        100
       Vitamin B12 (mcg)          8.6     8.0     9.6     100        100

         Percent energy from fat 33.4
     Percent energy from protein 21.1
Percent energy from carbohydrate 45.6
```

Boys12to13.hitot5:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            14
 [4,] Legumes              14
 [5,] NutsSeeds            7
 [6,] OtherVeg             28
 [7,] TotalFruit           14
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11979.6 11644.7 12444.1      NA         NA
             Energy (kJ)      12440.3 12116.3 12898.8      NA         NA
             Protein (g)        160.1   144.9   211.8     100        100
                 Fat (g)        105.0    98.6   113.7      NA         NA
        Carbohydrate (g)        332.2   318.4   347.8      NA         NA
              Sugars (g)        151.7   139.3   163.3      NA         NA
              Starch (g)        178.8   165.3   189.2      NA         NA
               Fibre (g)         61.4    54.0    73.9      NA        100
       Saturated fat (g)         35.5    33.0    39.1      NA         NA
 Monounsaturated fat (g)         35.5    32.0    39.6      NA         NA
 Polyunsaturated fat (g)         26.7    25.0    28.6      NA         NA
       Linoleic acid (g)         24.6    23.3    26.0      NA        100
Alpha linolenic acid (g)          1.7     1.5     1.9      NA        100
  LC n3 fatty acids (mg)        218.8   100.2   474.7      NA        100
  Vitamin A equivs (mcg)       2717.7  2434.4  3092.0     100        100
            Retinol (mcg)        635.9   566.6   715.3      NA         NA
      Provitamin A (mcg)      12432.6 10974.5 14378.4      NA         NA
            Thiamin (mg)          2.6     2.4     2.9     100        100
         Riboflavin (mg)          3.9     3.5     4.1     100        100
             Niacin (mg)         73.5    69.3    78.7     100        100
      Folate (mcg total)        834.8   769.8   903.3      NA         NA
     Folate equivs (mcg)       1088.5   998.4  1175.3     100        100
          Vitamin C (mg)        235.6   189.2   290.5     100        100
         Vitamin D (mcg)          5.2     4.6     6.4      NA         70
          Vitamin E (mg)         17.9    15.8    20.9      NA        100
            Calcium (mg)       1673.1  1587.4  1777.4     100        100
               Iron (mg)         20.5    18.8    21.9     100        100
            Iodine (mcg)        264.3   244.5   287.6     100        100
          Magnesium (mg)        637.2   605.3   661.7     100        100
         Phosphorus (mg)       2701.7  2597.9  2802.5     100        100
          Potassium (mg)       6264.9  6053.4  6503.5      NA        100
             Sodium (mg)       2130.6  1894.6  2369.5      NA        100
               Zinc (mg)         34.8    18.7   100.8     100        100
        Cholesterol (mg)        291.0   212.4   418.2      NA         NA
          Selenium (mcg)         98.2    86.5   117.7     100        100
         Vitamin B6 (mg)          3.2     2.5     3.9     100        100
       Vitamin B12 (mcg)          7.9     7.4     8.6     100        100

         Percent energy from fat 31.4
     Percent energy from protein 22.0
Percent energy from carbohydrate 46.6
```

Boys12to13.hitot6:

```
             AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            10
 [6,] OtherVeg             28
 [7,] TotalFruit           14
 [8,] WholegrainCereals    29.5
 [9,] RefinedCereals       16
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               17.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11804.9 11318.6 12232.3      NA         NA
             Energy (kJ)      12185.8 11677.7 12614.2      NA         NA
             Protein (g)        149.0   135.7   202.9     100        100
                 Fat (g)        109.5   103.2   117.3      NA         NA
        Carbohydrate (g)        321.3   304.1   337.8      NA         NA
              Sugars (g)        147.8   135.8   160.1      NA         NA
              Starch (g)        171.8   159.8   186.1      NA         NA
               Fibre (g)         51.5    45.5    62.1      NA        100
       Saturated fat (g)         36.0    33.2    39.5      NA         NA
 Monounsaturated fat (g)         38.6    35.8    42.3      NA         NA
 Polyunsaturated fat (g)         27.4    26.1    28.6      NA         NA
       Linoleic acid (g)         25.4    24.3    26.6      NA        100
Alpha linolenic acid (g)          1.6     1.4     1.8      NA        100
  LC n3 fatty acids (mg)        203.7    92.3   389.6      NA        100
  Vitamin A equivs (mcg)       1858.5  1603.3  2165.9     100        100
           Retinol (mcg)        631.8   565.5   715.3      NA         NA
      Provitamin A (mcg)       7311.3  5781.3  9230.4      NA         NA
            Thiamin (mg)          2.4     2.2     2.6     100        100
         Riboflavin (mg)          3.6     3.3     3.9     100        100
             Niacin (mg)         70.7    67.3    73.9     100        100
      Folate (mcg total)        743.2   686.7   799.2      NA         NA
     Folate equivs (mcg)        972.8   893.4  1044.6     100        100
          Vitamin C (mg)        197.3   155.7   243.9     100        100
         Vitamin D (mcg)          5.0     4.4     5.8      NA         41
          Vitamin E (mg)         18.2    16.2    21.3      NA        100
            Calcium (mg)       1537.8  1437.9  1671.8     100        100
               Iron (mg)         17.8    16.4    19.3     100        100
            Iodine (mcg)        254.6   229.2   274.8     100        100
          Magnesium (mg)        579.9   556.4   608.6     100        100
         Phosphorus (mg)       2525.7  2395.6  2619.5     100        100
          Potassium (mg)       5605.1  5407.6  5861.8      NA        100
             Sodium (mg)       2070.2  1758.1  2371.1      NA        100
               Zinc (mg)         30.3    17.3    99.1     100        100
        Cholesterol (mg)        293.2   217.3   397.3      NA         NA
          Selenium (mcg)         94.9    81.5   117.1     100        100
         Vitamin B6 (mg)          2.9     2.2     3.7     100        100
       Vitamin B12 (mcg)          7.9     7.2     8.4     100        100

         Percent energy from fat 33.5
     Percent energy from protein 20.9
Percent energy from carbohydrate 45.6
```

A15.29 Summary *7-day Total Diets* Boys 14-18 years mid energy level

Age 16yrs, light to moderate activity PAL 1.7

Boys14to18.avtot1:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       35
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          4
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11989.2 11645.7 12376.7      NA         NA
             Energy (kJ)      12384.4 12032.4 12787.5      NA         NA
             Protein (g)        148.4   143.6   154.0     100        100
                 Fat (g)         90.3    85.7    94.9      NA         NA
        Carbohydrate (g)        364.8   349.1   383.3      NA         NA
              Sugars (g)        123.5   114.2   135.7      NA         NA
              Starch (g)        240.2   226.9   255.5      NA         NA
               Fibre (g)         50.7    47.3    56.8      NA        100
       Saturated fat (g)         27.9    26.0    29.7      NA         NA
 Monounsaturated fat (g)         30.1    28.1    33.2      NA         NA
 Polyunsaturated fat (g)         25.5    24.1    27.7      NA         NA
       Linoleic acid (g)         23.6    22.5    25.3      NA        100
Alpha linolenic acid (g)          1.6     1.4     2.0      NA        100
  LC n3 fatty acids (mg)        170.9    84.6   408.7      NA         71
  Vitamin A equivs (mcg)       1649.3  1396.9  1949.6     100        100
           Retinol (mcg)        567.6   514.3   616.2      NA         NA
      Provitamin A (mcg)       6434.0  5054.5  8313.9      NA         NA
             Thiamin (mg)          2.9     2.7     3.2     100        100
         Riboflavin (mg)          4.0     3.7     4.3     100        100
              Niacin (mg)        73.0    69.4    77.7     100        100
      Folate (mcg total)        735.2   634.3   801.6      NA         NA
     Folate equivs (mcg)       1143.0  1036.6  1254.3     100        100
          Vitamin C (mg)        149.6   118.5   200.4     100        100
         Vitamin D (mcg)          4.9     4.4     6.2      NA         29
          Vitamin E (mg)         16.0    13.9    18.1      NA        100
            Calcium (mg)       1740.7  1652.5  1845.0     100        100
               Iron (mg)         19.6    17.8    21.1     100        100
            Iodine (mcg)        299.1   267.5   356.9     100        100
          Magnesium (mg)        603.9   564.3   638.8     100        100
         Phosphorus (mg)       2650.9  2546.4  2731.2     100        100
          Potassium (mg)       4993.1  4771.1  5318.4      NA        100
             Sodium (mg)       2185.0  1930.7  2433.9      NA        100
               Zinc (mg)         19.0    18.0    24.2     100        100
        Cholesterol (mg)        255.7   192.8   332.7      NA         NA
          Selenium (mg)         97.5    88.8   104.7     100        100
         Vitamin B6 (mg)         2.3     2.1     2.6     100        100
       Vitamin B12 (mg)          8.7     8.2     9.8     100        100

         Percent energy from fat 27.6
     Percent energy from protein 20.9
Percent energy from carbohydrate 51.5
```

Boys14to18.avtot2:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       35
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12083.5 11667.6 12441.2      NA         NA
             Energy (kJ)      12492.2 12082.2 12836.1      NA         NA
             Protein (g)        147.8   140.1   205.7     100        100
                 Fat (g)         90.4    85.9    96.8      NA         NA
        Carbohydrate (g)        374.8   359.2   393.4      NA         NA
              Sugars (g)        141.8   129.1   153.8      NA         NA
              Starch (g)        231.4   219.0   246.9      NA         NA
               Fibre (g)         51.9    48.6    57.3      NA        100
       Saturated fat (g)         27.6    25.5    30.4      NA         NA
 Monounsaturated fat (g)         30.7    28.3    33.7      NA         NA
 Polyunsaturated fat (g)         25.5    24.2    27.8      NA         NA
       Linoleic acid (g)         23.5    22.5    25.7      NA        100
Alpha linolenic acid (g)          1.7     1.5     2.0      NA        100
  LC n3 fatty acids (mg)        174.7    83.9   455.7      NA         68
  Vitamin A equivs (mcg)       1620.3  1325.0  1909.9     100        100
            Retinol (mcg)        520.8   463.9   584.1      NA         NA
      Provitamin A (mcg)        6552.6  5171.4  8274.7      NA         NA
             Thiamin (mg)          2.8     2.6     3.0     100        100
          Riboflavin (mg)          3.6     3.3     4.0     100        100
              Niacin (mg)         69.6    66.4    72.6     100        100
      Folate (mcg total)         737.1   653.6   792.3      NA         NA
     Folate equivs (mcg)        1112.8   990.9  1207.5     100        100
          Vitamin C (mg)         180.7   137.2   225.7     100        100
          Vitamin D (mcg)          4.3     3.5     5.3      NA          4
           Vitamin E (mg)         16.5    14.7    18.6      NA        100
             Calcium (mg)        1608.3  1518.7  1714.1     100        100
                Iron (mg)         19.3    18.0    21.0     100        100
             Iodine (mcg)        263.7   243.7   330.1     100        100
           Magnesium (mg)        586.9   557.4   614.8     100        100
          Phosphorus (mg)       2516.5  2416.6  2623.3     100        100
           Potassium (mg)       5032.8  4804.6  5249.2      NA        100
              Sodium (mg)       2227.8  1900.3  2482.5      NA        100
                Zinc (mg)         23.3    17.1   103.4     100        100
        Cholesterol (mg)        253.2   191.8   359.2      NA         NA
           Selenium (mcg)         94.8    85.9   106.0     100        100
          Vitamin B6 (mg)          2.2     1.9     2.7     100        100
        Vitamin B12 (mcg)          8.0     7.3     9.1     100        100

         Percent energy from fat 27.3
     Percent energy from protein 20.5
Percent energy from carbohydrate 52.2
```

Boys14to18.avtot3:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             28
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       24
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          3
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11965.3 11599.7 12304.0      NA         NA
             Energy (kJ)      12393.8 12028.1 12753.6      NA         NA
             Protein (g)        150.6   140.9   206.9     100        100
                 Fat (g)         94.2    86.9   100.4      NA         NA
        Carbohydrate (g)        357.5   343.1   372.9      NA         NA
              Sugars (g)        152.0   140.6   161.9      NA         NA
              Starch (g)        203.8   189.5   219.6      NA         NA
               Fibre (g)         55.5    50.9    64.0      NA        100
       Saturated fat (g)         29.9    27.6    31.9      NA         NA
 Monounsaturated fat (g)         31.7    28.9    35.3      NA         NA
 Polyunsaturated fat (g)         25.6    23.9    26.7      NA         NA
       Linoleic acid (g)         23.7    22.2    24.8      NA        100
Alpha linolenic acid (g)          1.6     1.4     1.9      NA        100
  LC n3 fatty acids (mg)        189.9    88.0   406.7      NA         72
  Vitamin A equivs (mcg)       1809.6  1589.5  2083.5     100        100
            Retinol (mcg)       576.2   534.2   650.4      NA         NA
      Provitamin A (mcg)       7344.5  5922.5  8830.9      NA         NA
             Thiamin (mg)          2.7     2.6     3.0     100        100
          Riboflavin (mg)          3.9     3.6     4.2     100        100
              Niacin (mg)         71.5    67.5    75.2     100        100
      Folate (mcg total)         771.0   674.4   856.1      NA         NA
     Folate equivs (mcg)        1087.3   986.4  1204.0     100        100
          Vitamin C (mg)        235.2   194.8   275.9     100        100
          Vitamin D (mcg)          4.9     4.2     5.9      NA         34
           Vitamin E (mg)         17.2    15.5    18.9      NA        100
             Calcium (mg)       1710.2  1597.6  1809.2     100        100
                Iron (mg)         19.4    17.7    21.2     100        100
             Iodine (mcg)        274.3   245.5   336.4     100        100
           Magnesium (mg)        618.7   588.0   644.1     100        100
          Phosphorus (mg)       2633.9  2534.5  2727.0     100        100
           Potassium (mg)       5844.7  5647.3  6105.2      NA        100
              Sodium (mg)       2114.1  1925.3  2322.2      NA        100
                Zinc (mg)         24.5    17.9    99.3     100        100
        Cholesterol (mg)        270.0   210.4   388.0      NA         NA
           Selenium (mcg)         93.7    86.5   102.6     100        100
          Vitamin B6 (mg)          2.4     2.1     2.9     100        100
        Vitamin B12 (mcg)          8.4     7.7     9.5     100        100

         Percent energy from fat 28.6
     Percent energy from protein 21.0
Percent energy from carbohydrate 50.4
```

Boys14to18.avtot4:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             28
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12068.0 11657.8 12450.9      NA         NA
             Energy (kJ)      12500.4 12078.8 12873.1      NA         NA
             Protein (g)        151.7   139.5   261.3     100        100
                 Fat (g)         96.3    91.2   101.6      NA         NA
        Carbohydrate (g)        361.4   346.3   381.6      NA         NA
              Sugars (g)        159.6   146.3   173.3      NA         NA
              Starch (g)        199.9   186.7   214.6      NA         NA
               Fibre (g)         55.4    51.5    60.9      NA        100
       Saturated fat (g)         30.6    28.3    33.0      NA         NA
 Monounsaturated fat (g)         32.6    29.7    35.4      NA         NA
 Polyunsaturated fat (g)         26.0    24.5    28.1      NA         NA
       Linoleic acid (g)         24.1    22.7    25.8      NA        100
Alpha linolenic acid (g)          1.7     1.5     2.0      NA        100
  LC n3 fatty acids (mg)        205.1    87.7   511.9      NA         78
  Vitamin A equivs (mcg)       1778.7  1516.1  2068.0     100        100
           Retinol (mcg)        547.7   492.5   605.5      NA         NA
      Provitamin A (mcg)       7337.9  5855.2  9209.3      NA         NA
            Thiamin (mg)          2.7     2.5     3.0     100        100
         Riboflavin (mg)          3.7     3.3     4.1     100        100
             Niacin (mg)         70.6    65.4    74.1     100        100
      Folate (mcg total)        756.7   692.7   831.0      NA         NA
     Folate equivs (mcg)       1056.0   958.0  1148.0     100        100
          Vitamin C (mg)        242.8   181.6   286.1     100        100
         Vitamin D (mcg)          4.5     3.8     5.8      NA         12
          Vitamin E (mg)         17.6    15.6    20.0      NA        100
            Calcium (mg)       1622.0  1531.2  1758.1     100        100
               Iron (mg)         19.6    17.8    21.3     100        100
            Iodine (mcg)        251.7   226.3   321.8     100        100
          Magnesium (mg)        614.2   583.0   646.4     100        100
         Phosphorus (mg)       2583.5  2515.9  2687.4     100        100
          Potassium (mg)       5778.4  5543.3  6046.6      NA        100
             Sodium (mg)       2203.7  1902.6  2451.7      NA        100
               Zinc (mg)         28.3    17.6   179.4     100        100
        Cholesterol (mg)        268.4   211.4   366.8      NA         NA
          Selenium (mcg)         93.2    84.6   104.5     100        100
         Vitamin B6 (mg)          2.3     2.0     2.8     100        100
       Vitamin B12 (mcg)          7.9     7.1     9.0     100        100

         Percent energy from fat 28.8
     Percent energy from protein 20.9
Percent energy from carbohydrate 50.3
```

Boys14to18.avtot5:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       10
 [3,] OrangeVeg            7
 [4,] Legumes              9
 [5,] NutsSeeds            10
 [6,] OtherVeg             28
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       17
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          4
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11963.3 11659.5 12232.4      NA         NA
             Energy (kJ)      12407.4 12100.7 12678.7      NA         NA
             Protein (g)        151.3   143.9   207.8     100        100
                 Fat (g)        101.6    95.8   106.7      NA         NA
        Carbohydrate (g)        338.2   319.2   353.2      NA         NA
              Sugars (g)        155.8   146.1   165.4      NA         NA
              Starch (g)        180.7   168.9   190.4      NA         NA
               Fibre (g)         57.8    53.4    64.5      NA        100
       Saturated fat (g)         31.7    29.4    33.7      NA         NA
 Monounsaturated fat (g)         34.9    31.9    39.3      NA         NA
 Polyunsaturated fat (g)         27.7    25.7    30.0      NA         NA
       Linoleic acid (g)         25.8    24.0    28.0      NA        100
Alpha linolenic acid (g)          1.7     1.4     2.1      NA        100
  LC n3 fatty acids (mg)        177.9    81.2   366.7      NA         76
  Vitamin A equivs (mcg)       1859.1  1561.3  2090.7     100        100
           Retinol (mcg)        594.7   552.9   661.0      NA         NA
      Provitamin A (mcg)       7528.1  5683.6  8960.8      NA         NA
            Thiamin (mg)          2.8     2.6     3.0     100        100
         Riboflavin (mg)          4.0     3.8     4.3     100        100
             Niacin (mg)         73.5    69.6    77.0     100        100
      Folate (mcg total)        821.8   736.2   909.5      NA         NA
     Folate equivs (mcg)       1098.9  1000.3  1206.3     100        100
          Vitamin C (mg)        248.6   211.7   290.6     100        100
         Vitamin D (mcg)          5.0     4.3     6.1      NA         40
          Vitamin E (mg)         18.5    16.2    20.9      NA        100
            Calcium (mg)       1760.0  1661.0  1864.4     100        100
               Iron (mg)         19.9    18.5    21.5     100        100
            Iodine (mcg)        271.2   248.1   347.5     100        100
          Magnesium (mg)        652.0   626.1   680.3     100        100
         Phosphorus (mg)       2714.7  2631.8  2787.7     100        100
          Potassium (mg)       6072.3  5841.3  6281.8      NA        100
             Sodium (mg)       2005.0  1732.8  2286.3      NA        100
               Zinc (mg)         21.9    18.5    99.9     100        100
        Cholesterol (mg)        272.4   215.7   398.2      NA         NA
          Selenium (mcg)         92.4    84.8   103.2     100        100
         Vitamin B6 (mg)          2.6     2.3     2.9     100        100
       Vitamin B12 (mcg)          8.4     7.8     9.6     100        100

         Percent energy from fat 30.9
     Percent energy from protein 21.1
Percent energy from carbohydrate 48.0
```

Boys14to18.avtot6:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            10
 [6,] OtherVeg             28
 [7,] TotalFruit           14
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               17.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12128.3 11755.7 12397.5      NA         NA
             Energy (kJ)      12531.8 12152.3 12814.6      NA         NA
             Protein (g)        154.4   142.5   263.6     100        100
                 Fat (g)        105.8   100.5   112.6      NA         NA
        Carbohydrate (g)        342.2   326.3   361.3      NA         NA
              Sugars (g)        149.2   137.9   163.2      NA         NA
              Starch (g)        191.5   180.4   209.5      NA         NA
               Fibre (g)         51.2    47.3    57.1      NA        100
       Saturated fat (g)         33.3    31.1    36.6      NA         NA
 Monounsaturated fat (g)         37.1    33.9    41.8      NA         NA
 Polyunsaturated fat (g)         28.1    26.4    30.1      NA         NA
       Linoleic acid (g)         26.1    24.6    27.7      NA        100
Alpha linolenic acid (g)          1.7     1.5     2.0      NA        100
  LC n3 fatty acids (mg)        207.7    85.5   479.0      NA         83
  Vitamin A equivs (mcg)       1767.0  1539.6  1988.2     100        100
           Retinol (mcg)        563.0   508.5   634.0      NA         NA
      Provitamin A (mcg)       7174.7  6010.9  8292.7      NA         NA
            Thiamin (mg)          2.7     2.5     2.9     100        100
         Riboflavin (mg)          3.7     3.4     4.0     100        100
             Niacin (mg)         71.5    67.9    75.5     100        100
      Folate (mcg total)        727.3   662.4   780.6      NA         NA
     Folate equivs (mcg)       1025.6   915.3  1114.7     100        100
          Vitamin C (mg)        199.9   151.3   243.1     100        100
         Vitamin D (mcg)          4.6     3.7     5.8      NA         19
          Vitamin E (mg)         18.5    16.3    21.0      NA        100
            Calcium (mg)       1638.2  1553.7  1742.4     100        100
               Iron (mg)         19.4    18.0    21.3     100        100
            Iodine (mcg)        254.3   227.0   304.9     100        100
          Magnesium (mg)        608.9   580.5   636.3     100        100
         Phosphorus (mg)       2597.1  2523.8  2719.0     100        100
          Potassium (mg)       5229.3  5020.1  5453.9      NA        100
             Sodium (mg)       2296.3  1923.6  2681.6      NA        100
               Zinc (mg)         29.4    18.0   179.4     100        100
        Cholesterol (mg)        274.4   211.4   359.5      NA         NA
          Selenium (mcg)         94.7    85.8   105.4     100        100
         Vitamin B6 (mg)          2.2     2.0     2.7     100        100
       Vitamin B12 (mcg)          8.0     7.4     9.4     100        100

         Percent energy from fat 31.5
     Percent energy from protein 21.1
Percent energy from carbohydrate 47.3
```

A15.30 Summary 7-day *Total Diets* Boys 14-18 years higher energy level

Higher age, 18yrs and high activity PAL 2

Boys14to18.hitot1:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            14
 [6,] OtherVeg             28
 [7,] TotalFruit           21
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       42
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          4
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      14952.7 14599.3 15297.5      NA         NA
             Energy (kJ)      15492.3 15126.4 15871.1      NA         NA
             Protein (g)        178.8   170.3   236.3     100        100
                 Fat (g)        116.3   110.8   122.3      NA         NA
        Carbohydrate (g)        455.9   439.1   470.6      NA         NA
              Sugars (g)        162.0   150.0   172.8      NA         NA
              Starch (g)        292.1   275.0   304.4      NA         NA
               Fibre (g)         69.3    63.5    76.2      NA        100
       Saturated fat (g)         33.9    31.6    36.1      NA         NA
 Monounsaturated fat (g)         41.1    38.4    45.0      NA         NA
 Polyunsaturated fat (g)         32.9    31.0    35.1      NA         NA
       Linoleic acid (g)         30.6    28.9    32.8      NA        100
Alpha linolenic acid (g)          2.0     1.7     2.5      NA        100
  LC n3 fatty acids (mg)        185.4    95.0   413.4      NA         76
  Vitamin A equivs (mcg)       1835.9  1562.0  2083.5     100        100
           Retinol (mcg)        595.5   542.6   676.6      NA         NA
      Provitamin A (mcg)       7392.4  5572.9  8879.2      NA         NA
            Thiamin (mg)          3.6     3.4     3.8     100        100
         Riboflavin (mg)          4.4     4.0     4.8     100        100
             Niacin (mg)         87.4    83.0    90.4     100        100
      Folate (mcg total)        959.8   875.0  1057.1      NA         NA
     Folate equivs (mcg)       1399.8  1298.5  1547.8     100        100
          Vitamin C (mg)        239.3   191.8   292.4     100        100
         Vitamin D (mcg)          5.0     4.4     5.9      NA         53
          Vitamin E (mg)         21.5    18.7    24.3      NA        100
            Calcium (mg)       1911.5  1808.8  2015.6     100        100
               Iron (mg)         24.6    22.5    26.2     100        100
            Iodine (mcg)        319.8   285.9   383.4     100        100
          Magnesium (mg)        780.5   740.4   807.0     100        100
         Phosphorus (mg)       3133.7  3017.6  3242.9     100        100
          Potassium (mg)       6549.4  6290.7  6792.2      NA        100
             Sodium (mg)       2532.9  2308.1  2762.6      NA        100
               Zinc (mg)         25.6    21.6   103.1     100        100
        Cholesterol (mg)        272.5   215.8   377.2      NA         NA
          Selenium (mg)         113.7   104.0   121.0     100        100
         Vitamin B6 (mg)          2.9     2.6     3.3     100        100
       Vitamin B12 (mg)           9.1     8.5    10.2     100        100

         Percent energy from fat 28.3
     Percent energy from protein 20.0
Percent energy from carbohydrate 51.6
```

Boys14to18.hitot2:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            17
 [6,] OtherVeg             28
 [7,] TotalFruit           28
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       28
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          4
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      15080.9 14668.1 15432.3      NA         NA
             Energy (kJ)      15640.9 15264.7 15989.6      NA         NA
             Protein (g)        182.8   170.3   239.0     100        100
                 Fat (g)        127.1   120.6   134.3      NA         NA
        Carbohydrate (g)        441.7   424.0   455.1      NA         NA
              Sugars (g)        190.9   179.7   204.6      NA         NA
              Starch (g)        248.5   235.2   261.0      NA         NA
               Fibre (g)         71.8    65.5    79.0      NA        100
       Saturated fat (g)         37.7    35.2    40.3      NA         NA
 Monounsaturated fat (g)         45.5    42.9    49.2      NA         NA
 Polyunsaturated fat (g)         34.9    32.6    38.0      NA         NA
       Linoleic acid (g)         32.6    30.7    35.2      NA        100
Alpha linolenic acid (g)          2.1     1.6     2.5      NA        100
  LC n3 fatty acids (mg)        196.9    91.0   436.3      NA         76
  Vitamin A equivs (mcg)       1872.0  1638.2  2111.8     100        100
           Retinol (mcg)        622.0   572.9   673.5      NA         NA
      Provitamin A (mcg)       7446.4  5964.4  8889.9      NA         NA
             Thiamin (mg)          3.5     3.3     3.8     100        100
          Riboflavin (mg)          4.4     4.0     4.7     100        100
              Niacin (mg)         87.6    82.3    91.6     100        100
      Folate (mcg total)       1019.4   940.1  1094.7      NA         NA
     Folate equivs (mcg)       1396.6  1298.3  1544.0     100        100
          Vitamin C (mg)        269.7   230.6   321.8     100        100
          Vitamin D (mcg)         5.2     4.5     6.4      NA         63
          Vitamin E (mg)         23.2    20.7    25.6      NA        100
            Calcium (mg)       1929.1  1793.0  2069.9     100        100
               Iron (mg)         24.6    22.4    26.1     100        100
            Iodine (mcg)        304.4   279.5   331.3     100        100
          Magnesium (mg)        805.3   769.3   843.5     100        100
          Phosphorus (mg)       3158.1  3054.3  3297.0     100        100
          Potassium (mg)        6871.0  6599.0  7179.0      NA        100
             Sodium (mg)        2498.6  2259.0  2777.1      NA        100
               Zinc (mg)         32.5    21.8   109.0     100        100
        Cholesterol (mg)        279.7   221.4   386.6      NA         NA
          Selenium (mg)         110.7   101.3   122.7     100        100
          Vitamin B6 (mg)         3.0     2.8     3.5     100        100
        Vitamin B12 (mg)          8.9     8.2    10.5     100        100

         Percent energy from fat 30.5
     Percent energy from protein 20.1
Percent energy from carbohydrate 49.4
```

Boys14to18.hitot3:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            17
 [6,] OtherVeg             28
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       42
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      14899.1 14565.3 15214.6      NA         NA
             Energy (kJ)      15415.7 15082.8 15744.4      NA         NA
             Protein (g)        179.7   168.8   237.1     100        100
                 Fat (g)        123.8   116.8   130.5      NA         NA
        Carbohydrate (g)        437.9   422.4   453.8      NA         NA
              Sugars (g)        150.4   138.4   162.8      NA         NA
              Starch (g)        286.1   269.7   299.5      NA         NA
               Fibre (g)         65.6    60.7    70.5      NA        100
       Saturated fat (g)         34.8    32.4    37.1      NA         NA
 Monounsaturated fat (g)         45.3    42.0    48.8      NA         NA
 Polyunsaturated fat (g)         35.2    32.6    37.2      NA         NA
       Linoleic acid (g)         32.8    30.8    34.6      NA        100
Alpha linolenic acid (g)          2.1     1.7     2.4      NA        100
  LC n3 fatty acids (mg)        191.3    89.9   404.9      NA         72
  Vitamin A equivs (mcg)       1744.2  1472.1  2020.2     100        100
           Retinol (mcg)        551.5   501.8   608.9      NA         NA
      Provitamin A (mcg)       7104.4  5439.6  8731.8      NA         NA
            Thiamin (mg)          3.6     3.4     3.9     100        100
         Riboflavin (mg)          4.1     3.8     4.4     100        100
             Niacin (mg)         87.0    82.6    90.7     100        100
      Folate (mcg total)        920.5   857.1   996.7      NA         NA
     Folate equivs (mcg)       1362.5  1253.2  1474.4     100        100
          Vitamin C (mg)        204.4   169.2   242.9     100        100
         Vitamin D (mcg)          4.5     3.8     5.5      NA         12
          Vitamin E (mg)         22.8    20.6    25.7      NA        100
            Calcium (mg)       1799.8  1664.4  1911.0     100        100
               Iron (mg)         24.9    23.0    26.8     100        100
            Iodine (mcg)        290.3   265.6   380.0     100        100
          Magnesium (mg)        766.9   732.5   799.9     100        100
         Phosphorus (mg)       3051.1  2940.6  3166.6     100        100
          Potassium (mg)       5854.5  5657.6  6112.1      NA        100
             Sodium (mg)       2644.0  2421.3  3009.1      NA        100
               Zinc (mg)         29.0    21.4   103.2     100        100
        Cholesterol (mg)        268.8   213.2   371.1      NA         NA
          Selenium (mcg)        114.1   105.9   126.3     100        100
         Vitamin B6 (mg)          2.7     2.4     3.1     100        100
       Vitamin B12 (mcg)          8.4     7.8    10.0     100        100

         Percent energy from fat 30.2
     Percent energy from protein 20.2
Percent energy from carbohydrate 49.6
```

Boys14to18.hitot4:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            14
 [6,] OtherVeg             28
 [7,] TotalFruit           21
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       35
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          4
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      15039.7 14651.5 15365.0      NA         NA
             Energy (kJ)      15576.4 15179.7 15949.2      NA         NA
             Protein (g)        184.4   170.2   239.2     100        100
                 Fat (g)        121.7   114.6   129.0      NA         NA
        Carbohydrate (g)        450.2   432.6   468.4      NA         NA
              Sugars (g)        175.6   161.5   188.8      NA         NA
              Starch (g)        272.7   253.1   287.8      NA         NA
               Fibre (g)         68.8    64.5    75.1      NA        100
       Saturated fat (g)         37.0    34.1    38.8      NA         NA
 Monounsaturated fat (g)         43.0    40.1    45.5      NA         NA
 Polyunsaturated fat (g)         33.1    31.1    36.5      NA         NA
       Linoleic acid (g)         30.7    29.0    33.5      NA        100
Alpha linolenic acid (g)          2.0     1.8     2.5      NA        100
  LC n3 fatty acids (mg)        191.6    89.4   537.2      NA         79
  Vitamin A equivs (mcg)       1868.9  1673.8  2163.3     100        100
            Retinol (mcg)        620.2   579.7   662.3      NA         NA
      Provitamin A (mcg)        7436.3  6292.2  9157.4      NA         NA
            Thiamin (mg)          3.5     3.3     3.8     100        100
         Riboflavin (mg)          4.4     4.0     4.7     100        100
             Niacin (mg)         86.7    82.5    89.9     100        100
      Folate (mcg total)        953.0   876.3  1013.0      NA         NA
     Folate equivs (mcg)       1358.7  1264.9  1484.6     100        100
          Vitamin C (mg)        242.2   202.8   303.4     100        100
         Vitamin D (mcg)          5.2     4.5     6.7      NA         72
          Vitamin E (mg)         21.7    19.1    23.8      NA        100
            Calcium (mg)       1929.2  1818.4  2024.0     100        100
               Iron (mg)         24.6    23.1    27.2     100        100
            Iodine (mcg)        313.9   283.5   378.1     100        100
          Magnesium (mg)        780.1   754.3   811.9     100        100
         Phosphorus (mg)       3149.9  3035.8  3243.2     100        100
          Potassium (mg)       6606.9  6401.3  6828.1      NA        100
             Sodium (mg)       2603.5  2279.7  2971.9      NA        100
               Zinc (mg)         33.8    21.5   103.2     100        100
        Cholesterol (mg)        285.5   227.4   348.7      NA         NA
          Selenium (mcg)        112.7   104.9   123.8     100        100
         Vitamin B6 (mg)          2.9     2.6     3.3     100        100
       Vitamin B12 (mcg)          9.1     8.4     9.7     100        100

         Percent energy from fat 29.3
     Percent energy from protein 20.4
Percent energy from carbohydrate 50.3
```

Boys14to18.hitot5:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            14
 [6,] OtherVeg             35
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       35
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          4
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               17.5
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      15007.0 14715.4 15301.3      NA         NA
             Energy (kJ)      15539.5 15242.0 15836.6      NA         NA
             Protein (g)        182.8   170.1   237.8     100        100
                 Fat (g)        124.1   117.3   131.0      NA         NA
        Carbohydrate (g)        443.6   425.7   467.7      NA         NA
              Sugars (g)        180.7   167.0   193.2      NA         NA
              Starch (g)        261.0   247.2   275.9      NA         NA
               Fibre (g)         68.4    62.7    76.9      NA        100
       Saturated fat (g)         38.5    35.7    42.0      NA         NA
 Monounsaturated fat (g)         43.8    40.8    46.9      NA         NA
 Polyunsaturated fat (g)         33.0    30.4    35.6      NA         NA
       Linoleic acid (g)         30.7    28.5    32.8      NA        100
Alpha linolenic acid (g)          2.0     1.7     2.5      NA        100
  LC n3 fatty acids (mg)        209.2    94.5   433.6      NA         83
  Vitamin A equivs (mcg)       1921.7  1651.4  2136.7     100        100
           Retinol (mcg)        633.1   582.6   710.0      NA         NA
      Provitamin A (mcg)       7673.7  6134.8  8916.0      NA         NA
            Thiamin (mg)          3.3     3.1     3.6     100        100
         Riboflavin (mg)          4.3     4.0     4.6     100        100
             Niacin (mg)         85.6    80.5    90.0     100        100
      Folate (mcg total)        940.1   874.1   997.8      NA         NA
     Folate equivs (mcg)       1308.3  1227.3  1393.8     100        100
          Vitamin C (mg)        265.3   221.9   328.2     100        100
         Vitamin D (mcg)          5.3     4.7     6.4      NA         78
          Vitamin E (mg)         21.9    19.5    24.4      NA        100
            Calcium (mg)       1912.4  1775.1  2010.4     100        100
               Iron (mg)         23.9    22.3    25.9     100        100
            Iodine (mcg)        304.9   281.6   329.4     100        100
          Magnesium (mg)        765.3   722.7   808.7     100        100
         Phosphorus (mg)       3116.1  3004.3  3217.6     100        100
          Potassium (mg)       6696.4  6497.2  6958.2      NA        100
             Sodium (mg)       2598.8  2345.8  2895.9      NA        100
               Zinc (mg)         32.0    21.4   107.9     100        100
        Cholesterol (mg)        292.8   231.8   425.9      NA         NA
          Selenium (mcg)        110.8   102.4   120.9     100        100
         Vitamin B6 (mg)          2.9     2.6     3.4     100        100
       Vitamin B12 (mcg)          9.1     8.3    10.9     100        100

         Percent energy from fat 30.0
     Percent energy from protein 20.3
Percent energy from carbohydrate 49.8
```

Boys14to18.hitot6:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           10
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            14
 [6,] OtherVeg             28
 [7,] TotalFruit           28
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       35
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          4
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               17.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      15082.3 14724.4 15408.6      NA         NA
             Energy (kJ)      15618.2 15254.5 15945.9      NA         NA
             Protein (g)        180.0   166.4   233.9     100        100
                 Fat (g)        123.7   118.4   131.5      NA         NA
        Carbohydrate (g)        451.6   430.0   471.0      NA         NA
              Sugars (g)        194.8   178.1   209.6      NA         NA
              Starch (g)        254.5   240.9   267.9      NA         NA
               Fibre (g)         68.3    64.2    73.3      NA        100
       Saturated fat (g)         38.2    36.2    41.0      NA         NA
 Monounsaturated fat (g)         43.6    39.9    46.4      NA         NA
 Polyunsaturated fat (g)         33.1    30.9    35.8      NA         NA
       Linoleic acid (g)         30.7    28.6    32.9      NA        100
Alpha linolenic acid (g)          2.1     1.8     2.5      NA        100
  LC n3 fatty acids (mg)        192.8   100.0   427.5      NA         75
  Vitamin A equivs (mcg)       1893.6  1646.2  2155.1     100        100
            Retinol (mcg)        633.1   580.8   687.0      NA         NA
      Provitamin A (mcg)        7508.8  6085.4  9069.4      NA         NA
            Thiamin (mg)          3.3     3.1     3.6     100        100
         Riboflavin (mg)          4.3     3.9     4.5     100        100
             Niacin (mg)         84.1    79.5    90.8     100        100
      Folate (mcg total)        964.7   903.2  1027.7      NA         NA
     Folate equivs (mcg)       1335.8  1252.7  1432.5     100        100
          Vitamin C (mg)        263.9   216.1   329.5     100        100
         Vitamin D (mcg)          5.3     4.5     6.3      NA         76
          Vitamin E (mg)         22.1    19.5    23.9      NA        100
            Calcium (mg)       1906.2  1805.2  2004.5     100        100
               Iron (mg)         23.6    21.9    25.4     100        100
            Iodine (mcg)        305.5   280.0   361.1     100        100
          Magnesium (mg)        760.4   716.7   795.1     100        100
         Phosphorus (mg)       3071.1  2981.4  3165.6     100        100
          Potassium (mg)       6545.1  6365.6  6815.4      NA        100
             Sodium (mg)       2574.8  2328.8  2868.7      NA        100
               Zinc (mg)         31.0    20.7   103.1     100        100
        Cholesterol (mg)        293.8   234.6   392.8      NA         NA
          Selenium (mg)         109.5   101.7   123.9     100        100
         Vitamin B6 (mg)          2.9     2.6     3.3     100        100
       Vitamin B12 (mg)           9.1     8.3    10.4     100        100

         Percent energy from fat 29.7
     Percent energy from protein 19.9
Percent energy from carbohydrate 50.4
```

A15.31 Sample *7-day Total Diets* for Girls 2-3 years mid energy level

Average, aged 2.5y and energy at light to moderate activity

Girls2to3.avtot1:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           2.5
 [2,] GreenBrassicas       3.5
 [3,] OrangeVeg            3.5
 [4,] Legumes              2
 [5,] NutsSeeds            0
 [6,] OtherVeg             7
 [7,] TotalFruit           7
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       4916.2  4697.2  5229.4      NA         NA
             Energy (kJ)       5084.4  4856.5  5399.5      NA         NA
             Protein (g)         62.4    59.7    65.5     100        100
                 Fat (g)         30.8    27.2    35.7      NA         NA
        Carbohydrate (g)        161.6   150.1   173.4      NA         NA
              Sugars (g)         55.1    49.3    60.1      NA         NA
              Starch (g)        105.7    95.3   114.9      NA         NA
               Fibre (g)         22.9    19.9    28.6      NA        100
       Saturated fat (g)         10.1     8.9    11.5      NA         NA
 Monounsaturated fat (g)          9.9     8.0    12.4      NA         NA
 Polyunsaturated fat (g)          8.2     7.4     8.9      NA         NA
       Linoleic acid (g)          7.4     6.7     8.1      NA        100
Alpha linolenic acid (g)          0.6     0.5     0.8      NA        100
  LC n3 fatty acids (mg)        107.1    39.1   385.1      NA         99
  Vitamin A equivs (mcg)        757.4   616.8   977.2     100        100
           Retinol (mcg)        214.5   182.6   262.1      NA         NA
      Provitamin A (mcg)       3217.2  2405.2  4560.9      NA         NA
             Thiamin (mg)          1.1     0.9     1.2     100        100
          Riboflavin (mg)          1.6     1.4     1.8     100        100
              Niacin (mg)         30.4    27.1    33.2     100        100
      Folate (mcg total)        291.5   238.6   338.9      NA         NA
     Folate equivs (mcg)        479.7   414.4   545.8     100        100
          Vitamin C (mg)         64.9    42.5    85.3     100        100
          Vitamin D (mcg)          1.9     1.4     3.0      NA          0
           Vitamin E (mg)          5.5     4.5     6.8      NA         88
             Calcium (mg)        703.2   645.0   772.3     100        100
                Iron (mg)          8.1     7.1     9.1     100          4
             Iodine (mcg)        130.7   110.6   147.0     100        100
           Magnesium (mg)        244.8   228.1   269.9     100        100
          Phosphorus (mg)       1105.6  1048.9  1163.7     100        100
           Potassium (mg)       2192.5  2000.9  2396.2      NA        100
              Sodium (mg)        953.0   809.3  1133.4      NA        100
                Zinc (mg)          8.0     7.4    13.4     100        100
        Cholesterol (mg)         125.3    78.5   216.3      NA         NA
          Selenium (mcg)          43.4    37.3    51.5     100        100
          Vitamin B6 (mg)          1.1     0.8     1.6     100        100
        Vitamin B12 (mcg)          3.8     3.3     4.6     100        100

         Percent energy from fat 23.0
     Percent energy from protein 21.4
Percent energy from carbohydrate 55.6
```

Girls2to3.avtot2:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           4
 [2,] GreenBrassicas       3.5
 [3,] OrangeVeg            4
 [4,] Legumes              2
 [5,] NutsSeeds            0
 [6,] OtherVeg             10
 [7,] TotalFruit           14
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       9
[10,] Poultryfisheggsleg   3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             7
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       4828.3  4615.0  5091.9      NA         NA
             Energy (kJ)       5025.1  4811.7  5290.8      NA         NA
             Protein (g)         61.4    58.6    65.1     100        100
                 Fat (g)         27.8    24.0    33.0      NA         NA
        Carbohydrate (g)        164.5   155.5   178.1      NA         NA
              Sugars (g)         72.3    65.3    78.9      NA         NA
              Starch (g)         91.0    81.4   102.6      NA         NA
               Fibre (g)         26.6    22.4    34.8      NA        100
       Saturated fat (g)          9.2     7.9    10.6      NA         NA
 Monounsaturated fat (g)          9.1     7.4    12.1      NA         NA
 Polyunsaturated fat (g)          7.0     6.3     7.7      NA         NA
       Linoleic acid (g)          6.2     5.6     6.9      NA        100
Alpha linolenic acid (g)          0.6     0.5     0.7      NA         94
  LC n3 fatty acids (mg)        118.5    32.8   457.7      NA         97
  Vitamin A equivs (mcg)        813.8   644.4   973.8     100        100
           Retinol (mcg)        178.1   146.0   227.0      NA         NA
      Provitamin A (mcg)       3778.3  2708.9  4767.0      NA         NA
            Thiamin (mg)          1.1     1.0     1.3     100        100
         Riboflavin (mg)          1.6     1.4     1.8     100        100
             Niacin (mg)         30.3    27.6    32.8     100        100
      Folate (mcg total)        337.9   291.6   384.9      NA         NA
     Folate equivs (mcg)        503.4   446.8   584.3     100        100
          Vitamin C (mg)         96.7    71.2   132.2     100        100
         Vitamin D (mcg)          1.7     1.2     3.3      NA          0
          Vitamin E (mg)          5.6     4.5     6.5      NA         92
            Calcium (mg)        708.0   641.3   775.8     100        100
               Iron (mg)          8.3     7.2     9.2     100          5
            Iodine (mcg)        125.0   104.4   142.1     100        100
          Magnesium (mg)        265.3   243.3   289.5     100        100
         Phosphorus (mg)       1110.2  1039.8  1180.0     100        100
          Potassium (mg)       2613.7  2396.8  2775.5      NA        100
             Sodium (mg)        872.6   741.8  1007.6      NA        100
               Zinc (mg)          8.1     7.4     8.9     100        100
        Cholesterol (mg)        119.6    74.7   208.3      NA         NA
          Selenium (mcg)         41.8    33.9    49.1     100        100
         Vitamin B6 (mg)          1.3     0.9     1.8     100        100
       Vitamin B12 (mcg)          3.6     3.2     4.2     100        100

         Percent energy from fat 21.0
     Percent energy from protein 21.3
Percent energy from carbohydrate 57.7
```

Girls2to3.avtot3:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           4
 [2,] GreenBrassicas       4
 [3,] OrangeVeg            4
 [4,] Legumes              2
 [5,] NutsSeeds            0
 [6,] OtherVeg             14
 [7,] TotalFruit           7
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       9
[10,] Poultryfisheggsleg   3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             7
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       4783.3  4602.4  5007.6      NA         NA
             Energy (kJ)       4958.7  4761.4  5184.1      NA         NA
             Protein (g)         64.0    58.2   121.0     100        100
                 Fat (g)         32.0    28.3    37.9      NA         NA
        Carbohydrate (g)        152.0   140.8   163.5      NA         NA
              Sugars (g)         61.7    54.5    68.1      NA         NA
              Starch (g)         89.5    78.0    99.6      NA         NA
               Fibre (g)         24.1    20.1    32.1      NA        100
       Saturated fat (g)         11.3     9.5    12.7      NA         NA
 Monounsaturated fat (g)         10.9     8.7    14.3      NA         NA
 Polyunsaturated fat (g)          7.3     6.6     8.2      NA         NA
       Linoleic acid (g)          6.5     5.9     7.4      NA        100
Alpha linolenic acid (g)          0.6     0.5     0.7      NA         94
  LC n3 fatty acids (mg)        109.5    40.0   309.1      NA         99
  Vitamin A equivs (mcg)        830.2   641.1  1061.7     100        100
           Retinol (mcg)        196.4   167.1   231.4      NA         NA
      Provitamin A (mcg)       3761.3  2734.9  4987.2      NA         NA
            Thiamin (mg)          1.1     0.9     1.2     100        100
         Riboflavin (mg)          1.6     1.4     1.8     100        100
             Niacin (mg)         30.1    27.2    32.6     100        100
      Folate (mcg total)        300.4   260.2   362.1      NA         NA
     Folate equivs (mcg)        452.6   397.2   505.4     100        100
          Vitamin C (mg)         88.3    68.2   117.1     100        100
         Vitamin D (mcg)          1.7     1.3     2.5      NA          0
          Vitamin E (mg)          5.6     4.4     6.9      NA         87
            Calcium (mg)        702.1   619.2   779.0     100        100
               Iron (mg)          8.1     7.0     9.3     100          4
            Iodine (mcg)        123.3   109.8   138.4     100        100
          Magnesium (mg)        250.3   228.1   271.4     100        100
         Phosphorus (mg)       1112.0  1057.4  1184.2     100        100
          Potassium (mg)       2480.3  2311.0  2663.4      NA        100
             Sodium (mg)        927.4   765.2  1073.1      NA        100
               Zinc (mg)         11.3     7.6    88.5     100        100
        Cholesterol (mg)        133.4    83.7   207.0      NA         NA
          Selenium (mcg)         42.6    33.0    51.6     100        100
         Vitamin B6 (mg)          1.4     0.9     2.1     100        100
       Vitamin B12 (mcg)          3.7     3.3     4.2     100        100

         Percent energy from fat 24.3
     Percent energy from protein 22.3
Percent energy from carbohydrate 53.4
```

Girls2to3.avtot4:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           2.5
 [2,] GreenBrassicas       3.5
 [3,] OrangeVeg            3.5
 [4,] Legumes              3
 [5,] NutsSeeds            0
 [6,] OtherVeg             7
 [7,] TotalFruit           7
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       9
[10,] Poultryfisheggsleg   3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             7
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       4724.4  4480.8  5035.9      NA         NA
             Energy (kJ)       4891.1  4637.6  5218.6      NA         NA
             Protein (g)         61.5    58.5    65.5     100        100
                 Fat (g)         30.6    26.2    35.2      NA         NA
        Carbohydrate (g)        151.9   142.1   168.5      NA         NA
              Sugars (g)         60.0    53.0    66.0      NA         NA
              Starch (g)         91.1    83.0   103.2      NA         NA
               Fibre (g)         22.4    18.8    28.8      NA        100
       Saturated fat (g)         11.0     9.5    13.2      NA         NA
 Monounsaturated fat (g)          9.9     7.8    12.2      NA         NA
 Polyunsaturated fat (g)          7.2     6.4     8.3      NA         NA
       Linoleic acid (g)          6.4     5.7     7.3      NA        100
Alpha linolenic acid (g)          0.6     0.5     0.8      NA         97
  LC n3 fatty acids (mg)        102.1    40.5   344.9      NA        100
  Vitamin A equivs (mcg)        722.9   544.7   911.7     100        100
           Retinol (mcg)        196.7   167.8   242.7      NA         NA
      Provitamin A (mcg)       3117.9  2150.8  4225.5      NA         NA
            Thiamin (mg)          1.1     0.9     1.2     100        100
         Riboflavin (mg)          1.6     1.4     1.8     100        100
             Niacin (mg)         29.7    27.0    32.2     100        100
      Folate (mcg total)        292.6   233.4   346.9      NA         NA
     Folate equivs (mcg)        458.9   392.4   530.4     100        100
          Vitamin C (mg)         68.7    46.2    87.4     100        100
         Vitamin D (mcg)          1.7     1.4     2.9      NA          0
          Vitamin E (mg)          5.0     3.5     6.7      NA         53
            Calcium (mg)        708.0   654.6   767.6     100        100
               Iron (mg)          8.1     7.2     9.5     100          3
            Iodine (mcg)        126.4   110.5   144.4     100        100
          Magnesium (mg)        247.1   224.6   268.6     100        100
         Phosphorus (mg)       1101.0  1049.0  1170.9     100        100
          Potassium (mg)       2236.2  2030.7  2462.4      NA        100
             Sodium (mg)        945.6   771.1  1100.3      NA        100
               Zinc (mg)          8.0     7.3    13.6     100        100
        Cholesterol (mg)        131.2    77.3   217.1      NA         NA
          Selenium (mcg)         41.4    33.7    50.4     100        100
         Vitamin B6 (mg)          1.1     0.8     1.5     100        100
       Vitamin B12 (mcg)          3.7     3.2     4.4     100        100

         Percent energy from fat 23.7
     Percent energy from protein 21.9
Percent energy from carbohydrate 54.4
```

Girls2to3.avtot5:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           4
 [2,] GreenBrassicas       3.5
 [3,] OrangeVeg            3.5
 [4,] Legumes              3.5
 [5,] NutsSeeds            0
 [6,] OtherVeg             7
 [7,] TotalFruit           10
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       9
[10,] Poultryfisheggsleg   3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       4665.7  4446.8  4857.4      NA         NA
             Energy (kJ)       4842.7  4624.2  5050.5      NA         NA
             Protein (g)         60.8    57.3    63.3     100        100
                 Fat (g)         30.4    25.9    34.7      NA         NA
        Carbohydrate (g)        149.6   137.8   161.0      NA         NA
              Sugars (g)         61.5    53.0    70.8      NA         NA
              Starch (g)         87.1    76.2   100.3      NA         NA
               Fibre (g)         24.4    20.0    29.5      NA        100
       Saturated fat (g)          9.9     8.4    11.2      NA         NA
 Monounsaturated fat (g)          9.7     7.7    12.0      NA         NA
 Polyunsaturated fat (g)          8.3     7.3     8.9      NA         NA
       Linoleic acid (g)          7.4     6.6     8.0      NA        100
Alpha linolenic acid (g)          0.6     0.5     0.8      NA        100
  LC n3 fatty acids (mg)        116.4    36.4   341.3      NA         97
  Vitamin A equivs (mcg)        770.8   600.0   960.7     100        100
           Retinol (mcg)        211.1   181.2   237.4      NA         NA
      Provitamin A (mcg)       3319.8  2362.8  4565.0      NA         NA
            Thiamin (mg)          1.0     0.9     1.2     100        100
         Riboflavin (mg)          1.5     1.4     1.8     100        100
             Niacin (mg)         29.1    27.0    31.3     100        100
      Folate (mcg total)        306.9   263.1   354.6      NA         NA
     Folate equivs (mcg)        458.8   377.9   522.8     100        100
          Vitamin C (mg)         76.7    53.4   104.0     100        100
         Vitamin D (mcg)          1.9     1.5     3.0      NA          0
          Vitamin E (mg)          5.6     4.6     6.8      NA         94
            Calcium (mg)        686.5   629.4   759.0     100        100
               Iron (mg)          7.9     7.1     8.8     100          0
            Iodine (mcg)        120.3   102.7   135.0     100        100
          Magnesium (mg)        248.7   229.8   267.1     100        100
         Phosphorus (mg)       1076.5  1019.6  1137.2     100        100
          Potassium (mg)       2385.8  2221.9  2558.4      NA        100
             Sodium (mg)        851.1   683.7  1054.1      NA        100
               Zinc (mg)          7.9     7.3    13.1     100        100
        Cholesterol (mg)        120.9    73.4   180.5      NA         NA
          Selenium (mcg)         40.9    34.2    49.1     100        100
         Vitamin B6 (mg)          1.1     0.8     1.5     100        100
       Vitamin B12 (mcg)          3.6     3.1     4.4     100        100

         Percent energy from fat 23.8
     Percent energy from protein 21.9
Percent energy from carbohydrate 54.4
```

Girls2to3.avtot6:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       3.5
 [3,] OrangeVeg            3.5
 [4,] Legumes              2
 [5,] NutsSeeds            0
 [6,] OtherVeg             7
 [7,] TotalFruit           10
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       9
[10,] Poultryfisheggsleg   3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       4619.1  4363.3  4821.5      NA         NA
             Energy (kJ)       4788.9  4534.4  5008.0      NA         NA
             Protein (g)         59.4    57.0    62.4     100        100
                 Fat (g)         29.6    26.6    33.6      NA         NA
        Carbohydrate (g)        149.8   140.7   161.1      NA         NA
              Sugars (g)         61.3    54.4    68.4      NA         NA
              Starch (g)         87.5    79.0    98.3      NA         NA
               Fibre (g)         24.4    20.0    33.3      NA        100
       Saturated fat (g)          9.7     8.6    11.0      NA         NA
 Monounsaturated fat (g)          9.4     7.8    11.5      NA         NA
 Polyunsaturated fat (g)          7.9     7.2     8.8      NA         NA
       Linoleic acid (g)          7.2     6.6     7.8      NA        100
Alpha linolenic acid (g)          0.6     0.5     0.8      NA         99
  LC n3 fatty acids (mg)        119.1    38.2   373.3      NA         98
  Vitamin A equivs (mcg)        755.2   586.4   942.8     100        100
            Retinol (mcg)       211.6   180.5   239.0      NA         NA
      Provitamin A (mcg)       3223.2  2254.9  4276.9      NA         NA
            Thiamin (mg)          1.0     0.9     1.2     100        100
         Riboflavin (mg)          1.5     1.3     1.7     100        100
             Niacin (mg)         29.0    27.0    31.1     100        100
      Folate (mcg total)        297.2   250.4   354.9      NA         NA
     Folate equivs (mcg)        450.7   391.4   538.2     100        100
          Vitamin C (mg)         79.2    61.7    96.4     100        100
         Vitamin D (mcg)          1.9     1.4     2.9      NA          0
          Vitamin E (mg)          5.5     4.0     6.7      NA         81
            Calcium (mg)        678.7   614.5   726.5     100        100
               Iron (mg)          7.7     6.9     9.3     100          1
            Iodine (mcg)        120.3   103.9   137.0     100        100
          Magnesium (mg)        242.7   220.7   271.9     100        100
         Phosphorus (mg)       1063.8   986.6  1107.4     100        100
          Potassium (mg)       2382.5  2199.2  2574.5      NA        100
             Sodium (mg)        848.7   668.2  1028.2      NA        100
               Zinc (mg)          7.8     7.1    12.8     100        100
        Cholesterol (mg)        123.1    74.7   184.6      NA         NA
          Selenium (mcg)         40.2    31.0    48.7     100        100
         Vitamin B6 (mg)          1.1     0.8     1.5     100        100
       Vitamin B12 (mcg)          3.6     3.1     4.6     100        100

         Percent energy from fat 23.4
     Percent energy from protein 21.6
Percent energy from carbohydrate 54.9
```

A15.32 Sample *7-day Total Diets* for Girls 2-3 years higher energy level

High end, aged 3yrs and high activity PAL 2

Girls2to3.hitot1:

```
 AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       3.5
 [3,] OrangeVeg            3.5
 [4,] Legumes              7
 [5,] NutsSeeds            0
 [6,] OtherVeg             7
 [7,] TotalFruit           14
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6183.4  5953.2  6477.4      NA         NA
             Energy (kJ)       6427.2  6196.2  6709.9      NA         NA
             Protein (g)         73.5    69.5    76.8     100        100
                 Fat (g)         33.1    28.0    38.1      NA         NA
        Carbohydrate (g)        220.6   209.6   235.3      NA         NA
              Sugars (g)         74.6    68.1    81.7      NA         NA
              Starch (g)        144.7   132.0   154.5      NA         NA
               Fibre (g)         34.9    28.8    45.3      NA        100
       Saturated fat (g)         10.4     8.9    12.0      NA         NA
 Monounsaturated fat (g)         10.4     8.0    12.8      NA         NA
 Polyunsaturated fat (g)          9.4     8.0    10.6      NA         NA
       Linoleic acid (g)          8.4     7.3     9.4      NA        100
Alpha linolenic acid (g)          0.8     0.6     1.0      NA        100
  LC n3 fatty acids (mg)        104.1    42.1   371.1      NA        100
  Vitamin A equivs (mcg)        783.9   625.5   977.0     100        100
           Retinol (mcg)        215.4   183.4   272.1      NA         NA
      Provitamin A (mcg)       3370.0  2567.6  4527.4      NA         NA
            Thiamin (mg)          1.4     1.2     1.5     100        100
         Riboflavin (mg)          1.7     1.5     1.9     100        100
             Niacin (mg)         34.9    32.0    38.2     100        100
      Folate (mcg total)        389.6   345.3   445.7      NA         NA
     Folate equivs (mcg)        606.0   539.4   669.3     100        100
          Vitamin C (mg)         93.7    72.1   117.3     100        100
         Vitamin D (mcg)          1.8     1.5     2.7      NA          0
          Vitamin E (mg)          6.5     5.2     7.6      NA        100
            Calcium (mg)        755.0   691.5   828.6     100        100
               Iron (mg)         10.5     9.6    11.8     100        100
            Iodine (mcg)        139.1   123.4   159.0     100        100
          Magnesium (mg)        313.1   293.6   339.9     100        100
         Phosphorus (mg)       1286.9  1215.2  1352.3     100        100
          Potassium (mg)       2923.7  2731.4  3100.0      NA        100
             Sodium (mg)       1087.4   891.1  1288.6      NA        100
               Zinc (mg)          9.4     8.6    14.8     100        100
        Cholesterol (mg)        124.3    75.5   213.5      NA         NA
          Selenium (mcg)         50.4    41.4    61.4     100        100
         Vitamin B6 (mg)          1.4     1.0     1.7     100        100
       Vitamin B12 (mcg)          4.0     3.5     5.4     100        100

         Percent energy from fat 19.6
     Percent energy from protein 20.0
Percent energy from carbohydrate 60.4
```

Girls2to3.hitot2:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       3.5
 [3,] OrangeVeg            3.5
 [4,] Legumes              3.5
 [5,] NutsSeeds            0
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       18
[10,] Poultryfisheggsleg   3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           2
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6115.2  5794.7  6391.5      NA         NA
             Energy (kJ)       6358.3  6022.9  6653.2      NA         NA
             Protein (g)         72.3    67.9    76.4     100        100
                 Fat (g)         37.5    31.4    42.9      NA         NA
        Carbohydrate (g)        208.1   191.7   220.8      NA         NA
              Sugars (g)         76.9    70.6    85.1      NA         NA
              Starch (g)        129.9   117.8   141.9      NA         NA
               Fibre (g)         34.2    28.2    42.9      NA        100
       Saturated fat (g)         12.1    10.7    13.6      NA         NA
 Monounsaturated fat (g)         12.7     9.5    16.1      NA         NA
 Polyunsaturated fat (g)          9.5     8.3    10.8      NA         NA
       Linoleic acid (g)          8.6     7.5     9.7      NA        100
Alpha linolenic acid (g)          0.7     0.6     0.9      NA        100
  LC n3 fatty acids (mg)        121.6    34.6   327.8      NA         98
  Vitamin A equivs (mcg)        881.1   695.8  1305.0     100        100
           Retinol (mcg)        224.6   186.8   257.8      NA         NA
      Provitamin A (mcg)       3896.5  2886.2  6310.4      NA         NA
            Thiamin (mg)          1.3     1.2     1.5     100        100
         Riboflavin (mg)          1.8     1.6     2.0     100        100
             Niacin (mg)         35.5    33.2    38.0     100        100
      Folate (mcg total)        392.7   341.4   440.1      NA         NA
     Folate equivs (mcg)        598.1   505.9   662.2     100        100
          Vitamin C (mg)        127.0    99.4   168.7     100        100
         Vitamin D (mcg)          2.1     1.5     3.3      NA          0
          Vitamin E (mg)          7.3     6.2     8.7      NA        100
            Calcium (mg)        793.6   714.6   875.5     100        100
               Iron (mg)         10.2     8.7    11.5     100         99
            Iodine (mcg)        137.1   119.2   152.8     100        100
          Magnesium (mg)        314.5   294.4   336.4     100        100
         Phosphorus (mg)       1301.0  1225.0  1377.0     100        100
          Potassium (mg)       3203.9  2976.8  3414.2      NA        100
             Sodium (mg)       1106.1   911.5  1349.9      NA        100
               Zinc (mg)          9.5     8.8    14.8     100        100
        Cholesterol (mg)        124.2    86.3   188.6      NA         NA
          Selenium (mg)         51.5    45.1    64.7     100        100
         Vitamin B6 (mg)          1.8     1.1     2.4     100        100
       Vitamin B12 (mg)           4.0     3.6     4.8     100        100

         Percent energy from fat 22.4
     Percent energy from protein 19.9
Percent energy from carbohydrate 57.7
```

Girls2to3.hitot3:

```
      AllFoodGroups   N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       3.5
 [3,] OrangeVeg            3.5
 [4,] Legumes              3.5
 [5,] NutsSeeds            0
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       12
[10,] AllOtherMeatEggsLeg  3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6191.8  5853.6  6536.8      NA         NA
             Energy (kJ)       6455.9  6107.0  6801.8      NA         NA
             Protein (g)         70.5    66.7   130.0     100        100
                 Fat (g)         38.2    31.3    45.0      NA         NA
        Carbohydrate (g)        214.3   199.5   227.2      NA         NA
              Sugars (g)        100.0    91.8   110.5      NA         NA
              Starch (g)        112.6   101.4   121.1      NA         NA
               Fibre (g)         37.0    30.7    48.3      NA        100
       Saturated fat (g)         12.6    10.1    15.0      NA         NA
 Monounsaturated fat (g)         12.9     9.5    16.4      NA         NA
 Polyunsaturated fat (g)          9.5     8.6    10.6      NA         NA
       Linoleic acid (g)          8.5     7.5     9.4      NA        100
Alpha linolenic acid (g)          0.7     0.6     0.9      NA        100
  LC n3 fatty acids (mg)        119.5    40.4   315.6      NA        100
  Vitamin A equivs (mcg)        922.7   699.9  1163.1     100        100
            Retinol (mcg)       232.2   191.2   280.9      NA         NA
      Provitamin A (mcg)       4108.2  2848.3  5527.9      NA         NA
             Thiamin (mg)          1.3     1.2     1.5     100        100
          Riboflavin (mg)          1.8     1.6     2.0     100        100
              Niacin (mg)         34.7    31.9    37.8     100        100
      Folate (mcg total)         436.1   387.0   485.3      NA         NA
     Folate equivs (mcg)         616.2   548.3   694.3     100        100
          Vitamin C (mg)         150.2   121.1   193.0     100        100
          Vitamin D (mcg)          2.0     1.5     2.8      NA          0
           Vitamin E (mg)          7.9     6.7     9.5      NA        100
             Calcium (mg)        768.8   698.4   862.0     100        100
                Iron (mg)         10.3     8.8    11.6     100         99
             Iodine (mcg)        133.2   112.3   152.8     100        100
           Magnesium (mg)        327.6   304.2   359.0     100        100
          Phosphorus (mg)       1274.4  1201.1  1356.2     100        100
           Potassium (mg)       3478.4  3258.1  3712.9      NA        100
              Sodium (mg)       1054.3   890.6  1268.2      NA        100
                Zinc (mg)         10.1     8.6    89.2     100        100
        Cholesterol (mg)         132.1    70.6   214.8      NA         NA
           Selenium (mcg)         48.2    39.2    57.6     100        100
          Vitamin B6 (mg)          1.9     1.3     2.7     100        100
        Vitamin B12 (mcg)          3.8     3.3     5.7     100        100

         Percent energy from fat 22.4
     Percent energy from protein 19.0
Percent energy from carbohydrate 58.6
```

Girls2to3.hitot4:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           3.5
 [2,] GreenBrassicas       3.5
 [3,] OrangeVeg            3.5
 [4,] Legumes              3.5
 [5,] NutsSeeds            0
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       13
[10,] AllOtherMeatEggsLeg  3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6239.6  6004.7  6543.4      NA         NA
             Energy (kJ)       6487.2  6262.7  6799.3      NA         NA
             Protein (g)         72.6    69.4    75.5     100        100
                 Fat (g)         39.7    35.1    46.4      NA         NA
        Carbohydrate (g)        210.9   200.1   224.8      NA         NA
              Sugars (g)         84.8    77.3    92.4      NA         NA
              Starch (g)        124.7   115.4   137.5      NA         NA
               Fibre (g)         33.1    27.8    41.1      NA        100
       Saturated fat (g)         13.0    11.5    14.9      NA         NA
 Monounsaturated fat (g)         13.5    11.1    17.6      NA         NA
 Polyunsaturated fat (g)          9.9     9.0    11.3      NA         NA
       Linoleic acid (g)          8.9     8.0    10.1      NA        100
Alpha linolenic acid (g)          0.8     0.6     0.9      NA        100
  LC n3 fatty acids (mg)        122.8    36.8   362.8      NA         99
  Vitamin A equivs (mcg)        881.2   693.0  1124.3     100        100
           Retinol (mcg)        232.0   202.2   278.2      NA         NA
      Provitamin A (mcg)       3852.8  2746.9  5366.5      NA         NA
            Thiamin (mg)          1.4     1.3     1.7     100        100
         Riboflavin (mg)          1.9     1.7     2.2     100        100
             Niacin (mg)         36.7    33.4    39.7     100        100
      Folate (mcg total)        406.3   355.1   460.5      NA         NA
     Folate equivs (mcg)        629.5   541.6   701.2     100        100
          Vitamin C (mg)        119.9    90.2   170.0     100        100
         Vitamin D (mcg)          2.0     1.6     2.9      NA          0
          Vitamin E (mg)          7.6     6.4     8.8      NA        100
            Calcium (mg)        809.3   756.3   891.3     100        100
               Iron (mg)         10.8     9.4    12.2     100        100
            Iodine (mcg)        145.6   130.2   164.9     100        100
          Magnesium (mg)        329.4   312.5   353.8     100        100
         Phosphorus (mg)       1333.5  1264.3  1421.6     100        100
          Potassium (mg)       3112.0  2916.7  3365.6      NA        100
             Sodium (mg)       1178.4  1018.7  1432.6      NA        100
               Zinc (mg)          9.6     9.0    10.3     100        100
        Cholesterol (mg)        129.0    87.2   218.2      NA         NA
          Selenium (mcg)         50.8    44.0    61.1     100        100
         Vitamin B6 (mg)          1.8     1.3     2.5     100        100
       Vitamin B12 (mcg)          3.8     3.3     5.7     100        100

         Percent energy from fat 23.2
     Percent energy from protein 19.5
Percent energy from carbohydrate 57.3
```

Girls2to3.hitot5:

```
      AllFoodGroups     N.serves
 [1,] StarchyVeg           3.5
 [2,] GreenBrassicas       3.5
 [3,] OrangeVeg            3.5
 [4,] Legumes              3.5
 [5,] NutsSeeds            0
 [6,] OtherVeg             21
 [7,] TotalFruit           17
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       15
[10,] AllOtherMeatEggsLeg  3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                          Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)        6131.9  5827.8  6393.1      NA         NA
             Energy (kJ)        6377.5  6075.3  6632.4      NA         NA
             Protein (g)          72.0    67.2   128.2     100        100
                 Fat (g)          39.1    34.2    44.7      NA         NA
        Carbohydrate (g)         208.3   198.6   218.6      NA         NA
              Sugars (g)          89.4    82.8    98.5      NA         NA
              Starch (g)         117.4   108.8   127.3      NA         NA
               Fibre (g)          32.4    28.5    38.5      NA        100
       Saturated fat (g)          12.8    11.5    14.7      NA         NA
 Monounsaturated fat (g)          13.4    11.1    16.0      NA         NA
 Polyunsaturated fat (g)           9.7     8.6    10.5      NA         NA
       Linoleic acid (g)           8.7     7.8     9.5      NA        100
Alpha linolenic acid (g)           0.8     0.6     0.9      NA        100
  LC n3 fatty acids (mg)         124.2    36.3   359.2      NA         98
  Vitamin A equivs (mcg)         886.2   729.9  1131.1     100        100
           Retinol (mcg)         230.3   198.1   264.1      NA         NA
      Provitamin A (mcg)        3900.3  3088.2  5375.8      NA         NA
            Thiamin (mg)           1.3     1.2     1.5     100        100
         Riboflavin (mg)           1.8     1.6     2.0     100        100
             Niacin (mg)          34.8    32.0    37.2     100        100
      Folate (mcg total)         401.0   354.7   452.4      NA         NA
     Folate equivs (mcg)         592.0   530.2   654.2     100        100
          Vitamin C (mg)         128.1    83.6   155.0     100        100
         Vitamin D (mcg)           2.0     1.4     3.0      NA          0
          Vitamin E (mg)           7.6     6.3     9.3      NA        100
            Calcium (mg)         771.1   697.9   833.8     100        100
               Iron (mg)          10.1     9.1    11.4     100        100
            Iodine (mcg)         135.2   116.8   159.8     100        100
          Magnesium (mg)         312.6   291.7   348.3     100        100
         Phosphorus (mg)        1266.7  1196.7  1375.2     100        100
          Potassium (mg)        3145.2  2886.2  3376.1      NA        100
             Sodium (mg)        1090.6   906.3  1266.9      NA        100
               Zinc (mg)          11.7     8.7    89.5     100        100
        Cholesterol (mg)         128.5    83.7   187.0      NA         NA
          Selenium (mcg)          48.7    41.3    56.9     100        100
         Vitamin B6 (mg)           1.9     1.3     2.6     100        100
       Vitamin B12 (mcg)           3.9     3.2     4.4     100        100

         Percent energy from fat 23.2
     Percent energy from protein 19.6
Percent energy from carbohydrate 57.3
```

Girls2to3.hitot6:

```
      AllFoodGroups   N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       3.5
 [3,] OrangeVeg            3.5
 [4,] Legumes              3.5
 [5,] NutsSeeds            0
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       13
[10,] AllOtherMeatEggsLeg  3.5
[11,] RedMeats             3.5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           9.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)        6134.7  5827.8  6468.5      NA         NA
             Energy (kJ)        6395.5  6070.3  6751.3      NA         NA
             Protein (g)          70.0    65.8   127.9     100        100
                 Fat (g)          37.6    32.3    46.2      NA         NA
        Carbohydrate (g)         212.6   201.7   227.3      NA         NA
              Sugars (g)          98.4    90.8   110.4      NA         NA
              Starch (g)         112.6   104.3   124.1      NA         NA
               Fibre (g)          36.6    30.0    47.0      NA        100
       Saturated fat (g)          12.4    10.9    15.2      NA         NA
 Monounsaturated fat (g)          12.6     9.9    17.2      NA         NA
 Polyunsaturated fat (g)           9.4     8.1    10.5      NA         NA
       Linoleic acid (g)           8.4     7.3     9.5      NA        100
Alpha linolenic acid (g)           0.7     0.6     0.9      NA        100
  LC n3 fatty acids (mg)         112.7    36.7   364.2      NA         99
  Vitamin A equivs (mcg)         920.3   739.4  1149.4     100        100
           Retinol (mcg)         227.6   195.9   282.6      NA         NA
      Provitamin A (mcg)        4125.2  3155.5  5389.8      NA         NA
            Thiamin (mg)           1.3     1.1     1.5     100        100
         Riboflavin (mg)           1.8     1.5     2.1     100        100
             Niacin (mg)          34.2    31.8    37.3     100        100
      Folate (mcg total)         425.3   378.5   494.9      NA         NA
     Folate equivs (mcg)         594.6   523.0   685.1     100        100
          Vitamin C (mg)         151.8   122.2   191.7     100        100
         Vitamin D (mcg)           1.9     1.4     2.8      NA          0
          Vitamin E (mg)           7.8     6.5     9.1      NA        100
            Calcium (mg)         761.2   697.2   819.2     100        100
               Iron (mg)          10.1     8.9    11.7     100         99
            Iodine (mcg)         129.3   113.2   147.9     100        100
          Magnesium (mg)         320.6   298.8   354.5     100        100
         Phosphorus (mg)        1260.1  1193.5  1339.6     100        100
          Potassium (mg)        3437.9  3210.8  3754.2      NA        100
             Sodium (mg)        1027.2   822.9  1198.7      NA        100
               Zinc (mg)          10.2     8.5    89.2     100        100
        Cholesterol (mg)         126.3    81.2   222.4      NA         NA
          Selenium (mcg)          46.9    39.1    56.4     100        100
         Vitamin B6 (mg)           1.9     1.4     2.7     100        100
       Vitamin B12 (mcg)           3.8     3.2     5.1     100        100

         Percent energy from fat 22.3
     Percent energy from protein 19.1
Percent energy from carbohydrate 58.6
```

A15.33 Sample *7-day Total Diets* for Girls 4-8 years mid energy level

Average aged 6yrs and light to moderate activity PAL 1.7

Girls4to8.avtot1:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            0
 [6,] OtherVeg             10.5
 [7,] TotalFruit           10.5
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       17
[10,] Poultryfisheggsleg   5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           10.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6264.1  6049.0  6495.3      NA         NA
             Energy (kJ)       6509.5  6304.3  6736.4      NA         NA
             Protein (g)         82.8    79.3    87.7     100        100
                 Fat (g)         37.0    33.4    42.9      NA         NA
        Carbohydrate (g)        207.6   197.7   220.1      NA         NA
              Sugars (g)         72.4    65.7    78.9      NA         NA
              Starch (g)        134.3   121.7   145.0      NA         NA
               Fibre (g)         32.8    29.1    39.1      NA        100
       Saturated fat (g)         11.9    10.6    14.0      NA         NA
 Monounsaturated fat (g)         12.1    10.3    15.1      NA         NA
 Polyunsaturated fat (g)          9.6     8.9    10.7      NA         NA
       Linoleic acid (g)          8.5     7.9     9.5      NA         95
Alpha linolenic acid (g)          0.8     0.6     1.0      NA         42
  LC n3 fatty acids (mg)        167.9    71.9   351.9      NA        100
  Vitamin A equivs (mcg)       1293.3  1020.0  1545.3     100        100
           Retinol (mcg)        239.9   209.4   314.7      NA         NA
      Provitamin A (mcg)       6281.1  4703.5  7622.4      NA         NA
            Thiamin (mg)          1.6     1.4     1.8     100        100
         Riboflavin (mg)          2.1     1.8     2.3     100        100
             Niacin (mg)         41.3    36.9    44.5     100        100
      Folate (mcg total)        401.1   334.1   460.1      NA         NA
     Folate equivs (mcg)        654.6   559.9   726.5     100        100
          Vitamin C (mg)        113.9    83.5   151.3     100        100
         Vitamin D (mcg)          2.2     1.8     2.8      NA          0
          Vitamin E (mg)          7.1     5.9     8.3      NA         99
            Calcium (mg)        850.0   772.9   973.0     100        100
               Iron (mg)         11.5    10.4    12.8     100        100
            Iodine (mcg)        161.8   147.1   231.5     100        100
          Magnesium (mg)        328.1   303.3   351.6     100        100
         Phosphorus (mg)       1427.4  1367.2  1522.4     100        100
          Potassium (mg)       3080.1  2879.9  3229.5      NA        100
             Sodium (mg)       1282.1  1075.5  1473.5      NA        100
               Zinc (mg)         10.7    10.0    11.4     100        100
        Cholesterol (mg)        185.7   121.0   333.2      NA         NA
          Selenium (mcg)         61.5    53.3    76.1     100        100
         Vitamin B6 (mg)          1.7     1.1     2.3     100        100
       Vitamin B12 (mcg)          4.7     4.1     6.2     100        100

         Percent energy from fat 21.6
     Percent energy from protein 22.2
Percent energy from carbohydrate 56.2
```

Girls4to8.avtot2:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            0
 [6,] OtherVeg             28
 [7,] TotalFruit           21
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       9
[10,] Poultryfisheggsleg   5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           2
[14,] MidFatDairy          0
[15,] LoFatDairy           10.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6148.2  5833.3  6402.4      NA         NA
             Energy (kJ)       6444.2  6113.7  6704.6      NA         NA
             Protein (g)         83.1    79.2    86.5     100        100
                 Fat (g)         39.4    33.6    44.6      NA         NA
        Carbohydrate (g)        195.7   183.7   208.0      NA         NA
              Sugars (g)         98.2    90.7   106.3      NA         NA
              Starch (g)         96.0    86.1   107.5      NA         NA
               Fibre (g)         40.0    34.3    46.6      NA        100
       Saturated fat (g)         13.0    11.3    15.0      NA         NA
 Monounsaturated fat (g)         12.9     9.7    16.0      NA         NA
 Polyunsaturated fat (g)         10.0     8.9    11.4      NA         NA
       Linoleic acid (g)          8.8     7.8    10.2      NA         96
Alpha linolenic acid (g)          0.8     0.7     1.0      NA         55
  LC n3 fatty acids (mg)        174.9    65.3   405.0      NA        100
  Vitamin A equivs (mcg)       1468.5  1221.1  1689.6     100        100
           Retinol (mcg)        249.3   208.3   326.8      NA         NA
      Provitamin A (mcg)       7275.7  5847.8  8527.7      NA         NA
            Thiamin (mg)          1.4     1.3     1.6     100        100
         Riboflavin (mg)          2.0     1.8     2.3     100        100
             Niacin (mg)         39.8    37.2    42.8     100        100
      Folate (mcg total)        495.8   440.1   550.9      NA         NA
     Folate equivs (mcg)        659.6   582.2   750.8     100        100
          Vitamin C (mg)        193.4   151.0   236.2     100        100
         Vitamin D (mcg)          2.3     1.6     3.4      NA          0
          Vitamin E (mg)          9.2     7.6    10.4      NA        100
            Calcium (mg)        868.2   799.2   932.4     100        100
               Iron (mg)         11.8    10.7    14.1     100        100
            Iodine (mcg)        139.9   122.1   212.8     100        100
          Magnesium (mg)        355.6   330.3   383.9     100        100
         Phosphorus (mg)       1433.3  1374.7  1491.7     100        100
          Potassium (mg)       3988.1  3727.4  4181.3      NA        100
             Sodium (mg)       1090.3   925.6  1344.2      NA        100
               Zinc (mg)         11.1    10.2    11.8     100        100
        Cholesterol (mg)        191.2   109.8   335.4      NA         NA
          Selenium (mcg)         59.0    49.6    66.6     100        100
         Vitamin B6 (mg)          2.9     2.0     3.8     100        100
       Vitamin B12 (mcg)          4.6     3.9     6.3     100        100

         Percent energy from fat 23.1
     Percent energy from protein 22.4
Percent energy from carbohydrate 54.4
```

Girls4to8.avtot3:

```
      AllFoodGroups    N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            0
 [6,] OtherVeg             21
 [7,] TotalFruit           17
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       10
[10,] AllOtherMeatEggsLeg  5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           10.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6168.7  5890.6  6540.9      NA         NA
             Energy (kJ)       6446.8  6160.1  6819.5      NA         NA
             Protein (g)         84.4    79.1   142.4     100        100
                 Fat (g)         39.9    33.9    45.2      NA         NA
        Carbohydrate (g)        196.3   184.5   207.0      NA         NA
              Sugars (g)         92.7    85.3   101.0      NA         NA
              Starch (g)        102.3    94.2   115.6      NA         NA
               Fibre (g)         37.3    32.3    43.3      NA        100
       Saturated fat (g)         13.3    11.5    15.3      NA         NA
 Monounsaturated fat (g)         13.0     9.9    16.2      NA         NA
 Polyunsaturated fat (g)         10.1     9.1    11.2      NA         NA
       Linoleic acid (g)          8.9     8.0     9.9      NA         99
Alpha linolenic acid (g)          0.8     0.7     1.0      NA         75
  LC n3 fatty acids (mg)        176.0    61.8   423.2      NA        100
  Vitamin A equivs (mcg)       1417.1  1100.2  1623.7     100        100
           Retinol (mcg)        247.6   196.0   296.3      NA         NA
      Provitamin A (mcg)       6985.0  5113.1  8141.2      NA         NA
            Thiamin (mg)          1.4     1.2     1.5     100        100
         Riboflavin (mg)          2.0     1.7     2.1     100        100
             Niacin (mg)         39.7    37.1    43.9     100        100
      Folate (mcg total)        460.5   395.1   556.4      NA         NA
     Folate equivs (mcg)        629.9   538.8   711.7     100        100
          Vitamin C (mg)        163.1   123.6   198.7     100        100
         Vitamin D (mcg)          2.2     1.6     3.4      NA          0
          Vitamin E (mg)          8.4     7.1    10.1      NA        100
            Calcium (mg)        825.6   758.7   889.3     100        100
               Iron (mg)         11.6    10.6    13.0     100        100
            Iodine (mcg)        139.9   116.2   160.9     100        100
          Magnesium (mg)        343.0   317.0   367.4     100        100
         Phosphorus (mg)       1409.5  1325.3  1480.3     100        100
          Potassium (mg)       3713.8  3475.0  3929.4      NA        100
             Sodium (mg)       1138.8  1010.2  1317.3      NA        100
               Zinc (mg)         13.3     9.9    91.4     100        100
        Cholesterol (mg)        185.2   124.9   282.8      NA         NA
          Selenium (mcg)         59.4    51.2    69.0     100        100
         Vitamin B6 (mg)          2.5     1.5     3.6     100        100
       Vitamin B12 (mcg)          4.5     4.1     5.8     100        100

         Percent energy from fat 23.3
     Percent energy from protein 22.7
Percent energy from carbohydrate 54.0
```

Girls4to8.avtot4:

```
      AllFoodGroups    N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            0
 [6,] OtherVeg             10.5
 [7,] TotalFruit           10.5
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       15
[10,] AllOtherMeatEggsLeg  5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           10.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6264.3  5998.5  6480.8      NA         NA
             Energy (kJ)       6516.6  6235.6  6727.6      NA         NA
             Protein (g)         85.3    81.1   145.3     100        100
                 Fat (g)         39.8    34.9    43.8      NA         NA
        Carbohydrate (g)        199.7   187.0   211.9      NA         NA
              Sugars (g)         75.6    69.0    82.4      NA         NA
              Starch (g)        123.1   114.5   134.0      NA         NA
               Fibre (g)         34.7    30.2    42.3      NA        100
       Saturated fat (g)         13.3    11.6    14.4      NA         NA
 Monounsaturated fat (g)         12.8    10.6    15.8      NA         NA
 Polyunsaturated fat (g)         10.1     8.8    11.4      NA         NA
       Linoleic acid (g)          9.0     7.8     9.9      NA         99
Alpha linolenic acid (g)          0.9     0.7     1.0      NA         82
  LC n3 fatty acids (mg)        173.0    67.7   406.2      NA        100
  Vitamin A equivs (mcg)       1321.9  1118.4  1521.9     100        100
           Retinol (mcg)        249.5   208.7   296.7      NA         NA
      Provitamin A (mcg)       6397.3  5184.7  7743.5      NA         NA
            Thiamin (mg)          1.4     1.3     1.7     100        100
         Riboflavin (mg)          1.9     1.7     2.2     100        100
             Niacin (mg)         40.4    37.4    42.9     100        100
      Folate (mcg total)        411.9   368.2   459.8      NA         NA
     Folate equivs (mcg)        618.7   542.9   700.9     100        100
          Vitamin C (mg)        118.0    93.6   164.7     100        100
         Vitamin D (mcg)          2.2     1.7     3.0      NA          0
          Vitamin E (mg)          7.4     5.8     9.1      NA         99
            Calcium (mg)        827.1   760.2   879.2     100        100
               Iron (mg)         11.5    10.6    13.0     100        100
            Iodine (mcg)        149.0   129.9   171.0     100        100
          Magnesium (mg)        328.8   306.7   351.9     100        100
         Phosphorus (mg)       1423.4  1345.5  1523.8     100        100
          Potassium (mg)       3261.3  3052.7  3457.4      NA        100
             Sodium (mg)       1247.6  1084.1  1435.8      NA        100
               Zinc (mg)         11.6    10.2    91.4     100        100
        Cholesterol (mg)        188.8   129.5   267.4      NA         NA
          Selenium (mcg)         61.7    52.1    70.9     100        100
         Vitamin B6 (mg)          1.8     1.2     2.4     100        100
       Vitamin B12 (mcg)          4.7     4.0     6.0     100        100

         Percent energy from fat 23.1
     Percent energy from protein 22.8
Percent energy from carbohydrate 54.1
```

Girls4to8.avtot5:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            0
 [6,] OtherVeg             10.5
 [7,] TotalFruit           10.5
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           10.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6280.5  6065.2  6525.9      NA         NA
             Energy (kJ)       6554.2  6327.7  6802.4      NA         NA
             Protein (g)         86.9    81.5    90.1     100        100
                 Fat (g)         39.5    35.5    44.9      NA         NA
        Carbohydrate (g)        199.1   186.9   209.4      NA         NA
              Sugars (g)         77.1    70.7    83.4      NA         NA
              Starch (g)        121.0   109.0   130.3      NA         NA
               Fibre (g)         37.8    31.8    45.6      NA        100
       Saturated fat (g)         13.3    11.7    14.5      NA         NA
 Monounsaturated fat (g)         12.6    10.7    15.2      NA         NA
 Polyunsaturated fat (g)         10.2     9.2    11.9      NA         NA
       Linoleic acid (g)          9.0     8.1    10.5      NA        100
Alpha linolenic acid (g)          0.9     0.7     1.1      NA         72
  LC n3 fatty acids (mg)        169.3    65.0   479.6      NA        100
  Vitamin A equivs (mcg)       1372.7  1100.2  1553.5     100        100
           Retinol (mcg)        247.8   205.9   303.8      NA         NA
      Provitamin A (mcg)       6705.7  5303.5  7810.3      NA         NA
            Thiamin (mg)          1.5     1.4     1.7     100        100
         Riboflavin (mg)          2.0     1.8     2.2     100        100
             Niacin (mg)         41.2    38.6    43.4     100        100
      Folate (mcg total)        446.8   403.9   517.4      NA         NA
     Folate equivs (mcg)        646.2   585.5   722.7     100        100
          Vitamin C (mg)        147.7   109.8   190.2     100        100
         Vitamin D (mcg)          2.2     1.7     3.7      NA          0
          Vitamin E (mg)          7.4     6.2     8.6      NA        100
            Calcium (mg)        850.0   786.0   914.7     100        100
               Iron (mg)         12.4    11.2    13.6     100        100
            Iodine (mcg)        149.1   131.7   213.5     100        100
          Magnesium (mg)        347.2   324.4   385.0     100        100
         Phosphorus (mg)       1464.8  1407.7  1541.0     100        100
          Potassium (mg)       3466.5  3304.7  3669.4      NA        100
             Sodium (mg)       1244.6  1040.3  1467.5      NA        100
               Zinc (mg)         11.3    10.7    11.9     100        100
        Cholesterol (mg)        184.1   122.8   273.1      NA         NA
          Selenium (mcg)         61.0    53.4    71.7     100        100
         Vitamin B6 (mg)          1.9     1.4     2.8     100        100
       Vitamin B12 (mcg)          4.7     3.9     7.7     100        100

         Percent energy from fat 22.9
     Percent energy from protein 23.1
Percent energy from carbohydrate 54.1
```

Girls4to8.avtot6:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            0
 [6,] OtherVeg             10.5
 [7,] TotalFruit           17
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       9
[10,] Poultryfisheggsleg   5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           10.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       6223.9  5935.8  6485.6      NA         NA
             Energy (kJ)       6501.5  6208.1  6772.1      NA         NA
             Protein (g)         85.2    79.0   142.9     100        100
                 Fat (g)         38.7    34.5    45.0      NA         NA
        Carbohydrate (g)        201.8   192.4   212.6      NA         NA
              Sugars (g)         90.9    78.9   101.8      NA         NA
              Starch (g)        109.7   100.8   118.1      NA         NA
               Fibre (g)         40.7    34.2    51.1      NA        100
       Saturated fat (g)         13.0    11.3    15.0      NA         NA
 Monounsaturated fat (g)         12.3    10.5    15.6      NA         NA
 Polyunsaturated fat (g)          9.9     8.7    11.1      NA         NA
       Linoleic acid (g)          8.8     7.7     9.8      NA         98
Alpha linolenic acid (g)          0.8     0.7     1.0      NA         67
  LC n3 fatty acids (mg)        154.1    65.4   380.1      NA        100
  Vitamin A equivs (mcg)       1370.2  1162.4  1658.2     100        100
            Retinol (mcg)        247.7   202.7   333.1      NA         NA
      Provitamin A (mcg)       6701.6  5479.3  7930.1      NA         NA
            Thiamin (mg)          1.4     1.3     1.6     100        100
         Riboflavin (mg)          1.9     1.7     2.1     100        100
             Niacin (mg)         39.7    36.3    43.6     100        100
      Folate (mcg total)        452.3   393.0   505.0      NA         NA
     Folate equivs (mcg)        612.9   541.2   674.1     100        100
          Vitamin C (mg)        149.4   109.5   198.6     100        100
         Vitamin D (mcg)          2.1     1.7     3.1      NA          0
          Vitamin E (mg)          7.6     6.6     8.8      NA        100
            Calcium (mg)        819.1   763.8   894.8     100        100
               Iron (mg)         11.6    10.8    13.2     100        100
            Iodine (mcg)        137.2   119.6   161.3     100        100
          Magnesium (mg)        347.0   323.8   370.7     100        100
         Phosphorus (mg)       1426.5  1362.3  1508.3     100        100
          Potassium (mg)       3848.2  3678.5  4082.3      NA        100
             Sodium (mg)       1120.8   932.1  1306.3      NA        100
               Zinc (mg)         14.0    10.0    91.2     100        100
        Cholesterol (mg)        187.0   121.9   332.1      NA         NA
          Selenium (mcg)         58.0    50.0    66.5     100        100
         Vitamin B6 (mg)          2.0     1.6     2.8     100        100
       Vitamin B12 (mcg)          4.5     3.8     6.0     100        100

         Percent energy from fat 22.4
     Percent energy from protein 22.7
Percent energy from carbohydrate 54.9
```

A15.34 Sample *7-day Total Diets* for Girls 4-8 years higher energy level

High end aged 8yrs and high activity PAL 2

Girls4to8.hitot1:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            0
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           2
[14,] MidFatDairy          0
[15,] LoFatDairy           10.5
[16,] PolyMarg             12
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8260.8  7983.7  8653.9      NA         NA
             Energy (kJ)       8623.3  8319.7  9034.2      NA         NA
             Protein (g)        100.4    96.8   103.5     100        100
                 Fat (g)         45.4    39.8    50.4      NA         NA
        Carbohydrate (g)        290.1   277.0   307.4      NA         NA
              Sugars (g)        104.4    97.3   111.4      NA         NA
              Starch (g)        184.3   172.9   195.3      NA         NA
               Fibre (g)         51.3    45.6    59.2      NA        100
       Saturated fat (g)         14.4    12.7    15.7      NA         NA
 Monounsaturated fat (g)         14.4    11.7    16.6      NA         NA
 Polyunsaturated fat (g)         12.3    11.0    13.7      NA         NA
       Linoleic acid (g)         10.9     9.9    12.1      NA        100
Alpha linolenic acid (g)          1.1     0.9     1.3      NA        100
  LC n3 fatty acids (mg)        161.3    51.6   387.3      NA         99
  Vitamin A equivs (mcg)       1432.1  1274.9  1637.1     100        100
           Retinol (mcg)        279.1   246.1   326.0      NA         NA
      Provitamin A (mcg)       6878.7  5898.7  8138.2      NA         NA
             Thiamin (mg)          2.1     1.9     2.2     100        100
         Riboflavin (mg)           2.4     2.1     2.7     100        100
              Niacin (mg)         50.3    47.0    53.6     100        100
      Folate (mcg total)         564.7   495.9   607.7      NA         NA
     Folate equivs (mcg)         878.6   801.5   957.4     100        100
          Vitamin C (mg)         172.6   141.0   223.1     100        100
         Vitamin D (mcg)           2.5     2.0     3.5      NA          0
          Vitamin E (mg)           9.3     7.7    10.6      NA        100
            Calcium (mg)       1004.1   934.5  1101.6     100        100
               Iron (mg)         15.4    14.3    16.7     100        100
            Iodine (mcg)         183.5   162.1   243.0     100        100
          Magnesium (mg)         447.3   416.8   483.8     100        100
         Phosphorus (mg)        1767.1  1688.2  1835.5     100        100
          Potassium (mg)        4403.4  4157.5  4727.7      NA        100
             Sodium (mg)        1570.1  1389.2  1779.3      NA        100
               Zinc (mg)          13.1    12.4    13.8     100        100
        Cholesterol (mg)         189.0   131.4   279.2      NA         NA
          Selenium (mg)           72.9    64.6    84.8     100        100
         Vitamin B6 (mg)           2.4     1.8     3.1     100        100
       Vitamin B12 (mg)            4.9     4.2     6.0     100        100

         Percent energy from fat 20.0
     Percent energy from protein 20.3
Percent energy from carbohydrate 59.7
```

Girls4to8.hitot2:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            0
 [6,] OtherVeg             28
 [7,] TotalFruit           28
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           2
[14,] MidFatDairy          2
[15,] LoFatDairy           10.5
[16,] PolyMarg             15
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8217.1  7927.8  8568.9      NA         NA
             Energy (kJ)       8583.7  8268.9  8957.6      NA         NA
             Protein (g)         97.4    93.8   100.2     100        100
                 Fat (g)         49.8    44.1    55.5      NA         NA
        Carbohydrate (g)        281.3   269.9   294.3      NA         NA
              Sugars (g)        123.6   115.7   131.9      NA         NA
              Starch (g)        155.9   146.2   169.2      NA         NA
               Fibre (g)         51.3    43.0    60.9      NA        100
       Saturated fat (g)         16.3    14.6    18.5      NA         NA
 Monounsaturated fat (g)         15.9    13.1    19.1      NA         NA
 Polyunsaturated fat (g)         13.2    11.9    14.5      NA         NA
       Linoleic acid (g)         11.7    10.5    12.8      NA        100
Alpha linolenic acid (g)          1.1     0.9     1.3      NA        100
  LC n3 fatty acids (mg)        165.4    66.0   566.0      NA        100
  Vitamin A equivs (mcg)       1612.6  1290.3  1835.3     100        100
           Retinol (mcg)        336.8   296.7   389.8      NA         NA
      Provitamin A (mcg)       7613.1  5634.4  9000.7      NA         NA
            Thiamin (mg)          1.8     1.6     2.0     100        100
         Riboflavin (mg)          2.4     2.1     2.6     100        100
             Niacin (mg)         47.4    44.5    50.9     100        100
      Folate (mcg total)        592.7   524.0   635.0      NA         NA
     Folate equivs (mcg)        824.7   747.6   900.5     100        100
          Vitamin C (mg)        226.6   175.1   306.1     100        100
         Vitamin D (mcg)          3.0     2.4     4.5      NA          0
          Vitamin E (mg)         11.0     9.5    12.5      NA        100
            Calcium (mg)       1005.2   921.9  1083.1     100        100
               Iron (mg)         14.1    13.1    15.5     100        100
            Iodine (mcg)        174.9   146.8   229.4     100        100
          Magnesium (mg)        429.4   391.0   459.5     100        100
         Phosphorus (mg)       1705.4  1631.1  1767.5     100        100
          Potassium (mg)       4892.2  4622.2  5115.7      NA        100
             Sodium (mg)       1408.0  1214.5  1646.3      NA        100
               Zinc (mg)         12.7    11.9    13.4     100        100
        Cholesterol (mg)        193.6   130.7   298.6      NA         NA
          Selenium (mcg)         68.3    54.0    78.0     100        100
         Vitamin B6 (mg)          3.2     2.2     4.1     100        100
       Vitamin B12 (mcg)          5.3     4.6     6.7     100        100

         Percent energy from fat 22.0
     Percent energy from protein 19.8
Percent energy from carbohydrate 58.2
```

Girls4to8.hitot3:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            0
 [6,] OtherVeg             21
 [7,] TotalFruit           28
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       17
[10,] Poultryfisheggsleg   5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          0
[15,] LoFatDairy           10.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8218.5  7901.7  8542.6      NA         NA
             Energy (kJ)       8597.7  8279.2  8947.0      NA         NA
             Protein (g)         99.9    93.3   155.2     100        100
                 Fat (g)         45.1    40.5    52.4      NA         NA
        Carbohydrate (g)        291.6   277.0   309.4      NA         NA
              Sugars (g)        127.2   119.1   135.2      NA         NA
              Starch (g)        162.5   149.7   174.9      NA         NA
               Fibre (g)         50.4    45.3    58.9      NA        100
       Saturated fat (g)         14.5    12.9    16.7      NA         NA
 Monounsaturated fat (g)         14.7    12.5    18.3      NA         NA
 Polyunsaturated fat (g)         11.6    10.6    12.8      NA         NA
       Linoleic acid (g)         10.2     9.2    11.3      NA        100
Alpha linolenic acid (g)          1.0     0.8     1.3      NA        100
  LC n3 fatty acids (mg)        157.9    64.9   351.9      NA        100
  Vitamin A equivs (mcg)       1444.3  1221.6  1681.4     100        100
            Retinol (mcg)        258.3   219.4   299.5      NA         NA
      Provitamin A (mcg)        7084.1  5734.8  8421.7      NA         NA
            Thiamin (mg)          2.0     1.9     2.2     100        100
         Riboflavin (mg)          2.4     2.2     2.8     100        100
             Niacin (mg)         49.5    46.6    54.8     100        100
      Folate (mcg total)        604.7   548.0   659.5      NA         NA
     Folate equivs (mcg)        907.0   837.7   979.5     100        100
          Vitamin C (mg)        195.3   146.8   237.3     100        100
         Vitamin D (mcg)          2.2     1.8     3.1      NA          0
          Vitamin E (mg)          9.8     8.7    11.6      NA        100
            Calcium (mg)        988.5   907.3  1071.5     100        100
               Iron (mg)         15.5    14.5    16.9     100        100
            Iodine (mcg)        180.1   159.4   200.5     100        100
          Magnesium (mg)        451.1   424.7   499.2     100        100
         Phosphorus (mg)       1722.4  1661.3  1807.2     100        100
          Potassium (mg)       4454.7  4213.9  4768.4      NA        100
             Sodium (mg)       1553.9  1324.6  1774.5      NA        100
               Zinc (mg)         15.4    12.2    93.5     100        100
        Cholesterol (mg)        190.9   119.0   293.9      NA         NA
          Selenium (mcg)         71.1    64.1    83.0     100        100
         Vitamin B6 (mg)          2.8     2.0     3.9     100        100
       Vitamin B12 (mcg)          4.7     4.2     5.6     100        100

         Percent energy from fat 19.8
     Percent energy from protein 20.2
Percent energy from carbohydrate 60.0
```

Girls4to8.hitot4:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            0
 [6,] OtherVeg             28
 [7,] TotalFruit           14
 [8,] WholegrainCereals    31
 [9,] RefinedCereals       18
[10,] Poultryfisheggsleg   5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           2
[14,] MidFatDairy          2
[15,] LoFatDairy           10.5
[16,] PolyMarg             15
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8217.7  7907.8  8627.7      NA         NA
             Energy (kJ)       8558.6  8247.2  8997.5      NA         NA
             Protein (g)        101.5    95.6   157.8     100        100
                 Fat (g)         54.2    49.2    63.2      NA         NA
        Carbohydrate (g)        267.6   252.8   281.9      NA         NA
              Sugars (g)         99.2    90.7   108.1      NA         NA
              Starch (g)        167.2   153.0   178.9      NA         NA
               Fibre (g)         48.1    41.6    57.3      NA        100
       Saturated fat (g)         18.4    16.9    20.5      NA         NA
 Monounsaturated fat (g)         17.4    14.8    21.5      NA         NA
 Polyunsaturated fat (g)         13.9    12.8    15.8      NA         NA
       Linoleic acid (g)         12.4    11.4    14.1      NA        100
Alpha linolenic acid (g)          1.1     1.0     1.3      NA        100
  LC n3 fatty acids (mg)        173.5    73.2   409.6      NA        100
  Vitamin A equivs (mcg)       1585.8  1322.1  1888.1     100        100
            Retinol (mcg)        355.5   304.7   406.9      NA         NA
      Provitamin A (mcg)        7332.6  5811.4  8968.8      NA         NA
             Thiamin (mg)          1.9     1.8     2.2     100        100
         Riboflavin (mg)           2.5     2.2     2.7     100        100
              Niacin (mg)         50.3    47.0    53.2     100        100
      Folate (mcg total)         541.6   500.9   606.0      NA         NA
     Folate equivs (mcg)         826.6   727.6   935.6     100        100
          Vitamin C (mg)         185.1   139.6   233.3     100        100
         Vitamin D (mcg)           3.1     2.6     4.0      NA          0
          Vitamin E (mg)          10.6     9.3    12.4      NA        100
            Calcium (mg)        1057.2   974.7  1140.8     100        100
               Iron (mg)         14.9    13.9    16.5     100        100
            Iodine (mcg)         191.1   173.4   257.2     100        100
          Magnesium (mg)         436.7   412.3   464.4     100        100
         Phosphorus (mg)        1800.4  1701.8  1875.5     100        100
          Potassium (mg)        4542.6  4320.2  4760.6      NA        100
             Sodium (mg)        1620.9  1402.9  1813.4      NA        100
               Zinc (mg)         14.1    12.6    93.6     100        100
        Cholesterol (mg)         204.5   129.5   300.6      NA         NA
          Selenium (mcg)          72.7    63.3    81.7     100        100
         Vitamin B6 (mg)           3.1     2.3     4.1     100        100
       Vitamin B12 (mcg)           5.3     4.7     6.0     100        100

         Percent energy from fat 24.0
     Percent energy from protein 20.7
Percent energy from carbohydrate 55.3
```

Girls4to8.hitot5:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            0
 [6,] OtherVeg             21
 [7,] TotalFruit           28
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           2
[14,] MidFatDairy          0
[15,] LoFatDairy           10.5
[16,] PolyMarg             12
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8291.4  7993.1  8616.4      NA         NA
             Energy (kJ)       8665.0  8367.6  8993.3      NA         NA
             Protein (g)        101.8    93.7   158.5     100        100
                 Fat (g)         50.7    46.2    59.1      NA         NA
        Carbohydrate (g)        284.0   269.9   298.3      NA         NA
              Sugars (g)        130.6   122.9   139.8      NA         NA
              Starch (g)        151.4   139.9   163.2      NA         NA
               Fibre (g)         52.4    43.8    63.0      NA        100
       Saturated fat (g)         17.5    15.5    19.6      NA         NA
 Monounsaturated fat (g)         16.2    13.7    20.2      NA         NA
 Polyunsaturated fat (g)         12.5    11.5    14.6      NA         NA
       Linoleic acid (g)         11.0    10.2    12.9      NA        100
Alpha linolenic acid (g)          1.1     0.9     1.3      NA        100
  LC n3 fatty acids (mg)        170.5    67.6   393.2      NA        100
  Vitamin A equivs (mcg)       1529.6  1300.6  1744.0     100        100
            Retinol (mcg)        305.2   262.9   361.2      NA         NA
      Provitamin A (mcg)        7309.9  5994.1  8413.8      NA         NA
            Thiamin (mg)          1.9     1.7     2.1     100        100
         Riboflavin (mg)          2.3     2.2     2.6     100        100
             Niacin (mg)         48.1    45.5    50.5     100        100
      Folate (mcg total)         589.5   519.0   661.8      NA         NA
     Folate equivs (mcg)         826.6   722.1   909.2     100        100
          Vitamin C (mg)         215.0   175.3   269.7     100        100
         Vitamin D (mcg)          2.6     2.2     3.5      NA          0
          Vitamin E (mg)         10.3     8.6    11.7      NA        100
            Calcium (mg)         992.5   911.3  1067.5     100        100
               Iron (mg)         14.8    13.1    16.0     100        100
            Iodine (mcg)         168.0   151.6   235.0     100        100
          Magnesium (mg)         444.0   415.2   470.9     100        100
         Phosphorus (mg)        1734.3  1671.6  1818.6     100        100
          Potassium (mg)        4786.7  4569.5  5057.1      NA        100
             Sodium (mg)        1538.7  1312.8  1860.0      NA        100
               Zinc (mg)         18.6    12.3    93.3     100        100
        Cholesterol (mg)         201.8   144.6   287.6      NA         NA
          Selenium (mcg)         69.3    62.2    78.5     100        100
         Vitamin B6 (mg)          2.8     2.1     3.9     100        100
       Vitamin B12 (mcg)          4.8     4.2     5.5     100        100

         Percent energy from fat 22.0
     Percent energy from protein 20.3
Percent energy from carbohydrate 57.7
```

Girls4to8.hitot6:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            0
 [6,] OtherVeg             28
 [7,] TotalFruit           21
 [8,] WholegrainCereals    32
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   5.5
[11,] RedMeats             5
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           1
[14,] MidFatDairy          1
[15,] LoFatDairy           10.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8205.8  7986.9  8616.4      NA         NA
             Energy (kJ)       8575.9  8343.3  9004.7      NA         NA
             Protein (g)        103.3    95.3   219.3     100        100
                 Fat (g)         49.1    45.0    57.1      NA         NA
        Carbohydrate (g)        280.6   269.4   296.7      NA         NA
              Sugars (g)        119.9   111.7   127.6      NA         NA
              Starch (g)        159.1   148.6   171.4      NA         NA
               Fibre (g)         52.2    45.9    61.3      NA        100
       Saturated fat (g)         16.9    15.2    19.4      NA         NA
 Monounsaturated fat (g)         16.0    13.4    20.4      NA         NA
 Polyunsaturated fat (g)         11.9    10.8    13.0      NA         NA
       Linoleic acid (g)         10.5     9.5    11.5      NA        100
Alpha linolenic acid (g)          1.0     0.9     1.2      NA        100
  LC n3 fatty acids (mg)        169.1    75.7   339.7      NA        100
  Vitamin A equivs (mcg)       1543.3  1233.3  1768.2     100        100
            Retinol (mcg)        290.5   251.4   339.3      NA         NA
      Provitamin A (mcg)       7482.5  5801.1  8839.9      NA         NA
             Thiamin (mg)          2.0     1.8     2.2     100        100
          Riboflavin (mg)          2.5     2.2     2.7     100        100
              Niacin (mg)         49.9    46.3    53.6     100        100
      Folate (mcg total)         584.3   500.5   644.7      NA         NA
     Folate equivs (mcg)         849.7   765.2   915.1     100        100
          Vitamin C (mg)         213.0   172.8   254.9     100        100
          Vitamin D (mcg)          2.5     2.0     3.2      NA          0
           Vitamin E (mg)         10.3     8.8    12.4      NA        100
             Calcium (mg)       1009.3   937.8  1083.1     100        100
                Iron (mg)         15.4    14.4    16.7     100        100
             Iodine (mcg)        181.9   167.8   251.4     100        100
           Magnesium (mg)        453.0   426.5   484.1     100        100
          Phosphorus (mg)       1786.5  1716.7  1878.6     100        100
           Potassium (mg)       4797.2  4555.4  5044.2      NA        100
              Sodium (mg)       1577.5  1324.9  1863.5      NA        100
                Zinc (mg)         18.9    12.6   173.6     100        100
        Cholesterol (mg)        204.8   133.3   294.7      NA         NA
           Selenium (mcg)         72.2    62.9    83.6     100        100
          Vitamin B6 (mg)          3.1     2.2     4.3     100        100
        Vitamin B12 (mcg)          5.0     4.4     6.8     100        100

         Percent energy from fat 21.6
     Percent energy from protein 20.8
Percent energy from carbohydrate 57.6
```

A15.35 Sample *7-day Total Diets* for Girls 9-11 years mid energy level

Average aged 10yrs and light to moderate activity PAL 1.7

Girls9to11.avtot1:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           17.5
[16,] PolyMarg             15
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       7675.2  7377.1  7895.3      NA         NA
             Energy (kJ)       7921.9  7612.0  8147.1      NA         NA
             Protein (g)        106.3   102.3   110.0     100        100
                 Fat (g)         63.9    59.3    68.8      NA         NA
        Carbohydrate (g)        208.8   192.3   221.1      NA         NA
              Sugars (g)         92.6    85.9    99.7      NA         NA
              Starch (g)        115.1   103.0   128.4      NA         NA
               Fibre (g)         32.3    28.1    38.9      NA        100
       Saturated fat (g)         19.7    18.4    21.0      NA         NA
 Monounsaturated fat (g)         23.2    20.4    26.4      NA         NA
 Polyunsaturated fat (g)         16.3    14.9    18.7      NA         NA
       Linoleic acid (g)         15.1    13.6    16.9      NA        100
Alpha linolenic acid (g)          1.0     0.8     1.7      NA         97
  LC n3 fatty acids (mg)        218.5    85.4   460.1      NA        100
  Vitamin A equivs (mcg)       1383.6  1149.5  1574.2     100        100
            Retinol (mcg)        360.5   324.4   428.4      NA         NA
      Provitamin A (mcg)        6087.7  4467.0  7252.3      NA         NA
            Thiamin (mg)          1.6     1.4     1.8     100        100
         Riboflavin (mg)          2.5     2.3     2.7     100        100
             Niacin (mg)         51.9    48.1    56.9     100        100
      Folate (mcg total)         499.2   434.5   552.3      NA         NA
     Folate equivs (mcg)         695.5   616.9   781.8     100        100
          Vitamin C (mg)         129.9    99.0   170.4     100        100
         Vitamin D (mcg)          3.4     2.7     4.5      NA          0
          Vitamin E (mg)         11.3     9.1    13.2      NA        100
            Calcium (mg)        1131.7  1036.5  1220.7     100        100
               Iron (mg)         11.7    10.6    13.0     100        100
            Iodine (mcg)         197.2   178.7   213.0     100        100
          Magnesium (mg)         399.1   375.5   422.6     100        100
         Phosphorus (mg)        1824.3  1730.9  1955.1     100        100
          Potassium (mg)        3717.4  3542.1  3876.1      NA        100
             Sodium (mg)        1331.2  1140.3  1513.6      NA        100
               Zinc (mg)         14.0    13.2    19.0     100        100
        Cholesterol (mg)         240.4   178.8   352.4      NA         NA
          Selenium (mcg)         74.2    66.3    85.3     100        100
         Vitamin B6 (mg)          2.0     1.6     3.1     100        100
       Vitamin B12 (mcg)          6.6     6.0     7.6     100        100

         Percent energy from fat 30.5
     Percent energy from protein 23.3
Percent energy from carbohydrate 46.2
```

Girls9to11.avtot2:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           10
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            10
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       9
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           17.5
[16,] PolyMarg             12
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       7764.0  7524.1  8096.1      NA         NA
             Energy (kJ)       8039.2  7795.9  8385.3      NA         NA
             Protein (g)        111.5   107.3   116.0     100        100
                 Fat (g)         67.8    63.3    74.5      NA         NA
        Carbohydrate (g)        200.1   187.6   210.7      NA         NA
              Sugars (g)         93.3    86.7   102.6      NA         NA
              Starch (g)        105.7    96.1   113.7      NA         NA
               Fibre (g)         37.1    32.8    45.3      NA        100
       Saturated fat (g)         20.0    18.7    21.8      NA         NA
 Monounsaturated fat (g)         25.4    23.1    28.5      NA         NA
 Polyunsaturated fat (g)         17.5    15.3    20.0      NA         NA
       Linoleic acid (g)         16.3    14.2    18.5      NA        100
Alpha linolenic acid (g)          1.0     0.7     1.5      NA         96
  LC n3 fatty acids (mg)        200.2    85.1   513.8      NA        100
  Vitamin A equivs (mcg)       1379.6  1123.2  1618.2     100        100
           Retinol (mcg)        328.0   283.2   373.6      NA         NA
      Provitamin A (mcg)       6255.3  4612.8  7660.0      NA         NA
            Thiamin (mg)          1.7     1.5     1.9     100        100
         Riboflavin (mg)          2.5     2.4     2.7     100        100
             Niacin (mg)         54.3    51.2    57.8     100        100
      Folate (mcg total)        551.3   494.4   608.5      NA         NA
     Folate equivs (mcg)        707.6   638.5   789.1     100        100
          Vitamin C (mg)        138.8   112.9   174.8     100        100
         Vitamin D (mcg)          3.1     2.6     4.2      NA          0
          Vitamin E (mg)         11.8    10.1    13.9      NA        100
            Calcium (mg)       1156.2  1089.0  1236.1     100        100
               Iron (mg)         12.8    11.6    13.8     100        100
            Iodine (mcg)        186.9   165.1   210.8     100        100
          Magnesium (mg)        445.8   411.6   473.9     100        100
         Phosphorus (mg)       1924.9  1849.2  1999.8     100        100
          Potassium (mg)       4188.2  3949.2  4367.2      NA        100
             Sodium (mg)       1230.6  1056.2  1445.5      NA        100
               Zinc (mg)         14.9    13.8    20.8     100        100
        Cholesterol (mg)        240.8   177.2   315.3      NA         NA
          Selenium (mcg)         75.6    67.2    84.5     100        100
         Vitamin B6 (mg)          2.2     1.7     3.0     100        100
       Vitamin B12 (mcg)          6.6     5.9     8.1     100        100

         Percent energy from fat 31.8
     Percent energy from protein 24.0
Percent energy from carbohydrate 44.1
```

Girls9to11.avtot3:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       9
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           17.5
[16,] PolyMarg             12
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       7794.1  7490.1  8248.4      NA         NA
             Energy (kJ)       8066.1  7753.6  8524.3      NA         NA
             Protein (g)        112.4   106.6   170.9     100        100
                 Fat (g)         64.9    60.4    71.2      NA         NA
        Carbohydrate (g)        209.6   198.6   224.6      NA         NA
              Sugars (g)         99.8    91.2   108.9      NA         NA
              Starch (g)        108.6    99.3   119.3      NA         NA
               Fibre (g)         36.2    31.6    46.7      NA        100
       Saturated fat (g)         20.7    18.6    23.0      NA         NA
 Monounsaturated fat (g)         23.4    20.5    26.7      NA         NA
 Polyunsaturated fat (g)         15.9    14.0    18.5      NA         NA
       Linoleic acid (g)         14.6    12.8    17.0      NA        100
Alpha linolenic acid (g)          1.0     0.8     1.6      NA        100
  LC n3 fatty acids (mg)        206.8    96.6   520.2      NA        100
  Vitamin A equivs (mcg)       1378.9  1160.7  1645.8     100        100
           Retinol (mcg)        341.3   285.5   401.9      NA         NA
      Provitamin A (mcg)       6162.3  4941.5  7890.7      NA         NA
            Thiamin (mg)          1.6     1.5     1.8     100        100
         Riboflavin (mg)          2.5     2.4     2.8     100        100
             Niacin (mg)         53.0    48.8    56.5     100        100
      Folate (mcg total)        535.0   483.5   590.1      NA         NA
     Folate equivs (mcg)        704.6   611.9   776.7     100        100
          Vitamin C (mg)        133.0   100.3   168.7     100        100
         Vitamin D (mcg)          3.2     2.5     4.4      NA          0
          Vitamin E (mg)         11.1     9.1    13.2      NA        100
            Calcium (mg)       1167.0  1091.9  1259.2     100        100
               Iron (mg)         12.6    11.8    13.7     100        100
            Iodine (mcg)        192.4   170.7   212.3     100        100
          Magnesium (mg)        427.1   400.6   463.9     100        100
         Phosphorus (mg)       1902.3  1825.0  1978.9     100        100
          Potassium (mg)       4013.0  3808.3  4188.3      NA        100
             Sodium (mg)       1360.0  1214.6  1633.4      NA        100
               Zinc (mg)         16.9    13.8    95.2     100        100
        Cholesterol (mg)        244.7   177.7   359.0      NA         NA
          Selenium (mcg)         75.5    68.0    83.7     100        100
         Vitamin B6 (mg)          2.2     1.6     3.0     100        100
       Vitamin B12 (mcg)          6.6     6.1     7.5     100        100

         Percent energy from fat 30.3
     Percent energy from protein 24.1
Percent energy from carbohydrate 45.7
```

Girls9to11.avtot4:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              3
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       9
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           18
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       7736.2  7462.8  8047.1      NA         NA
             Energy (kJ)       8008.1  7725.0  8321.0      NA         NA
             Protein (g)        107.9   103.4   166.5     100        100
                 Fat (g)         61.1    56.8    65.9      NA         NA
        Carbohydrate (g)        218.0   203.1   234.5      NA         NA
              Sugars (g)        115.5   108.2   129.3      NA         NA
              Starch (g)        100.9    92.0   112.5      NA         NA
               Fibre (g)         36.3    31.4    42.5      NA        100
       Saturated fat (g)         19.9    18.3    21.6      NA         NA
 Monounsaturated fat (g)         22.3    19.8    24.8      NA         NA
 Polyunsaturated fat (g)         14.2    12.9    15.6      NA         NA
       Linoleic acid (g)         13.0    11.7    14.5      NA        100
Alpha linolenic acid (g)          0.9     0.7     1.4      NA         77
  LC n3 fatty acids (mg)        206.5    91.6   526.6      NA        100
  Vitamin A equivs (mcg)       1372.7  1111.7  1608.2     100        100
            Retinol (mcg)        316.3   270.3   365.9      NA         NA
      Provitamin A (mcg)        6278.4  4684.4  7627.6      NA         NA
            Thiamin (mg)          1.6     1.5     1.8     100        100
         Riboflavin (mg)          2.6     2.3     2.8     100        100
             Niacin (mg)         52.0    48.4    56.2     100        100
      Folate (mcg total)         544.2   490.2   622.9      NA         NA
     Folate equivs (mcg)         700.9   642.8   775.8     100        100
          Vitamin C (mg)         156.9   119.9   197.8     100        100
         Vitamin D (mcg)           3.1     2.5     4.2      NA          0
          Vitamin E (mg)          10.8     9.3    12.4      NA        100
            Calcium (mg)        1169.2  1092.1  1253.8     100        100
               Iron (mg)          11.9    10.8    12.9     100        100
            Iodine (mcg)         191.2   173.9   209.9     100        100
          Magnesium (mg)         415.5   388.1   446.6     100        100
         Phosphorus (mg)        1858.9  1784.8  1926.6     100        100
          Potassium (mg)        4136.8  3961.9  4394.5      NA        100
             Sodium (mg)        1292.3  1116.6  1441.6      NA        100
               Zinc (mg)          15.1    13.3    94.4     100        100
        Cholesterol (mg)         239.2   175.0   343.3      NA         NA
          Selenium (mg)          72.6    63.0    83.4     100        100
         Vitamin B6 (mg)          2.2     1.7     2.8     100        100
       Vitamin B12 (mg)           6.7     6.1     8.2     100        100

         Percent energy from fat 28.8
     Percent energy from protein 23.4
Percent energy from carbohydrate 47.9
```

Girls9to11.avtot5:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              3
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       9
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           18
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       7752.4  7433.2  8042.5      NA         NA
             Energy (kJ)       8001.6  7728.6  8300.6      NA         NA
             Protein (g)        109.2   104.4   165.4     100        100
                 Fat (g)         65.0    60.3    70.4      NA         NA
        Carbohydrate (g)        210.0   196.2   225.0      NA         NA
              Sugars (g)        105.7    97.9   114.5      NA         NA
              Starch (g)        103.1    93.6   112.8      NA         NA
               Fibre (g)         33.7    29.6    40.6      NA        100
       Saturated fat (g)         21.8    20.4    23.6      NA         NA
 Monounsaturated fat (g)         23.7    21.9    26.5      NA         NA
 Polyunsaturated fat (g)         14.6    12.9    17.1      NA         NA
       Linoleic acid (g)         13.4    11.5    15.6      NA        100
Alpha linolenic acid (g)          0.9     0.7     1.5      NA         84
  LC n3 fatty acids (mg)        215.2    80.6   439.4      NA        100
  Vitamin A equivs (mcg)       1360.1  1119.3  1608.5     100        100
           Retinol (mcg)        337.2   294.7   389.9      NA         NA
      Provitamin A (mcg)       6081.0  4533.9  7692.8      NA         NA
             Thiamin (mg)          1.6     1.4     1.9     100        100
          Riboflavin (mg)          2.6     2.4     2.8     100        100
             Niacin (mg)         52.2    47.0    57.4     100        100
      Folate (mcg total)        506.9   452.5   555.8      NA         NA
     Folate equivs (mcg)        665.3   577.5   736.8     100        100
          Vitamin C (mg)        135.3   100.1   170.3     100        100
          Vitamin D (mcg)          3.1     2.5     4.1      NA          0
           Vitamin E (mg)         10.5     8.7    14.1      NA        100
             Calcium (mg)       1172.2  1102.6  1251.8     100        100
                Iron (mg)         11.9    10.9    13.1     100        100
             Iodine (mcg)        194.9   175.9   214.3     100        100
           Magnesium (mg)        406.7   380.0   442.6     100        100
          Phosphorus (mg)       1876.2  1817.2  1960.5     100        100
           Potassium (mg)       3946.6  3778.4  4181.7      NA        100
              Sodium (mg)       1388.2  1160.0  1590.9      NA        100
                Zinc (mg)         15.8    13.3    94.4     100        100
        Cholesterol (mg)        258.2   185.8   367.7      NA         NA
          Selenium (mcg)         73.9    64.6    84.3     100        100
          Vitamin B6 (mg)         2.1     1.6     2.7     100        100
        Vitamin B12 (mcg)         6.8     6.2     7.8     100        100

         Percent energy from fat 30.6
     Percent energy from protein 23.6
Percent energy from carbohydrate 45.9
```

Girls9to11.avtot6:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            5
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           17.5
[16,] PolyMarg             10
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       7814.2  7575.0  8145.0      NA         NA
             Energy (kJ)       8060.0  7811.2  8393.6      NA         NA
             Protein (g)        111.0   102.6   166.9     100        100
                 Fat (g)         60.9    56.4    66.6      NA         NA
        Carbohydrate (g)        223.8   211.2   237.9      NA         NA
              Sugars (g)        105.0    92.5   113.9      NA         NA
              Starch (g)        117.5   104.1   127.0      NA         NA
               Fibre (g)         32.3    28.2    39.3      NA        100
       Saturated fat (g)         21.2    19.2    23.3      NA         NA
 Monounsaturated fat (g)         21.8    19.5    23.8      NA         NA
 Polyunsaturated fat (g)         13.3    11.9    15.2      NA         NA
       Linoleic acid (g)         12.0    10.8    13.6      NA        100
Alpha linolenic acid (g)          0.9     0.7     1.3      NA         88
  LC n3 fatty acids (mg)        221.0    81.5   495.6      NA        100
  Vitamin A equivs (mcg)       1351.2  1115.7  1613.8     100        100
           Retinol (mcg)        332.7   287.9   418.9      NA         NA
      Provitamin A (mcg)       6054.7  4788.0  7508.6      NA         NA
            Thiamin (mg)          1.6     1.4     1.7     100        100
         Riboflavin (mg)          2.5     2.3     2.7     100        100
             Niacin (mg)         50.9    46.0    54.8     100        100
      Folate (mcg total)        479.7   428.8   555.1      NA         NA
     Folate equivs (mcg)        658.1   596.3   755.6     100        100
          Vitamin C (mg)        131.8   106.3   181.9     100        100
         Vitamin D (mcg)          3.1     2.5     4.2      NA          0
          Vitamin E (mg)         10.0     8.5    11.9      NA        100
            Calcium (mg)       1150.0  1071.6  1236.7     100        100
               Iron (mg)         11.7    10.6    12.8     100        100
            Iodine (mcg)        197.8   179.1   250.9     100        100
          Magnesium (mg)        388.4   364.5   413.1     100        100
         Phosphorus (mg)       1831.9  1780.5  1919.2     100        100
          Potassium (mg)       3763.9  3592.7  3998.6      NA        100
             Sodium (mg)       1458.1  1240.5  1784.4      NA        100
               Zinc (mg)         19.6    13.1    99.6     100        100
        Cholesterol (mg)        252.8   189.3   376.8      NA         NA
          Selenium (mcg)         74.0    61.4    81.6     100        100
         Vitamin B6 (mg)          2.0     1.5     2.5     100        100
       Vitamin B12 (mcg)          6.8     6.2     8.1     100        100

         Percent energy from fat 28.3
     Percent energy from protein 23.7
Percent energy from carbohydrate 48.0
```

A15.36 Sample *7-day Total Diets* for Girls 9-11 years higher energy level

Average age 11yrs and high activity PAL 2

Girls9to11.hitot1:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           10
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            10
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          3
[15,] LoFatDairy           17.5
[16,] PolyMarg             12
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9788.1  9487.6 10050.5      NA         NA
             Energy (kJ)      10108.0  9804.1 10370.2      NA         NA
             Protein (g)        126.5   121.4   129.9     100        100
                 Fat (g)         75.0    70.9    81.1      NA         NA
        Carbohydrate (g)        289.4   279.6   300.2      NA         NA
              Sugars (g)        106.9    99.0   115.0      NA         NA
              Starch (g)        181.4   170.6   196.3      NA         NA
               Fibre (g)         43.4    38.3    50.4      NA        100
       Saturated fat (g)         23.0    21.6    24.9      NA         NA
 Monounsaturated fat (g)         27.7    25.4    30.6      NA         NA
 Polyunsaturated fat (g)         18.7    16.5    21.0      NA         NA
       Linoleic acid (g)         17.3    15.2    19.7      NA        100
Alpha linolenic acid (g)          1.1     0.9     1.7      NA        100
  LC n3 fatty acids (mg)        211.4    67.0   442.7      NA         99
  Vitamin A equivs (mcg)       1426.7  1147.0  1769.1     100        100
           Retinol (mcg)        379.1   342.8   426.5      NA         NA
      Provitamin A (mcg)       6225.7  4510.0  8318.5      NA         NA
            Thiamin (mg)          2.3     2.1     2.5     100        100
         Riboflavin (mg)          3.1     2.9     3.4     100        100
             Niacin (mg)         64.0    61.0    67.9     100        100
      Folate (mcg total)        596.9   533.5   678.4      NA         NA
     Folate equivs (mcg)        904.6   813.6  1018.8     100        100
          Vitamin C (mg)        138.5   107.1   190.0     100        100
         Vitamin D (mcg)          3.7     3.1     4.7      NA          0
          Vitamin E (mg)         12.5    10.7    14.6      NA        100
            Calcium (mg)       1359.5  1270.2  1434.3     100        100
               Iron (mg)         15.3    14.1    16.7     100        100
            Iodine (mcg)        251.5   233.4   273.6     100        100
          Magnesium (mg)        524.5   499.2   551.1     100        100
         Phosphorus (mg)       2271.7  2177.1  2342.7     100        100
          Potassium (mg)       4514.1  4350.8  4699.3      NA        100
             Sodium (mg)       1735.6  1525.1  1999.4      NA        100
               Zinc (mg)         16.7    15.7    17.6     100        100
        Cholesterol (mg)        249.6   194.8   326.9      NA         NA
          Selenium (mcg)         89.3    78.7   100.6     100        100
         Vitamin B6 (mg)          2.4     2.0     3.0     100        100
       Vitamin B12 (mcg)          7.5     7.0     8.1     100        100

         Percent energy from fat 28.1
     Percent energy from protein 21.8
Percent energy from carbohydrate 50.1
```

Girls9to11.hitot2:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           10
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            14
 [6,] OtherVeg             17
 [7,] TotalFruit           21
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          4
[15,] LoFatDairy           17.5
[16,] PolyMarg             12
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9784.1  9450.5 10138.7      NA         NA
             Energy (kJ)      10105.6  9763.7 10469.3      NA         NA
             Protein (g)        124.9   120.9   129.0     100        100
                 Fat (g)         82.7    78.0    86.7      NA         NA
        Carbohydrate (g)        274.5   260.4   291.9      NA         NA
              Sugars (g)        122.6   114.4   130.4      NA         NA
              Starch (g)        150.4   136.8   161.7      NA         NA
               Fibre (g)         43.1    38.6    50.0      NA        100
       Saturated fat (g)         24.5    22.5    25.9      NA         NA
 Monounsaturated fat (g)         31.5    29.2    34.8      NA         NA
 Polyunsaturated fat (g)         20.6    18.4    22.9      NA         NA
       Linoleic acid (g)         19.2    17.3    21.4      NA        100
Alpha linolenic acid (g)          1.1     0.8     2.1      NA        100
  LC n3 fatty acids (mg)        209.6    85.8   450.1      NA        100
  Vitamin A equivs (mcg)       1480.8  1247.6  1772.4     100        100
           Retinol (mcg)        398.4   359.4   451.4      NA         NA
      Provitamin A (mcg)       6437.9  5276.3  8072.1      NA         NA
            Thiamin (mg)          2.1     1.9     2.3     100        100
         Riboflavin (mg)          3.0     2.8     3.3     100        100
              Niacin (mg)        62.5    58.3    67.0     100        100
      Folate (mcg total)        637.4   589.1   725.8      NA         NA
     Folate equivs (mcg)        863.5   764.6  1030.1     100        100
          Vitamin C (mg)        168.0   133.1   216.2     100        100
         Vitamin D (mcg)          3.8     3.3     5.0      NA          0
          Vitamin E (mg)         14.0    12.1    17.1      NA        100
            Calcium (mg)       1335.8  1241.7  1410.7     100        100
               Iron (mg)         14.2    13.2    15.2     100        100
            Iodine (mcg)        238.1   219.6   265.7     100        100
          Magnesium (mg)        513.6   485.4   542.4     100        100
         Phosphorus (mg)       2216.2  2135.9  2293.2     100        100
          Potassium (mg)       4762.7  4616.8  5011.6      NA        100
             Sodium (mg)       1512.8  1256.0  1747.2      NA        100
               Zinc (mg)         16.3    15.3    21.5     100        100
        Cholesterol (mg)        260.1   195.6   361.0      NA         NA
          Selenium (mcg)         86.1    77.4    97.8     100        100
         Vitamin B6 (mg)          2.6     2.1     3.2     100        100
       Vitamin B12 (mcg)          7.7     7.1     8.9     100        100

         Percent energy from fat 30.9
     Percent energy from protein 21.5
Percent energy from carbohydrate 47.6
```

Girls9to11.hitot3:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            12
 [6,] OtherVeg             28
 [7,] TotalFruit           21
 [8,] WholegrainCereals    21
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          4
[15,] LoFatDairy           17.5
[16,] PolyMarg             15
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9701.9  9266.2 10000.9      NA         NA
             Energy (kJ)      10046.0  9605.4 10347.3      NA         NA
             Protein (g)        127.2   121.6   187.9     100        100
                 Fat (g)         86.3    81.3    94.0      NA         NA
        Carbohydrate (g)        261.0   239.9   276.6      NA         NA
              Sugars (g)        130.2   120.2   139.7      NA         NA
              Starch (g)        129.1   117.3   145.3      NA         NA
               Fibre (g)         45.4    40.3    52.1      NA        100
       Saturated fat (g)         26.5    24.8    29.0      NA         NA
 Monounsaturated fat (g)         32.1    29.7    35.4      NA         NA
 Polyunsaturated fat (g)         21.6    19.4    25.0      NA         NA
       Linoleic acid (g)         20.0    18.2    23.3      NA        100
Alpha linolenic acid (g)          1.3     1.0     1.9      NA        100
  LC n3 fatty acids (mg)        190.0    84.8   441.0      NA        100
  Vitamin A equivs (mcg)       1591.5  1295.9  1858.3     100        100
           Retinol (mcg)        440.9   402.8   497.3      NA         NA
      Provitamin A (mcg)       6849.6  5267.5  8446.6      NA         NA
            Thiamin (mg)          2.0     1.9     2.3     100        100
         Riboflavin (mg)          3.1     2.9     3.4     100        100
             Niacin (mg)         61.6    57.3    66.3     100        100
      Folate (mcg total)        673.2   604.0   756.0      NA         NA
     Folate equivs (mcg)        863.5   781.8   945.7     100        100
          Vitamin C (mg)        188.8   149.2   227.7     100        100
         Vitamin D (mcg)          4.0     3.5     4.9      NA          0
          Vitamin E (mg)         15.2    13.1    17.8      NA        100
            Calcium (mg)       1377.2  1300.8  1464.3     100        100
               Iron (mg)         14.9    13.7    16.8     100        100
            Iodine (mcg)        230.1   209.7   245.9     100        100
          Magnesium (mg)        526.3   496.9   557.6     100        100
         Phosphorus (mg)       2234.5  2147.2  2343.6     100        100
          Potassium (mg)       4957.8  4727.5  5142.0      NA        100
             Sodium (mg)       1526.8  1359.2  1770.1      NA        100
               Zinc (mg)         18.3    15.7    97.2     100        100
        Cholesterol (mg)        259.7   196.7   357.3      NA         NA
          Selenium (mcg)         84.7    75.6    95.2     100        100
         Vitamin B6 (mg)          3.0     2.3     4.0     100        100
       Vitamin B12 (mcg)          7.5     6.9     8.9     100        100

         Percent energy from fat 32.3
     Percent energy from protein 21.9
Percent energy from carbohydrate 45.8
```

Girls9to11.hitot4:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            12
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          4
[15,] LoFatDairy           17.5
[16,] PolyMarg             15
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9642.1  9362.7 10012.5      NA         NA
             Energy (kJ)       9956.4  9668.3 10335.7      NA         NA
             Protein (g)        129.4   123.0   186.3     100        100
                 Fat (g)         86.1    81.4    92.3      NA         NA
        Carbohydrate (g)        256.6   243.7   274.3      NA         NA
              Sugars (g)        112.7   105.1   127.0      NA         NA
              Starch (g)        142.7   129.6   156.9      NA         NA
               Fibre (g)         41.4    36.8    48.6      NA        100
       Saturated fat (g)         26.6    24.3    28.5      NA         NA
 Monounsaturated fat (g)         31.6    29.2    34.6      NA         NA
 Polyunsaturated fat (g)         21.7    19.2    25.4      NA         NA
       Linoleic acid (g)         20.1    17.7    23.3      NA        100
Alpha linolenic acid (g)          1.2     1.0     2.0      NA        100
  LC n3 fatty acids (mg)        233.8    85.8   473.1      NA        100
  Vitamin A equivs (mcg)       1493.2  1276.4  1782.2     100        100
           Retinol (mcg)        446.4   378.0   514.1      NA         NA
      Provitamin A (mcg)       6219.7  5091.8  7885.0      NA         NA
            Thiamin (mg)          2.1     1.9     2.4     100        100
         Riboflavin (mg)          3.1     2.8     3.3     100        100
              Niacin (mg)        62.2    56.1    67.0     100        100
      Folate (mcg total)        620.2   549.1   692.6      NA         NA
     Folate equivs (mcg)        860.5   775.6   943.9     100        100
          Vitamin C (mg)        136.4    89.3   172.9     100        100
         Vitamin D (mcg)          4.2     3.5     5.1      NA          3
          Vitamin E (mg)         13.9    11.5    16.0      NA        100
            Calcium (mg)       1389.8  1323.3  1486.5     100        100
               Iron (mg)         15.0    13.8    16.4     100        100
            Iodine (mcg)        243.4   221.9   266.3     100        100
          Magnesium (mg)        524.9   491.6   568.9     100        100
         Phosphorus (mg)       2264.3  2160.0  2387.9     100        100
          Potassium (mg)       4480.5  4275.9  4699.7      NA        100
             Sodium (mg)       1651.9  1428.0  1840.0      NA        100
               Zinc (mg)         19.9    16.1    97.1     100        100
        Cholesterol (mg)        264.8   193.8   366.6      NA         NA
          Selenium (mcg)         87.7    78.2   103.0     100        100
         Vitamin B6 (mg)          2.5     1.9     3.1     100        100
       Vitamin B12 (mcg)          7.6     6.9     8.7     100        100

         Percent energy from fat 32.5
     Percent energy from protein 22.4
Percent energy from carbohydrate 45.1
```

Girls9to11.hitot5:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       24
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          0
[15,] LoFatDairy           17.5
[16,] PolyMarg             12
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9719.9  9455.5 10087.6      NA         NA
             Energy (kJ)      10045.3  9766.9 10425.5      NA         NA
             Protein (g)        126.5   119.9   185.0     100        100
                 Fat (g)         72.0    66.7    78.0      NA         NA
        Carbohydrate (g)        294.1   280.9   310.6      NA         NA
              Sugars (g)        110.6   101.9   122.1      NA         NA
              Starch (g)        182.2   171.4   196.2      NA         NA
               Fibre (g)         42.7    37.9    51.6      NA        100
       Saturated fat (g)         23.1    21.1    25.0      NA         NA
 Monounsaturated fat (g)         25.8    23.5    28.9      NA         NA
 Polyunsaturated fat (g)         17.5    16.0    20.1      NA         NA
       Linoleic acid (g)         16.0    14.7    18.2      NA        100
Alpha linolenic acid (g)          1.2     0.9     1.8      NA        100
  LC n3 fatty acids (mg)        212.4    87.2   573.4      NA        100
  Vitamin A equivs (mcg)       1381.2  1087.8  1596.5     100        100
           Retinol (mcg)        356.6   317.0   426.0      NA         NA
      Provitamin A (mcg)       6091.2  4532.1  7428.2      NA         NA
            Thiamin (mg)          2.1     1.9     2.3     100        100
         Riboflavin (mg)          2.8     2.6     3.1     100        100
             Niacin (mg)         60.4    56.6    64.5     100        100
      Folate (mcg total)        588.0   531.5   643.0      NA         NA
     Folate equivs (mcg)        870.3   758.4   975.5     100        100
          Vitamin C (mg)        137.1   109.5   160.6     100        100
         Vitamin D (mcg)          3.2     2.4     4.8      NA          0
          Vitamin E (mg)         12.0    10.3    13.9      NA        100
            Calcium (mg)       1277.4  1208.7  1384.0     100        100
               Iron (mg)         15.5    14.1    17.0     100        100
            Iodine (mcg)        225.3   202.7   249.5     100        100
          Magnesium (mg)        494.1   465.5   529.2     100        100
         Phosphorus (mg)       2155.9  2047.5  2245.0     100        100
          Potassium (mg)       4291.2  4061.7  4507.5      NA        100
             Sodium (mg)       1811.0  1569.7  2096.4      NA        100
               Zinc (mg)         18.5    15.1    96.7     100        100
        Cholesterol (mg)        251.7   200.4   379.8      NA         NA
          Selenium (mcg)         88.2    80.4   101.2     100        100
         Vitamin B6 (mg)          2.3     1.9     2.7     100        100
       Vitamin B12 (mcg)          7.1     6.3     7.6     100        100

         Percent energy from fat 27.1
     Percent energy from protein 21.8
Percent energy from carbohydrate 51.1
```

Girls9to11.hitot6:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            10
 [6,] OtherVeg             28
 [7,] TotalFruit           28
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       9
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3
[14,] MidFatDairy          2
[15,] LoFatDairy           17.5
[16,] PolyMarg             15
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9597.8  9311.8  9932.4      NA         NA
             Energy (kJ)       9964.0  9670.6 10301.7      NA         NA
             Protein (g)        124.9   117.6   182.0     100        100
                 Fat (g)         81.2    74.8    87.1      NA         NA
        Carbohydrate (g)        269.6   254.3   284.4      NA         NA
              Sugars (g)        147.5   139.2   154.5      NA         NA
              Starch (g)        120.0   108.8   131.7      NA         NA
               Fibre (g)         49.8    42.1    57.1      NA        100
       Saturated fat (g)         25.7    23.7    28.2      NA         NA
 Monounsaturated fat (g)         29.5    26.7    32.7      NA         NA
 Polyunsaturated fat (g)         20.0    18.4    21.7      NA         NA
       Linoleic acid (g)         18.5    16.9    20.2      NA        100
Alpha linolenic acid (g)          1.2     1.0     2.2      NA        100
  LC n3 fatty acids (mg)        216.6    85.4   485.1      NA        100
  Vitamin A equivs (mcg)       1626.1  1376.8  1958.5     100        100
           Retinol (mcg)        421.6   375.7   496.6      NA         NA
      Provitamin A (mcg)       7174.0  5768.4  8865.4      NA         NA
            Thiamin (mg)          1.9     1.8     2.2     100        100
         Riboflavin (mg)          2.9     2.7     3.1     100        100
             Niacin (mg)         60.0    55.8    63.9     100        100
      Folate (mcg total)        696.5   659.8   749.5      NA         NA
     Folate equivs (mcg)        855.9   786.8   922.0     100        100
          Vitamin C (mg)        231.1   193.4   276.5     100        100
         Vitamin D (mcg)          3.8     3.0     4.9      NA          0
          Vitamin E (mg)         14.9    12.6    17.4      NA        100
            Calcium (mg)       1317.2  1216.1  1417.9     100        100
               Iron (mg)         14.9    13.8    16.4     100        100
            Iodine (mcg)        211.0   191.3   234.6     100        100
          Magnesium (mg)        526.0   492.2   556.5     100        100
         Phosphorus (mg)       2182.5  2097.1  2256.2     100        100
          Potassium (mg)       5465.7  5228.7  5700.4      NA        100
             Sodium (mg)       1501.7  1306.6  1691.7      NA        100
               Zinc (mg)         19.5    15.3    97.0     100        100
        Cholesterol (mg)        258.8   198.6   381.9      NA         NA
          Selenium (mcg)         82.2    70.4    92.5     100        100
         Vitamin B6 (mg)          3.1     2.4     3.8     100        100
       Vitamin B12 (mcg)          7.1     6.3     7.9     100        100

         Percent energy from fat 30.6
     Percent energy from protein 21.7
Percent energy from carbohydrate 47.7
```

A15.37 Sample *7-day Total Diets* for Girls 12-13 years mid energy level

Girls12to13.avtot1:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            10
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    24
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           24.5
[16,] PolyMarg             20
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8986.4  8662.6  9270.8      NA         NA
             Energy (kJ)       9250.3  8917.7  9533.8      NA         NA
             Protein (g)        121.7   117.1   126.7     100        100
                 Fat (g)         80.3    75.5    86.3      NA         NA
        Carbohydrate (g)        235.4   220.4   246.7      NA         NA
              Sugars (g)        110.4   103.4   118.3      NA         NA
              Starch (g)        123.8   112.4   134.1      NA         NA
               Fibre (g)         34.6    30.7    41.0      NA        100
       Saturated fat (g)         24.8    23.0    26.8      NA         NA
 Monounsaturated fat (g)         29.1    27.1    32.1      NA         NA
 Polyunsaturated fat (g)         20.9    19.3    22.9      NA         NA
       Linoleic acid (g)         19.4    18.0    21.3      NA        100
Alpha linolenic acid (g)          1.2     0.9     1.8      NA        100
  LC n3 fatty acids (mg)        216.2    78.7   435.9      NA        100
  Vitamin A equivs (mcg)       1506.3  1254.5  1782.0     100        100
           Retinol (mcg)        467.2   427.5   537.6      NA         NA
      Provitamin A (mcg)       6154.5  4679.8  7466.6      NA         NA
            Thiamin (mg)          1.8     1.7     2.1     100        100
         Riboflavin (mg)          3.1     2.9     3.3     100        100
              Niacin (mg)         59.1    55.1    64.1     100        100
      Folate (mcg total)        579.5   524.8   637.2      NA         NA
     Folate equivs (mcg)        792.1   711.1   867.0     100        100
          Vitamin C (mg)        127.5   100.1   156.2     100        100
         Vitamin D (mcg)          4.1     3.7     5.4      NA          2
          Vitamin E (mg)         13.5    11.0    15.4      NA        100
            Calcium (mg)       1471.5  1383.6  1573.5     100        100
               Iron (mg)         12.6    11.7    14.2     100        100
            Iodine (mcg)        250.3   232.8   307.9     100        100
          Magnesium (mg)        466.4   437.1   495.2     100        100
         Phosphorus (mg)       2187.1  2104.1  2303.8     100        100
          Potassium (mg)       4244.1  4049.4  4510.7      NA        100
             Sodium (mg)       1565.3  1389.1  1775.8      NA        100
               Zinc (mg)         15.8    14.6    21.1     100        100
        Cholesterol (mg)        257.0   190.3   394.9      NA         NA
          Selenium (mcg)         81.2    71.5    91.9     100        100
         Vitamin B6 (mg)          2.3     1.8     3.0     100        100
       Vitamin B12 (mcg)          8.4     7.4     9.8     100        100

         Percent energy from fat 32.8
     Percent energy from protein 22.8
Percent energy from carbohydrate 44.4
```

Girls12to13.avtot2:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       9
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           24.5
[16,] PolyMarg             25
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8848.9  8623.2  9244.3      NA         NA
             Energy (kJ)       9157.3  8944.8  9555.2      NA         NA
             Protein (g)        122.2   118.4   126.3     100        100
                 Fat (g)         79.3    74.8    86.7      NA         NA
        Carbohydrate (g)        229.2   217.7   241.8      NA         NA
              Sugars (g)        125.4   117.8   135.3      NA         NA
              Starch (g)        102.2    91.4   114.4      NA         NA
               Fibre (g)         40.7    36.6    46.7      NA        100
       Saturated fat (g)         25.0    23.6    27.0      NA         NA
 Monounsaturated fat (g)         27.1    25.0    29.4      NA         NA
 Polyunsaturated fat (g)         21.5    20.0    24.1      NA         NA
       Linoleic acid (g)         19.9    18.5    22.1      NA        100
Alpha linolenic acid (g)          1.3     1.1     1.9      NA        100
  LC n3 fatty acids (mg)        210.5    92.2   419.2      NA        100
  Vitamin A equivs (mcg)       1659.6  1387.9  1898.8     100        100
            Retinol (mcg)        522.6   470.4   581.7      NA         NA
      Provitamin A (mcg)       6749.5  5116.5  8145.1      NA         NA
            Thiamin (mg)          1.7     1.6     1.9     100        100
         Riboflavin (mg)          3.1     2.9     3.4     100        100
              Niacin (mg)         57.3    51.9    60.0     100        100
      Folate (mcg total)        655.1   598.2   700.7      NA         NA
     Folate equivs (mcg)        812.7   707.8   890.1     100        100
          Vitamin C (mg)        180.1   142.2   236.8     100        100
         Vitamin D (mcg)          4.5     3.9     5.5      NA          6
          Vitamin E (mg)         14.1    12.5    16.6      NA        100
            Calcium (mg)       1502.2  1413.5  1578.3     100        100
               Iron (mg)         13.4    12.4    14.4     100        100
            Iodine (mcg)        237.5   218.1   257.9     100        100
          Magnesium (mg)        477.2   445.0   513.6     100        100
         Phosphorus (mg)       2182.5  2093.3  2250.5     100        100
          Potassium (mg)       4778.0  4560.8  4981.6      NA        100
             Sodium (mg)       1470.1  1307.3  1642.0      NA        100
               Zinc (mg)         15.9    15.0    21.4     100        100
        Cholesterol (mg)        257.0   190.0   376.6      NA         NA
          Selenium (mcg)         77.2    68.9    87.2     100        100
         Vitamin B6 (mg)          2.4     1.9     2.9     100        100
       Vitamin B12 (mcg)          8.2     7.5     9.5     100        100

         Percent energy from fat 32.6
     Percent energy from protein 23.1
Percent energy from carbohydrate 44.2
```

Girls12to13.avtot3:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            14
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       9
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           24.5
[16,] PolyMarg             15
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9016.5  8677.4  9346.9      NA         NA
             Energy (kJ)       9296.6  8970.4  9623.8      NA         NA
             Protein (g)        127.1   122.0   185.4     100        100
                 Fat (g)         86.8    81.3    94.5      NA         NA
        Carbohydrate (g)        219.2   207.4   237.9      NA         NA
              Sugars (g)        116.0   108.9   127.4      NA         NA
              Starch (g)        102.0    90.5   110.5      NA         NA
               Fibre (g)         36.6    32.9    45.6      NA        100
       Saturated fat (g)         26.3    24.0    28.9      NA         NA
 Monounsaturated fat (g)         32.7    30.1    35.7      NA         NA
 Polyunsaturated fat (g)         22.0    18.9    24.8      NA         NA
       Linoleic acid (g)         20.5    17.7    22.9      NA        100
Alpha linolenic acid (g)          1.2     0.9     1.7      NA        100
  LC n3 fatty acids (mg)        228.6    99.0   581.5      NA        100
  Vitamin A equivs (mcg)       1473.8  1163.3  1689.1     100        100
           Retinol (mcg)        430.1   388.7   486.8      NA         NA
      Provitamin A (mcg)       6190.2  4337.0  7281.0      NA         NA
            Thiamin (mg)          1.8     1.7     2.0     100        100
         Riboflavin (mg)          3.1     2.9     3.3     100        100
             Niacin (mg)         59.9    56.0    63.0     100        100
      Folate (mcg total)        622.5   579.5   673.0      NA         NA
     Folate equivs (mcg)        783.5   718.1   853.0     100        100
          Vitamin C (mg)        126.9    96.3   164.8     100        100
         Vitamin D (mcg)          4.0     3.3     5.6      NA          2
          Vitamin E (mg)         13.9    11.7    16.3      NA        100
            Calcium (mg)       1490.6  1406.2  1574.7     100        100
               Iron (mg)         13.3    11.9    14.4     100        100
            Iodine (mcg)        240.5   225.6   258.4     100        100
          Magnesium (mg)        502.0   476.6   526.1     100        100
         Phosphorus (mg)       2263.7  2199.4  2333.2     100        100
          Potassium (mg)       4422.0  4250.1  4589.6      NA        100
             Sodium (mg)       1484.4  1352.0  1700.3      NA        100
               Zinc (mg)         18.1    15.6    97.7     100        100
        Cholesterol (mg)        265.7   203.3   354.5      NA         NA
          Selenium (mcg)         82.8    73.4    95.6     100        100
         Vitamin B6 (mg)          2.3     1.9     3.0     100        100
       Vitamin B12 (mcg)          8.3     7.5     9.2     100        100

         Percent energy from fat 35.1
     Percent energy from protein 23.6
Percent energy from carbohydrate 41.4
```

Girls12to13.avtot4:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           10
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            5
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       14
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           24.5
[16,] PolyMarg             20
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8971.3  8680.7  9332.9      NA         NA
             Energy (kJ)       9227.8  8936.2  9592.4      NA         NA
             Protein (g)        121.9   115.6   178.2     100        100
                 Fat (g)         75.9    69.6    82.0      NA         NA
        Carbohydrate (g)        247.4   235.9   262.7      NA         NA
              Sugars (g)        120.8   112.0   130.8      NA         NA
              Starch (g)        125.2   113.5   138.2      NA         NA
               Fibre (g)         34.8    30.4    43.2      NA        100
       Saturated fat (g)         26.6    24.5    28.8      NA         NA
 Monounsaturated fat (g)         25.8    23.4    28.7      NA         NA
 Polyunsaturated fat (g)         18.0    16.6    19.7      NA         NA
       Linoleic acid (g)         16.5    15.2    18.0      NA        100
Alpha linolenic acid (g)          1.2     0.9     1.8      NA        100
  LC n3 fatty acids (mg)        213.2    93.3   447.2      NA        100
  Vitamin A equivs (mcg)       1579.1  1269.1  1862.7     100        100
            Retinol (mcg)        499.5   453.6   568.0      NA         NA
      Provitamin A (mcg)       6401.3  4632.9  8223.5      NA         NA
             Thiamin (mg)          1.6     1.5     1.9     100        100
          Riboflavin (mg)          3.1     2.9     3.3     100        100
              Niacin (mg)         56.4    52.3    60.0     100        100
      Folate (mcg total)         547.1   480.1   627.1      NA         NA
     Folate equivs (mcg)         724.7   585.8   827.9     100        100
          Vitamin C (mg)         139.5   109.2   180.0     100        100
          Vitamin D (mcg)          4.3     3.6     5.8      NA          4
           Vitamin E (mg)         12.1    10.2    14.0      NA        100
             Calcium (mg)       1465.8  1393.5  1569.4     100        100
                Iron (mg)         12.2    10.2    13.8     100        100
             Iodine (mcg)        245.6   222.9   262.2     100        100
           Magnesium (mg)        431.8   402.0   460.2     100        100
          Phosphorus (mg)       2138.6  2071.5  2194.0     100        100
           Potassium (mg)       4449.7  4247.7  4683.5      NA        100
              Sodium (mg)       1653.5  1409.7  1914.8      NA        100
                Zinc (mg)         19.2    14.4    96.1     100        100
        Cholesterol (mg)         276.5   205.0   374.8      NA         NA
          Selenium (mcg)          78.1    70.2    88.6     100        100
          Vitamin B6 (mg)          2.2     1.7     2.8     100        100
        Vitamin B12 (mcg)          8.4     7.7     9.3     100        100

         Percent energy from fat 30.9
     Percent energy from protein 22.8
Percent energy from carbohydrate 46.3
```

Girls12to13.avtot5:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            10
 [6,] OtherVeg             28
 [7,] TotalFruit           14
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       9
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           24.5
[16,] PolyMarg             17
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       8952.8  8599.0  9234.8      NA         NA
             Energy (kJ)       9223.7  8858.6  9505.6      NA         NA
             Protein (g)        123.6   117.2   179.1     100        100
                 Fat (g)         83.9    77.8    89.8      NA         NA
        Carbohydrate (g)        226.6   210.7   239.8      NA         NA
              Sugars (g)        125.1   114.5   135.0      NA         NA
              Starch (g)        100.1    90.8   110.5      NA         NA
               Fibre (g)         35.8    31.8    43.7      NA        100
       Saturated fat (g)         27.4    24.9    29.4      NA         NA
 Monounsaturated fat (g)         30.6    27.3    34.2      NA         NA
 Polyunsaturated fat (g)         20.1    18.2    23.0      NA         NA
       Linoleic acid (g)         18.7    17.0    21.5      NA        100
Alpha linolenic acid (g)          1.1     0.9     1.6      NA        100
  LC n3 fatty acids (mg)        224.0    96.8   435.5      NA        100
  Vitamin A equivs (mcg)       1594.1  1344.9  1856.6     100        100
           Retinol (mcg)        464.0   419.1   536.0      NA         NA
      Provitamin A (mcg)       6700.1  5027.5  8132.2      NA         NA
            Thiamin (mg)          1.7     1.6     1.9     100        100
         Riboflavin (mg)          3.2     3.0     3.4     100        100
             Niacin (mg)         58.7    55.0    62.2     100        100
      Folate (mcg total)        600.1   535.2   661.0      NA         NA
     Folate equivs (mcg)        757.1   686.7   829.3     100        100
          Vitamin C (mg)        168.3   122.3   209.5     100        100
         Vitamin D (mcg)          4.1     3.5     4.8      NA          0
          Vitamin E (mg)         14.3    11.6    16.4      NA        100
            Calcium (mg)       1483.7  1392.2  1570.5     100        100
               Iron (mg)         12.6    11.1    14.6     100        100
            Iodine (mcg)        240.7   221.6   261.8     100        100
          Magnesium (mg)        466.0   443.3   502.1     100        100
         Phosphorus (mg)       2195.5  2124.7  2270.2     100        100
          Potassium (mg)       4593.0  4419.9  4796.0      NA        100
             Sodium (mg)       1574.2  1390.9  1745.1      NA        100
               Zinc (mg)         19.3    15.3    96.5     100        100
        Cholesterol (mg)        272.4   210.6   343.9      NA         NA
          Selenium (mcg)         79.4    69.3    91.5     100        100
         Vitamin B6 (mg)          2.7     2.1     3.5     100        100
       Vitamin B12 (mcg)          8.4     7.7     9.6     100        100

         Percent energy from fat 34.1
     Percent energy from protein 23.1
Percent energy from carbohydrate 42.8
```

Girls12to13.avtot6:

```
      AllFoodGroups  N.serves
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            2
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    19
 [9,] RefinedCereals       12
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           21.5
[16,] PolyMarg             20
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9052.4  8767.5  9455.2      NA         NA
             Energy (kJ)       9320.5  9037.6  9727.0      NA         NA
             Protein (g)        118.5   109.8   233.2     100        100
                 Fat (g)         75.1    69.8    81.5      NA         NA
        Carbohydrate (g)        260.1   247.5   276.1      NA         NA
              Sugars (g)        141.1   130.7   156.6      NA         NA
              Starch (g)        117.3   104.8   130.3      NA         NA
               Fibre (g)         34.8    29.5    41.0      NA        100
       Saturated fat (g)         28.3    26.1    30.7      NA         NA
 Monounsaturated fat (g)         24.6    21.9    27.5      NA         NA
 Polyunsaturated fat (g)         16.5    15.3    18.0      NA         NA
       Linoleic acid (g)         14.9    14.0    16.3      NA        100
Alpha linolenic acid (g)          1.2     1.1     1.8      NA        100
  LC n3 fatty acids (mg)        228.2   101.1   529.4      NA        100
  Vitamin A equivs (mcg)       1580.9  1270.8  1912.6     100        100
           Retinol (mcg)        512.0   463.3   574.4      NA         NA
      Provitamin A (mcg)       6344.6  4626.1  8014.0      NA         NA
            Thiamin (mg)          1.6     1.4     1.9     100        100
         Riboflavin (mg)          3.0     2.7     3.2     100        100
             Niacin (mg)         53.0    49.7    57.2     100        100
      Folate (mcg total)        546.6   486.0   592.6      NA         NA
     Folate equivs (mcg)        714.7   628.6   768.7     100        100
          Vitamin C (mg)        156.0   118.7   187.7     100        100
         Vitamin D (mcg)          4.3     3.5     5.5      NA          3
          Vitamin E (mg)         11.9    10.0    13.5      NA        100
            Calcium (mg)       1381.2  1305.3  1452.3     100        100
               Iron (mg)         12.1    10.9    13.3     100        100
            Iodine (mcg)        229.0   206.6   244.7     100        100
          Magnesium (mg)        406.5   374.4   432.4     100        100
         Phosphorus (mg)       2011.9  1916.6  2115.2     100        100
          Potassium (mg)       4259.6  4033.0  4541.3      NA        100
             Sodium (mg)       1749.1  1520.4  2040.0      NA        100
               Zinc (mg)         20.9    13.8   174.8     100        100
        Cholesterol (mg)        286.2   220.0   385.8      NA         NA
          Selenium (mcg)         76.2    66.3    84.3     100        100
         Vitamin B6 (mg)          2.2     1.7     3.2     100        100
       Vitamin B12 (mcg)          7.9     7.2     8.5     100        100

         Percent energy from fat 30.1
     Percent energy from protein 21.8
Percent energy from carbohydrate 48.0
```

A15.38 Sample *7-day Total Diets* for Girls 12-13 years higher energy level

High end aged 13yrs and high activity PAL 2

Girls12to13.hitot1:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            14
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       18
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           24.5
[16,] PolyMarg             20
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10794.5 10463.2 11078.8      NA         NA
             Energy (kJ)      11141.3 10807.3 11424.3      NA         NA
             Protein (g)        135.7   132.6   139.3     100        100
                 Fat (g)         92.4    87.0    97.1      NA         NA
        Carbohydrate (g)        302.3   289.3   317.6      NA         NA
              Sugars (g)        133.2   125.7   141.6      NA         NA
              Starch (g)        167.6   154.3   181.3      NA         NA
               Fibre (g)         45.8    41.3    51.1      NA        100
       Saturated fat (g)         26.8    24.6    28.5      NA         NA
 Monounsaturated fat (g)         34.3    31.7    37.2      NA         NA
 Polyunsaturated fat (g)         24.8    22.6    27.9      NA         NA
       Linoleic acid (g)         23.2    21.2    26.1      NA        100
Alpha linolenic acid (g)          1.4     1.1     2.0      NA        100
  LC n3 fatty acids (mg)        198.1    90.0   401.0      NA        100
  Vitamin A equivs (mcg)       1554.5  1339.0  1817.5     100        100
           Retinol (mcg)        475.3   429.3   540.6      NA         NA
      Provitamin A (mcg)       6398.6  5261.7  7824.4      NA         NA
            Thiamin (mg)          2.4     2.3     2.6     100        100
         Riboflavin (mg)          3.4     3.1     3.8     100        100
             Niacin (mg)         68.4    64.9    73.0     100        100
      Folate (mcg total)        708.4   637.4   775.3      NA         NA
     Folate equivs (mcg)       1001.9   913.2  1138.6     100        100
          Vitamin C (mg)        153.5   126.2   193.0     100        100
         Vitamin D (mcg)          4.2     3.6     5.1      NA          1
          Vitamin E (mg)         15.9    13.8    18.5      NA        100
            Calcium (mg)       1583.3  1514.1  1690.2     100        100
               Iron (mg)         15.8    13.9    17.2     100        100
            Iodine (mcg)        275.4   254.9   295.2     100        100
          Magnesium (mg)        577.1   547.9   611.6     100        100
         Phosphorus (mg)       2489.6  2413.7  2579.9     100        100
          Potassium (mg)       4918.6  4702.1  5168.8      NA        100
             Sodium (mg)       1818.8  1569.4  2051.6      NA        100
               Zinc (mg)         18.0    16.8    23.8     100        100
        Cholesterol (mg)        258.4   194.6   407.3      NA         NA
          Selenium (mcg)         91.1    80.8   103.7     100        100
         Vitamin B6 (mg)          2.6     2.2     3.3     100        100
       Vitamin B12 (mcg)          8.5     7.8     9.7     100        100

         Percent energy from fat 31.3
     Percent energy from protein 21.1
Percent energy from carbohydrate 47.5
```

Girls12to13.hitot2:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            5
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       35
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           24.5
[16,] PolyMarg             20
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10849.4 10579.9 11237.0      NA         NA
             Energy (kJ)      11174.0 10903.6 11576.5      NA         NA
             Protein (g)        135.6   130.2   139.9     100        100
                 Fat (g)         75.7    70.2    82.6      NA         NA
        Carbohydrate (g)        341.7   325.7   359.3      NA         NA
              Sugars (g)        116.1   107.1   126.0      NA         NA
              Starch (g)        224.5   208.9   240.5      NA         NA
               Fibre (g)         42.3    38.7    49.0      NA        100
       Saturated fat (g)         24.4    22.2    27.1      NA         NA
 Monounsaturated fat (g)         25.9    23.3    29.1      NA         NA
 Polyunsaturated fat (g)         19.5    18.2    21.0      NA         NA
       Linoleic acid (g)         17.9    16.2    19.1      NA        100
Alpha linolenic acid (g)          1.4     1.1     1.9      NA        100
  LC n3 fatty acids (mg)        203.0    93.0   411.3      NA        100
  Vitamin A equivs (mcg)       1513.5  1235.9  1717.0     100        100
           Retinol (mcg)        472.6   424.7   553.0      NA         NA
      Provitamin A (mcg)       6169.9  4492.9  7318.8      NA         NA
            Thiamin (mg)          2.3     2.1     2.6     100        100
         Riboflavin (mg)          3.4     3.1     3.7     100        100
              Niacin (mg)         65.9    62.6    69.4     100        100
      Folate (mcg total)        617.1   560.4   668.0      NA         NA
     Folate equivs (mcg)        992.4   855.5  1084.6     100        100
          Vitamin C (mg)        130.0   101.9   172.2     100        100
         Vitamin D (mcg)          4.2     3.6     5.2      NA          3
          Vitamin E (mg)         12.9    10.9    14.9      NA        100
            Calcium (mg)       1584.0  1482.8  1678.5     100        100
               Iron (mg)         15.6    14.4    16.9     100        100
            Iodine (mcg)        294.7   268.0   329.1     100        100
          Magnesium (mg)        513.5   485.9   545.9     100        100
         Phosphorus (mg)       2417.5  2343.3  2508.3     100        100
          Potassium (mg)       4445.1  4263.8  4676.8      NA        100
             Sodium (mg)       2109.3  1873.8  2365.7      NA        100
               Zinc (mg)         17.2    16.3    22.6     100        100
        Cholesterol (mg)        257.8   194.3   376.7      NA         NA
          Selenium (mcg)         94.0    80.8   105.6     100        100
         Vitamin B6 (mg)          2.3     1.8     3.0     100        100
       Vitamin B12 (mcg)          8.9     8.1    10.1     100        100

         Percent energy from fat 25.7
     Percent energy from protein 21.2
Percent energy from carbohydrate 53.1
```

Girls12to13.hitot3:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            5
 [6,] OtherVeg             28
 [7,] TotalFruit           28
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           24.5
[16,] PolyMarg             20
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               3.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10811.7 10500.1 11315.9      NA         NA
             Energy (kJ)      11187.1 10850.3 11689.9      NA         NA
             Protein (g)        134.7   129.0   190.5     100        100
                 Fat (g)         78.7    73.3    89.6      NA         NA
        Carbohydrate (g)        336.7   319.7   356.3      NA         NA
              Sugars (g)        157.2   147.7   165.9      NA         NA
              Starch (g)        177.4   162.0   192.7      NA         NA
               Fibre (g)         48.7    44.7    56.5      NA        100
       Saturated fat (g)         26.1    23.9    30.4      NA         NA
 Monounsaturated fat (g)         27.0    24.1    31.0      NA         NA
 Polyunsaturated fat (g)         19.5    17.8    21.8      NA         NA
       Linoleic acid (g)         17.9    16.4    20.1      NA        100
Alpha linolenic acid (g)          1.4     1.1     1.9      NA        100
  LC n3 fatty acids (mg)        208.0    96.0   403.2      NA        100
  Vitamin A equivs (mcg)       1665.2  1409.9  1908.4     100        100
           Retinol (mcg)        489.4   443.0   561.5      NA         NA
      Provitamin A (mcg)       6972.7  5523.4  8318.4      NA         NA
            Thiamin (mg)          2.3     2.1     2.6     100        100
         Riboflavin (mg)          3.5     3.3     3.8     100        100
             Niacin (mg)         65.4    61.8    68.3     100        100
      Folate (mcg total)        725.7   679.0   781.6      NA         NA
     Folate equivs (mcg)       1035.7   962.9  1139.4     100        100
          Vitamin C (mg)        210.8   167.5   262.2     100        100
         Vitamin D (mcg)          4.3     3.7     5.1      NA          2
          Vitamin E (mg)         15.0    13.1    17.1      NA        100
            Calcium (mg)       1622.7  1518.8  1689.7     100        100
               Iron (mg)         16.0    15.0    17.6     100        100
            Iodine (mcg)        282.2   256.0   307.6     100        100
          Magnesium (mg)        544.0   495.5   575.3     100        100
         Phosphorus (mg)       2428.4  2343.4  2514.4     100        100
          Potassium (mg)       5239.5  4974.6  5444.5      NA        100
             Sodium (mg)       1991.1  1800.5  2208.7      NA        100
               Zinc (mg)         19.8    16.6    98.0     100        100
        Cholesterol (mg)        266.6   204.4   353.3      NA         NA
          Selenium (mcg)         89.9    78.0   104.0     100        100
         Vitamin B6 (mg)          3.0     2.4     3.6     100        100
       Vitamin B12 (mcg)          8.6     7.8     9.9     100        100

         Percent energy from fat 26.6
     Percent energy from protein 20.9
Percent energy from carbohydrate 52.6
```

Girls12to13.hitot4:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            5
 [6,] OtherVeg             14
 [7,] TotalFruit           28
 [8,] WholegrainCereals    32
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           24.5
[16,] PolyMarg             20
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10850.7 10602.3 11179.8      NA         NA
             Energy (kJ)      11204.5 10951.7 11524.7      NA         NA
             Protein (g)        135.0   125.7   248.2     100        100
                 Fat (g)         80.1    75.8    85.9      NA         NA
        Carbohydrate (g)        337.6   323.6   353.1      NA         NA
              Sugars (g)        157.4   148.5   169.3      NA         NA
              Starch (g)        178.1   164.0   190.6      NA         NA
               Fibre (g)         46.3    42.2    53.4      NA        100
       Saturated fat (g)         27.4    25.8    29.6      NA         NA
 Monounsaturated fat (g)         27.1    24.9    29.7      NA         NA
 Polyunsaturated fat (g)         19.3    17.7    21.4      NA         NA
       Linoleic acid (g)         17.7    16.1    19.6      NA        100
Alpha linolenic acid (g)          1.4     1.2     1.9      NA        100
  LC n3 fatty acids (mg)        217.9    92.7   431.7      NA        100
  Vitamin A equivs (mcg)       1601.0  1376.3  1842.3     100        100
           Retinol (mcg)        505.0   456.4   581.7      NA         NA
      Provitamin A (mcg)       6499.7  5107.5  8082.2      NA         NA
            Thiamin (mg)          2.2     2.0     2.4     100        100
         Riboflavin (mg)          3.4     3.2     3.8     100        100
             Niacin (mg)         63.8    60.4    67.2     100        100
      Folate (mcg total)        687.9   613.8   747.3      NA         NA
     Folate equivs (mcg)        976.2   888.0  1082.0     100        100
          Vitamin C (mg)        180.0   146.0   223.8     100        100
         Vitamin D (mcg)          4.3     3.7     5.2      NA          5
          Vitamin E (mg)         13.8    12.1    16.0      NA        100
            Calcium (mg)       1593.3  1529.3  1697.4     100        100
               Iron (mg)         15.4    14.0    16.8     100        100
            Iodine (mcg)        279.0   260.2   301.0     100        100
          Magnesium (mg)        526.1   490.4   558.9     100        100
         Phosphorus (mg)       2389.0  2279.6  2478.1     100        100
          Potassium (mg)       5030.3  4748.5  5252.6      NA        100
             Sodium (mg)       1993.7  1755.8  2240.9      NA        100
               Zinc (mg)         21.8    16.1   177.3     100        100
        Cholesterol (mg)        277.6   213.9   376.6      NA         NA
          Selenium (mcg)         88.8    80.2    99.9     100        100
         Vitamin B6 (mg)          2.5     2.0     3.1     100        100
       Vitamin B12 (mcg)          8.7     8.0     9.6     100        100

         Percent energy from fat 26.9
     Percent energy from protein 20.8
Percent energy from carbohydrate 52.3
```

Girls12to13.hitot5:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            5
 [6,] OtherVeg             28
 [7,] TotalFruit           17
 [8,] WholegrainCereals    28
 [9,] RefinedCereals       21
[10,] Poultryfisheggsleg   7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           24.5
[16,] PolyMarg             20
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10814.6 10499.1 11198.5      NA         NA
             Energy (kJ)      11141.0 10813.4 11531.8      NA         NA
             Protein (g)        138.8   129.2   250.1     100        100
                 Fat (g)         87.1    81.4    93.8      NA         NA
        Carbohydrate (g)        319.5   304.0   334.6      NA         NA
              Sugars (g)        147.3   137.3   157.2      NA         NA
              Starch (g)        170.6   156.1   182.5      NA         NA
               Fibre (g)         42.3    37.8    47.8      NA        100
       Saturated fat (g)         30.8    28.8    33.0      NA         NA
 Monounsaturated fat (g)         29.9    27.4    33.4      NA         NA
 Polyunsaturated fat (g)         19.9    18.3    21.9      NA         NA
       Linoleic acid (g)         18.2    16.8    20.1      NA        100
Alpha linolenic acid (g)          1.4     1.2     1.9      NA        100
  LC n3 fatty acids (mg)        210.4    89.2   399.7      NA        100
  Vitamin A equivs (mcg)       1681.2  1369.6  1877.7     100        100
           Retinol (mcg)        532.8   488.6   621.1      NA         NA
      Provitamin A (mcg)       6809.6  5017.2  8172.7      NA         NA
            Thiamin (mg)          2.1     1.9     2.3     100        100
         Riboflavin (mg)          3.5     3.2     3.7     100        100
             Niacin (mg)         64.0    60.5    67.4     100        100
      Folate (mcg total)        642.7   577.2   703.6      NA         NA
     Folate equivs (mcg)        912.1   804.4  1018.2     100        100
          Vitamin C (mg)        180.4   143.0   227.4     100        100
         Vitamin D (mcg)          4.4     3.7     5.3      NA          5
          Vitamin E (mg)         14.4    12.8    16.9      NA        100
            Calcium (mg)       1594.6  1513.8  1683.6     100        100
               Iron (mg)         15.3    14.1    16.6     100        100
            Iodine (mcg)        276.1   253.0   296.4     100        100
          Magnesium (mg)        508.3   483.5   535.1     100        100
         Phosphorus (mg)       2398.0  2302.8  2469.2     100        100
          Potassium (mg)       4902.7  4692.9  5087.8      NA        100
             Sodium (mg)       2110.1  1831.0  2391.9      NA        100
               Zinc (mg)         25.9    16.3   176.8     100        100
        Cholesterol (mg)        293.4   219.7   390.7      NA         NA
          Selenium (mg)         89.7    80.4    99.9     100        100
         Vitamin B6 (mg)         2.8     2.0     3.7     100        100
       Vitamin B12 (mg)          8.8     8.1     9.7     100        100

         Percent energy from fat 29.2
     Percent energy from protein 21.4
Percent energy from carbohydrate 49.4
```

Girls12to13.hitot6:

```
      AllFoodGroups   N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    24
 [9,] RefinedCereals       24
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           4
[14,] MidFatDairy          0
[15,] LoFatDairy           21.5
[16,] PolyMarg             20
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               17.5
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      10883.1 10549.1 11241.2      NA         NA
             Energy (kJ)      11186.6 10848.4 11526.8      NA         NA
             Protein (g)        138.2   125.0   192.1     100        100
                 Fat (g)         91.3    86.0    98.6      NA         NA
        Carbohydrate (g)        316.5   298.4   336.9      NA         NA
              Sugars (g)        135.3   125.8   145.8      NA         NA
              Starch (g)        179.7   165.7   191.9      NA         NA
               Fibre (g)         39.7    35.3    50.1      NA        100
       Saturated fat (g)         31.8    29.2    35.0      NA         NA
 Monounsaturated fat (g)         31.8    29.3    34.7      NA         NA
 Polyunsaturated fat (g)         21.2    19.3    23.3      NA         NA
       Linoleic acid (g)         19.4    17.9    21.3      NA        100
Alpha linolenic acid (g)          1.4     1.2     2.3      NA        100
  LC n3 fatty acids (mg)        209.7    85.4   488.7      NA        100
  Vitamin A equivs (mcg)       1578.6  1392.0  1874.4     100        100
            Retinol (mcg)        522.4   456.8   586.9      NA         NA
      Provitamin A (mcg)        6268.9  5197.3  7914.6      NA         NA
            Thiamin (mg)          2.1     1.9     2.2     100        100
         Riboflavin (mg)          3.2     3.0     3.5     100        100
             Niacin (mg)         62.0    58.6    64.8     100        100
      Folate (mcg total)        582.6   529.4   639.6      NA         NA
     Folate equivs (mcg)        838.7   752.1   951.9     100        100
          Vitamin C (mg)        141.8    94.9   183.1     100        100
         Vitamin D (mcg)          4.3     3.6     5.1      NA          2
          Vitamin E (mg)         13.7    11.0    17.3      NA        100
            Calcium (mg)       1463.7  1399.3  1578.8     100        100
               Iron (mg)         14.8    13.4    16.1     100        100
            Iodine (mcg)        253.8   228.8   279.1     100        100
          Magnesium (mg)        487.6   464.3   527.8     100        100
         Phosphorus (mg)       2302.3  2213.2  2415.1     100        100
          Potassium (mg)       4461.8  4280.0  4697.7      NA        100
             Sodium (mg)       2127.3  1843.4  2499.9      NA        100
               Zinc (mg)         27.8    15.8   101.8     100        100
        Cholesterol (mg)        288.2   224.5   372.0      NA         NA
          Selenium (mcg)         89.3    79.6   101.1     100        100
         Vitamin B6 (mg)          2.3     1.7     3.0     100        100
       Vitamin B12 (mcg)          8.2     7.5     9.1     100        100

         Percent energy from fat 30.5
     Percent energy from protein 21.2
Percent energy from carbohydrate 48.4
```

A15.39 Sample *7-day Total Diets* for Girls 14-18 years mid energy level

Average age 16yrs and light to moderate activity PAL 1.7

Girls14to18.avtot1:

```
      AllFoodGroups   N.serves
 [1,] StarchyVeg           6
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            14
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       14
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9680.7  9372.8 10017.7      NA         NA
             Energy (kJ)      10052.3  9717.0 10389.3      NA         NA
             Protein (g)        131.0   125.8   135.4     100        100
                 Fat (g)         76.5    69.3    83.8      NA         NA
        Carbohydrate (g)        275.6   258.9   290.6      NA         NA
              Sugars (g)        120.3   110.5   127.9      NA         NA
              Starch (g)        153.7   141.8   167.8      NA         NA
               Fibre (g)         47.8    43.1    55.3      NA        100
       Saturated fat (g)         21.2    18.9    23.5      NA         NA
 Monounsaturated fat (g)         28.7    25.1    32.6      NA         NA
 Polyunsaturated fat (g)         20.9    18.6    23.6      NA         NA
       Linoleic acid (g)         19.2    17.1    21.9      NA        100
Alpha linolenic acid (g)          1.4     1.0     2.6      NA        100
  LC n3 fatty acids (mg)        198.7    79.9   418.4      NA         99
  Vitamin A equivs (mcg)       1391.3  1107.4  1639.1     100        100
           Retinol (mcg)        342.6   292.4   402.1      NA         NA
      Provitamin A (mcg)       6215.2  4587.8  7918.2      NA         NA
             Thiamin (mg)          2.4     2.2     2.7     100        100
          Riboflavin (mg)          3.1     2.8     3.4     100        100
              Niacin (mg)         62.9    58.8    70.0     100        100
      Folate (mcg total)        638.3   560.0   712.1      NA         NA
     Folate equivs (mcg)        938.7   864.0  1031.7     100        100
          Vitamin C (mg)        164.9   132.8   206.5     100        100
          Vitamin D (mcg)         3.2     2.7     4.1      NA          0
           Vitamin E (mg)        16.1    13.6    18.8      NA        100
             Calcium (mg)       1490.4  1404.9  1575.6     100        100
                Iron (mg)        16.3    15.2    17.6     100        100
             Iodine (mcg)        236.6   216.0   261.1     100        100
           Magnesium (mg)        558.4   517.2   599.4     100        100
          Phosphorus (mg)       2316.3  2228.4  2407.2     100        100
           Potassium (mg)       4832.2  4648.8  5055.4      NA        100
              Sodium (mg)       1769.8  1592.9  1949.9      NA        100
                Zinc (mg)         16.8    15.8    17.7     100        100
        Cholesterol (mg)        249.0   183.1   372.6      NA         NA
          Selenium (mcg)         93.0    81.8   104.4     100        100
          Vitamin B6 (mg)         2.1     1.8     2.4     100        100
        Vitamin B12 (mcg)         7.6     7.0    10.5     100        100

         Percent energy from fat 28.8
     Percent energy from protein 22.6
Percent energy from carbohydrate 48.6
```

Girls14to18.avtot2:

```
      AllFoodGroups    N.serves
 [1,] StarchyVeg           6
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            14
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       14
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9692.8  9298.7 10081.4      NA         NA
             Energy (kJ)      10041.1  9649.9 10454.0      NA         NA
             Protein (g)        131.8   126.3   136.0     100        100
                 Fat (g)         79.7    70.2    86.8      NA         NA
        Carbohydrate (g)        268.6   251.5   286.0      NA         NA
              Sugars (g)        111.6   100.8   120.8      NA         NA
              Starch (g)        155.7   142.2   171.9      NA         NA
               Fibre (g)         45.4    40.7    51.9      NA        100
       Saturated fat (g)         22.8    20.6    25.0      NA         NA
 Monounsaturated fat (g)         29.9    24.2    34.3      NA         NA
 Polyunsaturated fat (g)         21.1    18.5    24.8      NA         NA
       Linoleic acid (g)         19.5    17.2    22.1      NA        100
Alpha linolenic acid (g)          1.4     1.0     2.5      NA        100
  LC n3 fatty acids (mg)        195.6    96.1   348.3      NA        100
  Vitamin A equivs (mcg)       1391.8  1184.0  1612.4     100        100
           Retinol (mcg)        352.5   305.2   420.0      NA         NA
      Provitamin A (mcg)       6147.3  4982.2  7369.1      NA         NA
            Thiamin (mg)          2.4     2.1     2.6     100        100
         Riboflavin (mg)          3.1     2.9     3.4     100        100
             Niacin (mg)         63.2    59.4    67.1     100        100
      Folate (mcg total)        598.7   529.1   676.5      NA         NA
     Folate equivs (mcg)        905.6   797.7  1005.2     100        100
          Vitamin C (mg)        145.3   112.7   176.3     100        100
         Vitamin D (mcg)          3.2     2.6     4.1      NA          0
          Vitamin E (mg)         15.4    12.9    19.2      NA        100
            Calcium (mg)       1489.2  1405.7  1564.9     100        100
               Iron (mg)         16.1    14.9    18.1     100         98
            Iodine (mcg)        238.2   211.5   256.2     100        100
          Magnesium (mg)        549.0   513.9   579.6     100        100
         Phosphorus (mg)       2323.6  2220.1  2405.5     100        100
          Potassium (mg)       4619.0  4430.5  4779.2      NA        100
             Sodium (mg)       1848.9  1604.1  2097.4      NA        100
               Zinc (mg)         16.9    15.9    17.9     100        100
        Cholesterol (mg)        250.0   181.9   367.0      NA         NA
          Selenium (mcg)         93.4    84.5   101.3     100        100
         Vitamin B6 (mg)          2.0     1.8     2.3     100        100
       Vitamin B12 (mcg)          7.6     6.8     9.1     100        100

         Percent energy from fat 30.0
     Percent energy from protein 22.8
Percent energy from carbohydrate 47.2
```

Girls14to18.avtot3:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              3
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       14
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          3
[15,] LoFatDairy           21
[16,] PolyMarg             14
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9804.3  9504.1 10100.5      NA         NA
             Energy (kJ)      10138.0  9832.1 10432.7      NA         NA
             Protein (g)        128.6   123.4   133.5     100        100
                 Fat (g)         74.0    66.6    79.3      NA         NA
        Carbohydrate (g)        291.5   275.9   307.5      NA         NA
              Sugars (g)        138.1   127.9   151.7      NA         NA
              Starch (g)        151.7   136.4   160.8      NA         NA
               Fibre (g)         43.2    39.6    50.5      NA        100
       Saturated fat (g)         25.4    23.4    27.4      NA         NA
 Monounsaturated fat (g)         25.6    21.6    28.5      NA         NA
 Polyunsaturated fat (g)         17.2    15.2    19.4      NA         NA
       Linoleic acid (g)         15.6    13.7    17.4      NA        100
Alpha linolenic acid (g)          1.3     1.0     2.2      NA        100
  LC n3 fatty acids (mg)        210.7    88.7   402.1      NA        100
  Vitamin A equivs (mcg)       1505.6  1292.2  1711.0     100        100
           Retinol (mcg)        424.2   382.5   492.6      NA         NA
      Provitamin A (mcg)       6406.5  5131.1  7525.2      NA         NA
            Thiamin (mg)          2.2     2.0     2.4     100        100
         Riboflavin (mg)          3.3     3.0     3.5     100        100
             Niacin (mg)         60.8    57.1    64.6     100        100
      Folate (mcg total)        579.7   525.0   638.0      NA         NA
     Folate equivs (mcg)        880.5   790.1   967.7     100        100
          Vitamin C (mg)        173.1   136.1   223.5     100        100
         Vitamin D (mcg)          3.9     3.2     4.7      NA          0
          Vitamin E (mg)         13.2    11.2    16.1      NA        100
            Calcium (mg)       1587.0  1476.5  1675.4     100        100
               Iron (mg)         15.0    13.9    16.6     100         47
            Iodine (mcg)        264.7   244.0   289.0     100        100
          Magnesium (mg)        507.3   475.7   541.7     100        100
         Phosphorus (mg)       2311.0  2235.3  2408.7     100        100
          Potassium (mg)       4728.6  4537.8  4919.2      NA        100
             Sodium (mg)       1943.3  1681.2  2196.4      NA        100
               Zinc (mg)         16.3    15.5    21.6     100        100
        Cholesterol (mg)        274.2   211.0   387.8      NA         NA
          Selenium (mcg)         88.4    79.7   100.6     100        100
         Vitamin B6 (mg)          2.0     1.8     2.3     100        100
       Vitamin B12 (mcg)          8.4     7.6    10.0     100        100

         Percent energy from fat 27.6
     Percent energy from protein 22.0
Percent energy from carbohydrate 50.4
```

Girls14to18.avtot4:

```
      AllFoodGroups   N.serves
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              3
 [5,] NutsSeeds            7
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       18
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             15
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9845.6  9593.4 10146.6      NA         NA
             Energy (kJ)      10188.6  9914.7 10482.4      NA         NA
             Protein (g)        127.3   121.8   131.0     100        100
                 Fat (g)         71.5    66.4    78.6      NA         NA
        Carbohydrate (g)        300.5   287.7   315.9      NA         NA
              Sugars (g)        132.6   124.5   142.5      NA         NA
              Starch (g)        166.2   153.2   180.0      NA         NA
               Fibre (g)         44.2    40.3    51.1      NA        100
       Saturated fat (g)         23.1    21.6    25.5      NA         NA
 Monounsaturated fat (g)         25.1    22.6    28.5      NA         NA
 Polyunsaturated fat (g)         17.7    16.0    21.3      NA         NA
       Linoleic acid (g)         16.1    14.7    19.1      NA        100
Alpha linolenic acid (g)          1.3     1.0     2.2      NA        100
  LC n3 fatty acids (mg)        209.8    99.0   482.6      NA        100
  Vitamin A equivs (mcg)       1456.2  1188.6  1667.3     100        100
           Retinol (mcg)        377.6   332.4   439.6      NA         NA
      Provitamin A (mcg)       6391.5  4837.5  7561.1      NA         NA
            Thiamin (mg)          2.3     2.1     2.7     100        100
         Riboflavin (mg)          3.1     2.9     3.4     100        100
             Niacin (mg)         60.4    56.7    63.8     100        100
      Folate (mcg total)        577.3   512.7   635.4      NA         NA
     Folate equivs (mcg)        902.6   803.9   992.2     100        100
          Vitamin C (mg)        175.5   139.0   218.9     100        100
         Vitamin D (mcg)          3.4     2.8     4.2      NA          0
          Vitamin E (mg)         13.5    11.8    15.6      NA        100
            Calcium (mg)       1491.3  1402.6  1597.5     100        100
               Iron (mg)         15.6    14.3    17.4     100         84
            Iodine (mcg)        246.3   221.6   272.9     100        100
          Magnesium (mg)        506.9   464.6   536.3     100        100
         Phosphorus (mg)       2250.2  2155.5  2326.8     100        100
          Potassium (mg)       4617.5  4416.7  4787.6      NA        100
             Sodium (mg)       1992.8  1711.3  2220.7      NA        100
               Zinc (mg)         16.1    15.3    21.2     100        100
        Cholesterol (mg)        258.4   191.9   348.7      NA         NA
          Selenium (mcg)         89.9    79.0   100.0     100        100
         Vitamin B6 (mg)          1.9     1.7     2.2     100        100
       Vitamin B12 (mcg)          7.8     7.1    10.2     100        100

         Percent energy from fat 26.6
     Percent energy from protein 21.7
Percent energy from carbohydrate 51.7
```

Girls14to18.avtot5:

```
      AllFoodGroups   N.serves
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            2
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       18
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             15
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               27
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9757.5  9395.0 10169.6      NA         NA
             Energy (kJ)      10072.8  9685.9 10493.9      NA         NA
             Protein (g)        125.6   120.6   130.5     100        100
                 Fat (g)         70.0    63.7    78.6      NA         NA
        Carbohydrate (g)        300.6   285.3   315.5      NA         NA
              Sugars (g)        130.5   118.3   143.4      NA         NA
              Starch (g)        168.7   158.2   179.5      NA         NA
               Fibre (g)         41.1    37.4    47.5      NA        100
       Saturated fat (g)         25.4    22.8    28.1      NA         NA
 Monounsaturated fat (g)         23.4    20.5    27.5      NA         NA
 Polyunsaturated fat (g)         15.6    14.2    17.1      NA         NA
       Linoleic acid (g)         14.1    12.7    15.7      NA        100
Alpha linolenic acid (g)          1.2     1.0     1.8      NA        100
  LC n3 fatty acids (mg)        214.9    88.1   534.3      NA        100
  Vitamin A equivs (mcg)       1496.1  1269.2  1728.1     100        100
           Retinol (mcg)        406.9   356.4   490.4      NA         NA
      Provitamin A (mcg)       6450.8  5096.2  7942.8      NA         NA
            Thiamin (mg)          2.2     2.0     2.4     100        100
         Riboflavin (mg)          3.2     2.9     3.4     100        100
             Niacin (mg)         58.9    50.6    61.7     100        100
      Folate (mcg total)        518.0   458.4   581.0      NA         NA
     Folate equivs (mcg)        838.4   759.3   926.7     100        100
          Vitamin C (mg)        172.4   127.6   217.0     100        100
         Vitamin D (mcg)          3.5     2.9     4.7      NA          0
          Vitamin E (mg)         11.8    10.1    13.4      NA        100
            Calcium (mg)       1498.5  1421.1  1572.5     100        100
               Iron (mg)         15.2    13.8    16.6     100         60
            Iodine (mcg)        249.5   225.6   281.2     100        100
          Magnesium (mg)        472.9   445.3   497.7     100        100
         Phosphorus (mg)       2224.4  2146.5  2313.8     100        100
          Potassium (mg)       4469.0  4278.9  4660.8      NA        100
             Sodium (mg)       2133.2  1897.2  2464.6      NA        100
               Zinc (mg)         15.7    14.7    16.5     100        100
        Cholesterol (mg)        271.3   204.1   390.0      NA         NA
          Selenium (mcg)         87.2    78.1    94.8     100        100
         Vitamin B6 (mg)          1.8     1.6     2.2     100        100
       Vitamin B12 (mcg)          7.9     7.3     9.5     100        100

         Percent energy from fat 26.3
     Percent energy from protein 21.7
Percent energy from carbohydrate 52.0
```

Girls14to18.avtot6:

```
      AllFoodGroups   N.serves
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            2
 [6,] OtherVeg             14
 [7,] TotalFruit           17
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       14
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             25
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               27
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)       9835.8  9533.7 10217.6      NA         NA
             Energy (kJ)      10140.7  9832.0 10522.3      NA         NA
             Protein (g)        122.3   117.6   125.5     100        100
                 Fat (g)         78.4    71.5    84.5      NA         NA
        Carbohydrate (g)        290.3   274.7   306.1      NA         NA
              Sugars (g)        135.1   126.0   143.8      NA         NA
              Starch (g)        153.7   142.5   166.5      NA         NA
               Fibre (g)         39.6    35.0    45.7      NA        100
       Saturated fat (g)         27.5    25.0    29.7      NA         NA
 Monounsaturated fat (g)         25.4    22.2    29.5      NA         NA
 Polyunsaturated fat (g)         19.6    18.2    21.4      NA         NA
       Linoleic acid (g)         17.8    16.6    19.2      NA        100
Alpha linolenic acid (g)          1.4     1.3     2.0      NA        100
  LC n3 fatty acids (mg)        226.8    98.4   518.9      NA        100
  Vitamin A equivs (mcg)       1585.6  1311.8  1784.5     100        100
           Retinol (mcg)        515.6   457.1   596.3      NA         NA
      Provitamin A (mcg)       6334.9  4756.9  7521.5      NA         NA
            Thiamin (mg)          2.1     1.9     2.4     100        100
          Riboflavin (mg)         3.1     2.9     3.4     100        100
             Niacin (mg)         57.1    53.8    61.2     100        100
      Folate (mcg total)        514.1   460.0   614.3      NA         NA
     Folate equivs (mcg)        820.1   698.4   908.9     100        100
          Vitamin C (mg)        162.5   126.8   209.3     100        100
          Vitamin D (mcg)         4.2     3.4     5.3      NA          2
           Vitamin E (mg)        13.2    11.6    14.7      NA        100
             Calcium (mg)       1482.9  1400.4  1569.4     100        100
                Iron (mg)         14.6    13.3    16.1     100         14
             Iodine (mcg)        244.3   225.8   265.6     100        100
           Magnesium (mg)        459.0   430.1   484.7     100        100
          Phosphorus (mg)       2171.1  2090.1  2242.4     100        100
           Potassium (mg)       4374.3  4169.6  4586.0      NA        100
              Sodium (mg)       2137.2  1938.2  2406.5      NA        100
                Zinc (mg)         15.3    14.4    16.0     100        100
         Cholesterol (mg)        269.0   208.8   395.0      NA         NA
           Selenium (mcg)         85.3    76.3    97.7     100        100
          Vitamin B6 (mg)          1.8     1.5     2.2     100        100
        Vitamin B12 (mcg)          7.9     7.2     9.3     100        100

         Percent energy from fat 29.2
     Percent energy from protein 20.9
Percent energy from carbohydrate 49.8
```

A15.40 Sample *7-day Total Diets* for Girls 14-18 years higher energy level

High end age 18yrs and high activity PAL 2

Girls14to18.hitot1:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           6
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       35
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             20
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               7
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11797.3 11348.5 12240.2      NA         NA
             Energy (kJ)      12223.9 11764.8 12661.8      NA         NA
             Protein (g)        144.9   140.8   149.4     100        100
                 Fat (g)         79.6    71.0    86.3      NA         NA
        Carbohydrate (g)        380.0   361.6   395.7      NA         NA
              Sugars (g)        132.6   122.3   142.6      NA         NA
              Starch (g)        245.7   232.3   260.9      NA         NA
               Fibre (g)         55.0    50.7    60.5      NA        100
       Saturated fat (g)         23.9    21.3    26.2      NA         NA
 Monounsaturated fat (g)         27.7    23.5    31.7      NA         NA
 Polyunsaturated fat (g)         21.6    19.8    23.4      NA         NA
       Linoleic acid (g)         19.7    18.0    21.7      NA        100
Alpha linolenic acid (g)          1.6     1.4     2.5      NA        100
  LC n3 fatty acids (mg)        210.8    91.1   517.3      NA        100
  Vitamin A equivs (mcg)       1537.9  1249.7  1771.8     100        100
           Retinol (mcg)        424.9   379.5   498.0      NA         NA
      Provitamin A (mcg)       6588.0  5018.8  8082.1      NA         NA
            Thiamin (mg)          2.8     2.6     3.0     100        100
         Riboflavin (mg)          3.4     3.1     3.7     100        100
             Niacin (mg)         69.3    65.3    73.6     100        100
      Folate (mcg total)        665.8   607.2   738.3      NA         NA
     Folate equivs (mcg)       1112.5   970.9  1209.8     100        100
          Vitamin C (mg)        192.9   154.1   235.0     100        100
         Vitamin D (mcg)          3.7     3.1     4.7      NA          0
          Vitamin E (mg)         15.7    12.9    18.6      NA        100
            Calcium (mg)       1602.6  1538.1  1706.6     100        100
               Iron (mg)         19.0    17.5    20.4     100        100
            Iodine (mcg)        279.7   252.1   309.7     100        100
          Magnesium (mg)        590.6   554.1   623.5     100        100
         Phosphorus (mg)       2532.7  2441.2  2629.6     100        100
          Potassium (mg)       5115.1  4884.4  5338.4      NA        100
             Sodium (mg)       2361.4  2093.5  2580.8      NA        100
               Zinc (mg)         18.1    17.1    23.9     100        100
        Cholesterol (mg)        254.2   183.7   370.1      NA         NA
          Selenium (mcg)        103.8    95.6   112.7     100        100
         Vitamin B6 (mg)          2.2     1.9     2.7     100        100
       Vitamin B12 (mcg)          8.2     7.5     9.9     100        100

         Percent energy from fat 24.7
     Percent energy from protein 20.7
Percent energy from carbohydrate 54.6
```

Girls14to18.hitot2:

```
      AllFoodGroups   N.serves
 [1,] StarchyVeg           9
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            10
 [6,] OtherVeg             21
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       32
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             15
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11617.2 11274.9 12273.9      NA         NA
             Energy (kJ)      12034.1 11704.2 12694.6      NA         NA
             Protein (g)        143.7   139.1   150.0     100        100
                 Fat (g)         81.2    71.2    93.8      NA         NA
        Carbohydrate (g)        367.4   347.5   381.9      NA         NA
              Sugars (g)        137.1   124.2   149.2      NA         NA
              Starch (g)        228.5   218.5   240.7      NA         NA
               Fibre (g)         54.7    49.8    61.8      NA        100
       Saturated fat (g)         24.6    21.9    28.2      NA         NA
 Monounsaturated fat (g)         29.5    23.6    35.0      NA         NA
 Polyunsaturated fat (g)         20.8    19.1    23.3      NA         NA
       Linoleic acid (g)         19.0    17.6    21.4      NA        100
Alpha linolenic acid (g)          1.5     1.1     2.7      NA        100
  LC n3 fatty acids (mg)        212.5    92.5   487.3      NA        100
  Vitamin A equivs (mcg)       1493.8  1271.2  1710.9     100        100
           Retinol (mcg)        377.0   329.4   422.4      NA         NA
      Provitamin A (mcg)       6613.0  5303.9  7800.3      NA         NA
            Thiamin (mg)          2.7     2.4     2.9     100        100
         Riboflavin (mg)          3.3     3.0     3.6     100        100
             Niacin (mg)         68.7    65.0    72.1     100        100
      Folate (mcg total)        665.5   602.1   729.2      NA         NA
     Folate equivs (mcg)       1053.9   940.2  1139.1     100        100
          Vitamin C (mg)        203.5   161.0   291.5     100        100
         Vitamin D (mcg)          3.4     2.7     4.6      NA          0
          Vitamin E (mg)         15.6    13.5    18.3      NA        100
            Calcium (mg)       1564.4  1479.0  1629.1     100        100
               Iron (mg)         18.5    17.3    19.9     100        100
            Iodine (mcg)        264.0   235.6   291.0     100        100
          Magnesium (mg)        589.1   563.1   624.6     100        100
         Phosphorus (mg)       2508.3  2435.3  2634.3     100        100
          Potassium (mg)       5280.9  5093.6  5521.2      NA        100
             Sodium (mg)       2241.3  1970.9  2471.2      NA        100
               Zinc (mg)         18.0    17.1    19.0     100        100
        Cholesterol (mg)        257.9   198.6   335.0      NA         NA
          Selenium (mcg)        101.9    89.3   114.0     100        100
         Vitamin B6 (mg)          2.2     1.9     2.7     100        100
       Vitamin B12 (mcg)          8.1     7.4     9.6     100        100

         Percent energy from fat 25.6
     Percent energy from protein 20.8
Percent energy from carbohydrate 53.6
```

Girls14to18.hitot3:

```
      AllFoodGroups   N.serves
 [1,] StarchyVeg           9
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            14
 [6,] OtherVeg             28
 [7,] TotalFruit           7
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       28
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             15
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               21
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11669.6 11318.1 12083.2      NA         NA
             Energy (kJ)      12053.0 11689.3 12468.1      NA         NA
             Protein (g)        145.3   140.1   149.6     100        100
                 Fat (g)         91.4    82.6   101.2      NA         NA
        Carbohydrate (g)        346.5   330.7   369.9      NA         NA
              Sugars (g)        118.1   105.3   131.1      NA         NA
              Starch (g)        227.4   216.5   242.3      NA         NA
               Fibre (g)         50.4    45.3    57.9      NA        100
       Saturated fat (g)         27.4    24.6    31.7      NA         NA
 Monounsaturated fat (g)         34.4    30.0    39.2      NA         NA
 Polyunsaturated fat (g)         23.0    20.5    25.9      NA         NA
       Linoleic acid (g)         21.2    19.1    24.2      NA        100
Alpha linolenic acid (g)          1.5     1.1     2.9      NA        100
  LC n3 fatty acids (mg)        212.7   106.6   486.6      NA        100
  Vitamin A equivs (mcg)       1510.7  1223.9  1792.7     100        100
           Retinol (mcg)        395.8   343.3   484.6      NA         NA
      Provitamin A (mcg)       6598.4  4764.4  7937.0      NA         NA
            Thiamin (mg)          2.9     2.6     3.1     100        100
         Riboflavin (mg)          3.4     3.2     3.7     100        100
             Niacin (mg)         72.0    68.1    76.7     100        100
      Folate (mcg total)        612.9   541.1   670.2      NA         NA
     Folate equivs (mcg)       1031.4   922.6  1147.9     100        100
          Vitamin C (mg)        180.1   146.7   231.9     100        100
         Vitamin D (mcg)          3.5     2.9     4.5      NA          0
          Vitamin E (mg)         17.0    14.5    19.4      NA        100
            Calcium (mg)       1589.1  1496.4  1667.0     100        100
               Iron (mg)         18.5    17.3    20.1     100        100
            Iodine (mcg)        274.8   254.8   295.9     100        100
          Magnesium (mg)        604.7   573.5   644.8     100        100
         Phosphorus (mg)       2587.4  2494.4  2718.4     100        100
          Potassium (mg)       5050.4  4871.5  5242.1      NA        100
             Sodium (mg)       2374.3  2081.1  2638.1      NA        100
               Zinc (mg)         18.3    17.2    19.4     100        100
        Cholesterol (mg)        267.2   206.4   363.2      NA         NA
          Selenium (mcg)        105.5    94.1   122.0     100        100
         Vitamin B6 (mg)          2.2     1.8     2.6     100        100
       Vitamin B12 (mcg)          8.1     7.3     9.6     100        100

         Percent energy from fat 28.7
     Percent energy from protein 21.0
Percent energy from carbohydrate 50.3
```

Girls14to18.hitot4:

```
      AllFoodGroups   N.serves
 [1,] StarchyVeg           6
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            7
 [6,] OtherVeg             28
 [7,] TotalFruit           21
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       28
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             15
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               28
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11685.3 11304.4 12040.2      NA         NA
             Energy (kJ)      12099.7 11720.0 12483.1      NA         NA
             Protein (g)        142.8   138.2   147.5     100        100
                 Fat (g)         82.9    74.5    90.1      NA         NA
        Carbohydrate (g)        369.3   345.2   388.4      NA         NA
              Sugars (g)        151.9   136.2   164.9      NA         NA
              Starch (g)        215.6   197.7   228.0      NA         NA
               Fibre (g)         53.4    49.0    60.6      NA        100
       Saturated fat (g)         27.4    25.1    30.3      NA         NA
 Monounsaturated fat (g)         29.3    24.3    33.5      NA         NA
 Polyunsaturated fat (g)         19.7    17.5    22.2      NA         NA
       Linoleic acid (g)         17.9    16.0    20.0      NA        100
Alpha linolenic acid (g)          1.5     1.2     2.5      NA        100
  LC n3 fatty acids (mg)        218.0   100.5   428.9      NA        100
  Vitamin A equivs (mcg)       1580.0  1331.1  1855.5     100        100
           Retinol (mcg)        411.2   350.9   490.9      NA         NA
      Provitamin A (mcg)       6924.4  5614.0  8322.6      NA         NA
            Thiamin (mg)          2.6     2.4     2.8     100        100
         Riboflavin (mg)          3.4     3.1     3.7     100        100
             Niacin (mg)         67.3    63.2    71.4     100        100
      Folate (mcg total)        658.6   597.5   742.6      NA         NA
     Folate equivs (mcg)       1025.2   923.1  1125.2     100        100
          Vitamin C (mg)        224.4   183.1   261.9     100        100
         Vitamin D (mcg)          3.5     2.8     4.5      NA          0
          Vitamin E (mg)         15.4    12.4    18.3      NA        100
            Calcium (mg)       1601.5  1488.9  1697.0     100        100
               Iron (mg)         18.5    17.2    20.0     100        100
            Iodine (mcg)        264.8   241.8   290.6     100        100
          Magnesium (mg)        578.3   547.4   615.7     100        100
         Phosphorus (mg)       2507.7  2425.3  2615.6     100        100
          Potassium (mg)       5285.6  5096.0  5523.4      NA        100
             Sodium (mg)       2348.5  2112.3  2667.1      NA        100
               Zinc (mg)         17.9    17.1    18.7     100        100
        Cholesterol (mg)        277.1   202.7   412.6      NA         NA
          Selenium (mcg)        100.5    90.0   112.4     100        100
         Vitamin B6 (mg)          2.2     1.9     2.8     100        100
       Vitamin B12 (mcg)          8.2     7.4    11.2     100        100

         Percent energy from fat 26.0
     Percent energy from protein 20.5
Percent energy from carbohydrate 53.5
```

Girls14to18.hitot5:

```
      AllFoodGroups   N.serves
 [1,] StarchyVeg           5
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            2
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       35
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             20
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               27
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11733.4 11409.9 12150.4      NA         NA
             Energy (kJ)      12102.4 11777.2 12525.0      NA         NA
             Protein (g)        139.4   134.1   144.2     100        100
                 Fat (g)         79.5    72.1    86.7      NA         NA
        Carbohydrate (g)        382.7   365.8   399.4      NA         NA
              Sugars (g)        135.0   125.0   146.2      NA         NA
              Starch (g)        246.4   233.8   258.9      NA         NA
               Fibre (g)         47.8    42.6    55.0      NA        100
       Saturated fat (g)         27.5    25.4    29.8      NA         NA
 Monounsaturated fat (g)         26.4    22.9    30.3      NA         NA
 Polyunsaturated fat (g)         19.2    17.5    20.6      NA         NA
       Linoleic acid (g)         17.4    15.8    18.8      NA        100
Alpha linolenic acid (g)          1.5     1.3     2.0      NA        100
  LC n3 fatty acids (mg)        220.8   106.5   475.0      NA        100
  Vitamin A equivs (mcg)       1566.7  1315.5  1867.7     100        100
           Retinol (mcg)        467.5   409.6   524.9      NA         NA
      Provitamin A (mcg)       6509.5  5231.5  8147.0      NA         NA
            Thiamin (mg)          2.6     2.4     2.9     100        100
         Riboflavin (mg)          3.4     3.1     3.7     100        100
             Niacin (mg)         66.3    62.6    70.8     100        100
      Folate (mcg total)        574.4   518.0   641.0      NA         NA
     Folate equivs (mcg)       1021.3   943.9  1129.6     100        100
          Vitamin C (mg)        175.9   133.1   228.6     100        100
         Vitamin D (mcg)          3.8     3.1     5.1      NA          1
          Vitamin E (mg)         13.5    11.5    15.6      NA        100
            Calcium (mg)       1584.2  1501.8  1664.4     100        100
               Iron (mg)         17.9    16.3    19.2     100        100
            Iodine (mcg)        284.5   258.4   310.6     100        100
          Magnesium (mg)        533.5   508.0   562.1     100        100
         Phosphorus (mg)       2455.1  2374.0  2539.7     100        100
          Potassium (mg)       4679.6  4480.8  4893.6      NA        100
             Sodium (mg)       2559.0  2256.7  2918.9      NA        100
               Zinc (mg)         17.4    16.1    22.5     100        100
        Cholesterol (mg)        278.4   205.0   373.0      NA         NA
          Selenium (mcg)        100.1    89.9   111.1     100        100
         Vitamin B6 (mg)          2.0     1.7     2.4     100        100
       Vitamin B12 (mcg)          8.4     7.7     9.9     100        100

         Percent energy from fat 24.9
     Percent energy from protein 20.1
Percent energy from carbohydrate 55.0
```

Girls14to18.hitot6:

```
      AllFoodGroups   N.serves
 [1,] StarchyVeg           9
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              2
 [5,] NutsSeeds            7
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    35
 [9,] RefinedCereals       28
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             20
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               35
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11669.8 11246.4 12027.2      NA         NA
             Energy (kJ)      12028.6 11593.7 12383.9      NA         NA
             Protein (g)        138.4   133.7   143.1     100        100
                 Fat (g)         89.2    78.7    97.0      NA         NA
        Carbohydrate (g)        359.1   345.2   375.2      NA         NA
              Sugars (g)        140.8   127.5   155.4      NA         NA
              Starch (g)        216.8   204.2   231.2      NA         NA
               Fibre (g)         47.3    42.6    52.8      NA        100
       Saturated fat (g)         30.0    26.9    33.4      NA         NA
 Monounsaturated fat (g)         31.1    25.6    36.2      NA         NA
 Polyunsaturated fat (g)         21.4    19.3    23.2      NA         NA
       Linoleic acid (g)         19.6    17.4    21.3      NA        100
Alpha linolenic acid (g)          1.5     1.2     2.4      NA        100
  LC n3 fatty acids (mg)        225.5   115.4   503.5      NA        100
  Vitamin A equivs (mcg)       1595.4  1327.0  1848.1     100        100
           Retinol (mcg)        479.1   416.2   547.1      NA         NA
      Provitamin A (mcg)       6611.8  5092.3  7923.1      NA         NA
            Thiamin (mg)          2.5     2.3     2.8     100        100
         Riboflavin (mg)          3.3     3.0     3.6     100        100
             Niacin (mg)         66.1    61.3    70.4     100        100
      Folate (mcg total)        577.6   514.2   621.4      NA         NA
     Folate equivs (mcg)        945.3   856.6  1029.9     100        100
          Vitamin C (mg)        187.5   156.9   230.0     100        100
         Vitamin D (mcg)          3.9     3.2     4.9      NA          0
          Vitamin E (mg)         15.1    13.1    17.2      NA        100
            Calcium (mg)       1551.7  1461.8  1648.5     100        100
               Iron (mg)         17.1    16.0    18.4     100        100
            Iodine (mcg)        266.2   238.0   292.4     100        100
          Magnesium (mg)        541.0   515.7   579.7     100        100
         Phosphorus (mg)       2446.8  2368.2  2537.2     100        100
          Potassium (mg)       4945.7  4741.8  5212.2      NA        100
             Sodium (mg)       2430.6  2219.7  2654.0      NA        100
               Zinc (mg)         17.3    16.4    18.4     100        100
        Cholesterol (mg)        280.2   214.1   407.6      NA         NA
          Selenium (mcg)         99.0    88.9   109.3     100        100
         Vitamin B6 (mg)          2.0     1.7     2.6     100        100
       Vitamin B12 (mcg)          8.2     7.3     9.5     100        100

         Percent energy from fat 28.1
     Percent energy from protein 20.0
Percent energy from carbohydrate 51.9
```

A15. 41 Pregnant Girls 14-18 years mid energy level

Average age; 16yrs; light to moderate activity PAL 1.7

Preg.avtot1:

```
      AllFoodGroups   N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            14
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       24.5
[10,] AllOtherMeatEggsLeg  12
[11,] RedMeats              12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             17
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12144.2 11738.3 12652.8      NA         NA
             Energy (kJ)      12570.8 12154.1 13095.6      NA         NA
             Protein (g)        175.3   168.8   180.0     100        100
                 Fat (g)         93.7    83.8   104.9      NA         NA
        Carbohydrate (g)        338.7   325.9   361.8      NA         NA
              Sugars (g)        113.9   106.9   120.3      NA         NA
              Starch (g)        223.7   209.8   240.2      NA         NA
               Fibre (g)         55.5    50.1    61.9      NA        100
       Saturated fat (g)         26.1    24.1    29.1      NA         NA
 Monounsaturated fat (g)         35.5    30.1    41.6      NA         NA
 Polyunsaturated fat (g)         24.9    22.5    27.7      NA         NA
       Linoleic acid (g)         22.6    19.9    25.4      NA        100
Alpha linolenic acid (g)          1.7     1.3     2.7      NA        100
  LC n3 fatty acids (mg)        362.5   184.6   634.5      NA        100
  Vitamin A equivs (mcg)       1497.7  1259.3  1773.4     100        100
           Retinol (mcg)        407.6   340.9   502.8      NA         NA
      Provitamin A (mcg)       6452.1  5077.1  8191.9      NA         NA
            Thiamin (mg)          3.1     2.8     3.4     100        100
         Riboflavin (mg)          3.7     3.4     4.0     100        100
             Niacin (mg)         85.2    80.2    91.3     100        100
      Folate (mcg total)        699.2   630.8   780.8      NA         NA
     Folate equivs (mcg)       1144.4  1009.3  1252.2     100        100
          Vitamin C (mg)        169.2   128.6   202.1     100        100
         Vitamin D (mcg)          4.1     3.2     5.4      NA          2
          Vitamin E (mg)         18.4    15.3    22.1      NA        100
            Calcium (mg)       1633.9  1542.7  1715.5     100        100
               Iron (mg)         21.4    19.7    23.1       1          0
            Iodine (mcg)        285.6   257.7   321.2     100        100
          Magnesium (mg)        668.7   626.5   698.4     100        100
         Phosphorus (mg)       2871.7  2791.9  2952.3     100        100
          Potassium (mg)       5462.6  5252.3  5610.3      NA        100
             Sodium (mg)       2353.4  2065.6  2663.3      NA        100
               Zinc (mg)         22.3    20.9    28.0     100        100
        Cholesterol (mg)        377.7   262.9   555.6      NA         NA
          Selenium (mcg)        134.8   124.6   152.3     100        100
         Vitamin B6 (mg)          2.5     2.3     3.0     100        100
       Vitamin B12 (mcg)          9.4     8.3    11.6     100        100

         Percent energy from fat 28.2
     Percent energy from protein 24.2
Percent energy from carbohydrate 47.6
```

Preg.avtot2:

```
     AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            14
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       21
[10,] AllOtherMeatEggsLeg  12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11890.2 11550.1 12400.4      NA         NA
             Energy (kJ)      12297.3 11948.1 12822.7      NA         NA
             Protein (g)        171.6   165.5   176.3     100        100
                 Fat (g)         96.0    89.4   105.4      NA         NA
        Carbohydrate (g)        322.5   309.9   338.6      NA         NA
              Sugars (g)        110.7   101.9   119.0      NA         NA
              Starch (g)        210.6   199.4   223.5      NA         NA
               Fibre (g)         52.9    48.5    61.9      NA        100
       Saturated fat (g)         26.7    24.2    29.3      NA         NA
 Monounsaturated fat (g)         35.8    31.9    40.6      NA         NA
 Polyunsaturated fat (g)         26.3    23.8    30.4      NA         NA
       Linoleic acid (g)         24.1    21.5    27.7      NA        100
Alpha linolenic acid (g)          1.7     1.3     2.9      NA        100
  LC n3 fatty acids (mg)        348.8   188.5   812.3      NA        100
  Vitamin A equivs (mcg)       1484.4  1247.3  1774.1     100        100
            Retinol (mcg)        448.9   402.7   508.6      NA         NA
      Provitamin A (mcg)        6132.3  4684.2  7635.6      NA         NA
             Thiamin (mg)          3.0     2.8     3.3     100        100
          Riboflavin (mg)          3.6     3.3     4.0     100        100
              Niacin (mg)         83.2    78.5    88.4     100        100
      Folate (mcg total)         681.9   613.3   758.2      NA         NA
     Folate equivs (mcg)        1111.7  1015.0  1246.0     100        100
          Vitamin C (mg)         148.9   112.2   181.1     100        100
          Vitamin D (mcg)          4.2     3.5     6.1      NA          6
           Vitamin E (mg)         18.9    15.8    23.1      NA        100
             Calcium (mg)        1610.6  1512.2  1713.0     100        100
                Iron (mg)         20.8    19.5    22.7       0          0
             Iodine (mcg)        279.0   259.2   312.9     100        100
           Magnesium (mg)        649.9   619.0   690.5     100        100
          Phosphorus (mg)       2809.9  2717.2  2899.1     100        100
           Potassium (mg)       5263.6  5054.9  5553.7      NA        100
              Sodium (mg)       2316.5  2106.5  2532.4      NA        100
                Zinc (mg)         21.8    20.5    27.5     100        100
        Cholesterol (mg)        374.4   278.3   522.7      NA         NA
           Selenium (mcg)       132.0   120.1   147.7     100        100
          Vitamin B6 (mg)          2.4     2.1     3.0     100        100
        Vitamin B12 (mcg)          9.3     8.3    11.4     100        100

         Percent energy from fat 29.5
     Percent energy from protein 24.2
Percent energy from carbohydrate 46.3
```

Preg.avtot3:

```
      AllFoodGroups   N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            11
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       21
[10,] AllOtherMeatEggsLeg  12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             17
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11667.3 11304.8 12247.4      NA         NA
             Energy (kJ)      12048.8 11680.1 12652.0      NA         NA
             Protein (g)        168.2   162.3   173.2     100        100
                 Fat (g)         91.5    84.9    99.0      NA         NA
        Carbohydrate (g)        323.2   307.4   338.1      NA         NA
              Sugars (g)        121.6   111.2   132.0      NA         NA
              Starch (g)        200.2   188.2   212.3      NA         NA
               Fibre (g)         49.7    44.2    56.8      NA        100
       Saturated fat (g)         28.0    25.6    31.1      NA         NA
 Monounsaturated fat (g)         33.5    30.1    37.7      NA         NA
 Polyunsaturated fat (g)         23.0    21.2    26.8      NA         NA
       Linoleic acid (g)         20.7    19.2    24.7      NA        100
Alpha linolenic acid (g)          1.6     1.2     2.7      NA        100
  LC n3 fatty acids (mg)        366.5   161.6   675.7      NA        100
  Vitamin A equivs (mcg)       1481.8  1237.3  1716.1     100        100
            Retinol (mcg)        432.9   372.8   506.4      NA         NA
      Provitamin A (mcg)        6207.6  4916.4  7931.0      NA         NA
            Thiamin (mg)          2.8     2.5     3.0     100        100
         Riboflavin (mg)          3.5     3.2     3.8     100        100
             Niacin (mg)         79.7    74.1    84.1     100        100
      Folate (mcg total)        641.3   588.3   717.1      NA         NA
     Folate equivs (mcg)       1023.4   931.0  1156.4     100        100
          Vitamin C (mg)        153.1   118.4   202.7     100        100
         Vitamin D (mcg)          4.1     3.3     5.5      NA          3
          Vitamin E (mg)         16.7    14.0    20.6      NA        100
            Calcium (mg)       1592.5  1486.8  1679.7     100        100
               Iron (mg)         19.7    17.8    21.0       0          0
            Iodine (mcg)        273.3   250.9   297.2     100        100
          Magnesium (mg)        610.7   574.9   656.2     100        100
         Phosphorus (mg)       2736.4  2616.0  2858.7     100        100
          Potassium (mg)       5189.7  4952.0  5404.8      NA        100
             Sodium (mg)       2328.2  2073.7  2635.5      NA        100
               Zinc (mg)         21.3    20.4    26.5     100        100
        Cholesterol (mg)        391.2   275.4   524.5      NA         NA
          Selenium (mcg)        128.5   115.9   141.1     100        100
         Vitamin B6 (mg)          2.3     2.1     2.7     100        100
       Vitamin B12 (mcg)          9.5     8.4    11.2     100        100

         Percent energy from fat 28.7
     Percent energy from protein 24.2
Percent energy from carbohydrate 47.1
```

Preg.avtot4:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            4
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       21
[10,] AllOtherMeatEggsLeg  12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             17
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               28
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11947.6 11505.0 12345.5      NA         NA
             Energy (kJ)      12331.6 11884.0 12718.5      NA         NA
             Protein (g)        168.4   163.3   173.7     100        100
                 Fat (g)         86.3    78.8    94.6      NA         NA
        Carbohydrate (g)        351.4   335.8   365.8      NA         NA
              Sugars (g)        134.6   125.3   147.3      NA         NA
              Starch (g)        215.3   199.4   227.8      NA         NA
               Fibre (g)         52.0    45.3    59.1      NA        100
       Saturated fat (g)         29.8    27.3    32.5      NA         NA
 Monounsaturated fat (g)         29.5    25.9    33.3      NA         NA
 Polyunsaturated fat (g)         20.0    18.1    21.7      NA         NA
       Linoleic acid (g)         17.8    16.0    19.5      NA        100
Alpha linolenic acid (g)          1.6     1.3     2.1      NA        100
  LC n3 fatty acids (mg)        360.5   203.1   690.0      NA        100
  Vitamin A equivs (mcg)       1546.1  1299.4  1774.0     100        100
           Retinol (mcg)        461.2   410.9   550.3      NA         NA
      Provitamin A (mcg)       6423.9  5013.4  7879.4      NA         NA
            Thiamin (mg)          2.7     2.5     2.9     100        100
         Riboflavin (mg)          3.5     3.3     3.8     100        100
             Niacin (mg)         79.2    74.4    83.9     100        100
      Folate (mcg total)        620.6   555.7   678.7      NA         NA
     Folate equivs (mcg)       1002.8   898.5  1098.2     100        100
          Vitamin C (mg)        174.7   140.8   230.2     100        100
         Vitamin D (mcg)          4.2     3.4     5.6      NA          7
          Vitamin E (mg)         14.3    12.4    17.1      NA        100
            Calcium (mg)       1600.9  1492.6  1719.0     100        100
               Iron (mg)         19.9    18.4    21.7       0          0
            Iodine (mcg)        277.0   246.5   306.9     100        100
          Magnesium (mg)        592.8   566.0   623.7     100        100
         Phosphorus (mg)       2753.5  2663.3  2849.9     100        100
          Potassium (mg)       5545.0  5361.5  5737.7      NA        100
             Sodium (mg)       2480.2  2234.1  2804.6      NA        100
               Zinc (mg)         21.0    19.9    22.1     100        100
        Cholesterol (mg)        404.1   320.7   539.0      NA         NA
          Selenium (mcg)        125.7   115.7   140.2     100        100
         Vitamin B6 (mg)          2.3     2.1     2.9     100        100
       Vitamin B12 (mcg)          9.5     8.6    11.4     100        100

         Percent energy from fat 26.5
     Percent energy from protein 23.7
Percent energy from carbohydrate 49.8
```

Preg.avtot5:

```
      AllFoodGroups    N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            2
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       21
[10,] AllOtherMeatEggsLeg  12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               21
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11970.4 11643.4 12294.4      NA         NA
             Energy (kJ)      12362.9 12045.2 12686.3      NA         NA
             Protein (g)        167.7   162.6   172.4     100        100
                 Fat (g)         91.4    85.8    97.5      NA         NA
        Carbohydrate (g)        341.8   330.6   356.2      NA         NA
              Sugars (g)        127.9   116.1   143.1      NA         NA
              Starch (g)        212.4   204.4   226.4      NA         NA
               Fibre (g)         52.6    47.4    61.1      NA        100
       Saturated fat (g)         30.5    28.2    33.1      NA         NA
 Monounsaturated fat (g)         30.1    28.2    32.6      NA         NA
 Polyunsaturated fat (g)         23.5    22.3    25.0      NA         NA
       Linoleic acid (g)         21.2    20.2    22.6      NA        100
Alpha linolenic acid (g)          1.7     1.5     2.2      NA        100
  LC n3 fatty acids (mg)        352.1   167.0   714.8      NA        100
  Vitamin A equivs (mcg)       1715.5  1494.3  2012.0     100        100
           Retinol (mcg)        571.6   521.0   638.1      NA         NA
      Provitamin A (mcg)       6781.4  5499.8  8590.7      NA         NA
            Thiamin (mg)          2.7     2.4     2.9     100        100
         Riboflavin (mg)          3.6     3.3     3.8     100        100
             Niacin (mg)         78.4    73.4    83.9     100        100
      Folate (mcg total)        633.0   572.9   693.5      NA         NA
     Folate equivs (mcg)       1015.1   890.2  1130.1     100        100
          Vitamin C (mg)        199.4   157.1   248.4     100        100
         Vitamin D (mcg)          4.9     4.1     5.9      NA         31
          Vitamin E (mg)         15.6    13.4    17.3      NA        100
            Calcium (mg)       1605.3  1517.9  1713.7     100        100
               Iron (mg)         20.2    18.9    21.8       0          0
            Iodine (mcg)        276.4   257.8   305.3     100        100
          Magnesium (mg)        586.9   555.6   635.3     100        100
         Phosphorus (mg)       2733.5  2643.5  2859.0     100        100
          Potassium (mg)       5628.2  5355.3  5846.5      NA        100
             Sodium (mg)       2504.1  2134.7  2798.9      NA        100
               Zinc (mg)         21.1    20.0    22.1     100        100
        Cholesterol (mg)        399.7   305.4   530.7      NA         NA
          Selenium (mcg)        124.4   114.0   137.9     100        100
         Vitamin B6 (mg)          2.3     2.1     2.6     100        100
       Vitamin B12 (mcg)          9.5     8.2    11.4     100        100

         Percent energy from fat 28.0
     Percent energy from protein 23.6
Percent energy from carbohydrate 48.5
```

Preg.avtot6:

```
      AllFoodGroups   N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            2
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       21
[10,] AllOtherMeatEggsLeg  12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             24
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               28
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11800.8 11488.9 12182.9      NA         NA
             Energy (kJ)      12165.7 11837.5 12539.8      NA         NA
             Protein (g)        164.5   158.8   169.3     100        100
                 Fat (g)         90.1    81.4    98.1      NA         NA
        Carbohydrate (g)        338.4   317.2   355.5      NA         NA
              Sugars (g)        133.1   121.1   143.4      NA         NA
              Starch (g)        203.9   185.2   219.2      NA         NA
               Fibre (g)         47.5    41.9    54.4      NA        100
       Saturated fat (g)         31.2    28.1    34.2      NA         NA
 Monounsaturated fat (g)         29.8    25.9    33.6      NA         NA
 Polyunsaturated fat (g)         21.9    20.2    23.5      NA         NA
       Linoleic acid (g)         19.6    18.2    21.1      NA        100
Alpha linolenic acid (g)          1.7     1.4     2.3      NA        100
  LC n3 fatty acids (mg)        360.8   186.2   669.1      NA        100
  Vitamin A equivs (mcg)       1608.3  1375.1  1889.3     100        100
            Retinol (mcg)        540.4   457.4   612.6      NA         NA
      Provitamin A (mcg)        6325.9  4938.6  7930.3      NA         NA
            Thiamin (mg)          2.6     2.4     2.9     100        100
          Riboflavin (mg)         3.5     3.2     3.7     100        100
             Niacin (mg)         76.2    70.3    79.9     100        100
      Folate (mcg total)        597.3   519.6   658.3      NA         NA
     Folate equivs (mcg)        983.2   876.7  1100.5     100        100
          Vitamin C (mg)        158.4   117.8   200.2     100        100
          Vitamin D (mcg)         4.7     4.0     6.1      NA         22
           Vitamin E (mg)        15.0    13.3    17.5      NA        100
             Calcium (mg)       1587.9  1488.6  1693.8     100        100
                Iron (mg)         19.3    17.9    20.7       0          0
             Iodine (mcg)        278.6   256.6   304.6     100        100
           Magnesium (mg)        560.9   534.4   597.6     100        100
          Phosphorus (mg)       2666.7  2557.8  2741.8     100        100
           Potassium (mg)       5061.6  4791.8  5270.2      NA        100
              Sodium (mg)       2538.9  2228.2  2785.9      NA        100
                Zinc (mg)         20.6    19.4    21.7     100        100
        Cholesterol (mg)        401.9   288.1   534.6      NA         NA
           Selenium (mcg)       123.3   113.5   139.9     100        100
          Vitamin B6 (mg)         2.2     1.9     2.5     100        100
        Vitamin B12 (mcg)         9.6     8.7    11.6     100        100

         Percent energy from fat 28.0
     Percent energy from protein 23.5
Percent energy from carbohydrate 48.5
```

A15.42 Pregnant Girls 14-18years higher energy level

Older age 18 yrs; high activity PAL 2.0

Preg.hitot1:

```
      AllFoodGroups   N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            21
 [6,] OtherVeg             21
 [7,] TotalFruit           28
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       28
[10,] AllOtherMeatEggsLeg  12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      14343.5 13983.3 14793.8      NA         NA
             Energy (kJ)      14886.2 14526.7 15340.4      NA         NA
             Protein (g)        191.4   182.3   196.2     100        100
                 Fat (g)        119.3   110.2   130.9      NA         NA
        Carbohydrate (g)        397.0   376.7   410.0      NA         NA
              Sugars (g)        147.2   139.1   158.4      NA         NA
              Starch (g)        247.6   232.4   258.0      NA         NA
               Fibre (g)         70.0    65.3    77.1      NA        100
       Saturated fat (g)         30.6    28.5    33.0      NA         NA
 Monounsaturated fat (g)         45.2    40.5    51.3      NA         NA
 Polyunsaturated fat (g)         34.8    32.0    38.1      NA         NA
       Linoleic acid (g)         32.1    29.2    35.3      NA        100
Alpha linolenic acid (g)          2.2     1.7     3.4      NA        100
  LC n3 fatty acids (mg)        335.2   151.7   563.7      NA        100
  Vitamin A equivs (mcg)       1680.2  1482.1  1851.0     100        100
           Retinol (mcg)        528.9   469.9   589.6      NA         NA
      Provitamin A (mcg)       6822.5  5415.6  7981.7      NA         NA
            Thiamin (mg)          3.5     3.2     3.8     100        100
         Riboflavin (mg)          3.9     3.5     4.2     100        100
             Niacin (mg)         92.8    87.3    98.0     100        100
      Folate (mcg total)        887.7   808.1   995.0      NA         NA
     Folate equivs (mcg)       1350.9  1250.3  1463.2     100        100
          Vitamin C (mg)        217.3   168.1   262.4     100        100
         Vitamin D (mcg)          4.7     3.9     5.9      NA         17
          Vitamin E (mg)         25.2    21.4    28.7      NA        100
            Calcium (mg)       1741.2  1640.4  1823.9     100        100
               Iron (mg)         24.7    23.4    26.9     100          0
            Iodine (mcg)        293.2   263.7   317.1     100        100
          Magnesium (mg)        789.7   747.9   823.8     100        100
         Phosphorus (mg)       3143.4  3035.8  3238.0     100        100
          Potassium (mg)       6382.0  6193.5  6597.6      NA        100
             Sodium (mg)       2524.5  2240.0  2810.8      NA        100
               Zinc (mg)         24.5    22.9    29.8     100        100
        Cholesterol (mg)        374.3   272.9   508.2      NA         NA
          Selenium (mcg)        145.7   134.2   161.7     100        100
         Vitamin B6 (mg)          3.0     2.7     3.5     100        100
       Vitamin B12 (mcg)          9.4     8.3    11.2     100        100

         Percent energy from fat 30.3
     Percent energy from protein 22.3
Percent energy from carbohydrate 47.3
```

Preg.hitot2:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            14
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       35
[10,] AllOtherMeatEggsLeg  12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      13604.1 13231.4 14084.9      NA         NA
             Energy (kJ)      14098.3 13717.0 14581.8      NA         NA
             Protein (g)        187.1   180.5   194.8     100        100
                 Fat (g)         99.7    92.8   107.4      NA         NA
        Carbohydrate (g)        400.4   385.8   417.0      NA         NA
              Sugars (g)        128.6   121.3   139.6      NA         NA
              Starch (g)        270.1   255.6   286.6      NA         NA
               Fibre (g)         64.1    57.2    73.3      NA        100
       Saturated fat (g)         27.2    24.7    29.6      NA         NA
 Monounsaturated fat (g)         36.6    33.1    41.6      NA         NA
 Polyunsaturated fat (g)         28.1    25.5    31.0      NA         NA
       Linoleic acid (g)         25.5    23.1    28.7      NA        100
Alpha linolenic acid (g)          2.1     1.6     3.1      NA        100
  LC n3 fatty acids (mg)        345.9   135.4   772.9      NA        100
  Vitamin A equivs (mcg)       1539.4  1288.2  1791.7     100        100
           Retinol (mcg)        448.4   378.6   508.9      NA         NA
      Provitamin A (mcg)       6460.1  4964.3  8067.6      NA         NA
            Thiamin (mg)          3.3     3.0     3.6     100        100
          Riboflavin (mg)         3.7     3.4     4.2     100        100
             Niacin (mg)         89.1    83.3    94.0     100        100
      Folate (mcg total)        792.8   706.8   888.1      NA         NA
     Folate equivs (mcg)       1284.7  1155.9  1412.7     100        100
          Vitamin C (mg)        169.6   132.2   220.1     100        100
          Vitamin D (mcg)         4.2     3.4     6.0      NA          3
           Vitamin E (mg)        20.2    17.8    23.0      NA        100
             Calcium (mg)       1699.8  1580.0  1780.2     100        100
                Iron (mg)         23.8    22.1    26.0      92          0
             Iodine (mcg)        300.8   267.7   334.7     100        100
           Magnesium (mg)        725.9   682.7   762.8     100        100
          Phosphorus (mg)       3039.2  2917.7  3191.0     100        100
           Potassium (mg)       5819.0  5596.8  6091.5      NA        100
              Sodium (mg)       2585.8  2334.2  2859.4      NA        100
                Zinc (mg)         23.7    22.7    24.5     100        100
        Cholesterol (mg)        371.3   278.7   490.5      NA         NA
          Selenium (mcg)        142.8   127.5   157.6     100        100
          Vitamin B6 (mg)         2.7     2.5     3.2     100        100
        Vitamin B12 (mcg)         9.7     8.5    11.7     100        100

         Percent energy from fat 26.8
     Percent energy from protein 23.1
Percent energy from carbohydrate 50.1
```

Preg.hitot3:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            18
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       28
[10,] AllOtherMeatEggsLeg  12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             17
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      13562.7 13171.9 14009.4      NA         NA
             Energy (kJ)      14025.9 13622.4 14461.1      NA         NA
             Protein (g)        183.1   178.8   188.8     100        100
                 Fat (g)        106.1    99.0   115.4      NA         NA
        Carbohydrate (g)        388.7   368.7   410.3      NA         NA
              Sugars (g)        141.9   131.9   158.4      NA         NA
              Starch (g)        245.0   232.1   261.6      NA         NA
               Fibre (g)         60.1    53.8    71.3      NA        100
       Saturated fat (g)         30.0    26.6    33.0      NA         NA
 Monounsaturated fat (g)         40.4    36.2    46.5      NA         NA
 Polyunsaturated fat (g)         27.7    25.7    30.9      NA         NA
       Linoleic acid (g)         25.2    23.5    27.8      NA        100
Alpha linolenic acid (g)          1.9     1.3     3.8      NA        100
  LC n3 fatty acids (mg)        370.1   169.3   680.1      NA        100
  Vitamin A equivs (mcg)       1514.0  1275.4  1812.6     100        100
            Retinol (mcg)        432.1   370.1   497.8      NA         NA
      Provitamin A (mcg)       6410.6  4976.8  8048.0      NA         NA
             Thiamin (mg)          3.3     3.1     3.6     100        100
          Riboflavin (mg)          3.8     3.4     4.1     100        100
              Niacin (mg)         89.2    84.5    94.6     100        100
      Folate (mcg total)         766.5   664.9   828.1      NA         NA
     Folate equivs (mcg)        1231.3  1131.6  1376.7     100        100
          Vitamin C (mg)         177.0   144.7   209.8     100        100
          Vitamin D (mcg)          4.2     3.4     5.2      NA          1
           Vitamin E (mg)         20.3    17.4    24.7      NA        100
             Calcium (mg)       1688.2  1606.6  1782.9     100        100
                Iron (mg)         22.6    21.0    23.9      26          0
             Iodine (mcg)        297.2   265.9   332.5     100        100
           Magnesium (mg)        716.6   683.2   762.4     100        100
          Phosphorus (mg)       3013.9  2901.5  3152.7     100        100
           Potassium (mg)       5777.2  5569.7  6027.7      NA        100
              Sodium (mg)       2589.0  2400.1  2889.1      NA        100
                Zinc (mg)         23.3    22.4    29.3     100        100
        Cholesterol (mg)         381.2   276.6   494.7      NA         NA
           Selenium (mcg)        140.9   126.2   154.9     100        100
          Vitamin B6 (mg)          2.7     2.3     3.1     100        100
        Vitamin B12 (mcg)          9.6     8.4    11.4     100        100

         Percent energy from fat 28.6
     Percent energy from protein 22.7
Percent energy from carbohydrate 48.7
```

Preg.hitot4:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            11
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       28
[10,] AllOtherMeatEggsLeg  12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             17
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               28
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      13592.5 13194.0 14043.3      NA         NA
             Energy (kJ)      14039.2 13645.5 14502.9      NA         NA
             Protein (g)        180.7   175.0   185.3     100        100
                 Fat (g)        101.1    90.3   109.3      NA         NA
        Carbohydrate (g)        404.3   386.4   418.4      NA         NA
              Sugars (g)        154.2   143.5   167.9      NA         NA
              Starch (g)        248.2   236.0   259.9      NA         NA
               Fibre (g)         57.7    52.5    63.2      NA        100
       Saturated fat (g)         32.0    29.6    34.6      NA         NA
 Monounsaturated fat (g)         36.7    30.8    41.5      NA         NA
 Polyunsaturated fat (g)         24.5    22.0    26.7      NA         NA
       Linoleic acid (g)         22.2    20.0    24.3      NA        100
Alpha linolenic acid (g)          1.8     1.4     2.7      NA        100
  LC n3 fatty acids (mg)        357.7   178.9   645.9      NA        100
  Vitamin A equivs (mcg)       1561.0  1257.9  1840.6     100        100
           Retinol (mcg)        462.5   406.8   525.1      NA         NA
      Provitamin A (mcg)       6504.8  4807.6  7867.4      NA         NA
            Thiamin (mg)          3.2     2.9     3.4     100        100
         Riboflavin (mg)          3.8     3.4     4.2     100        100
             Niacin (mg)         86.7    81.4    90.6     100        100
      Folate (mcg total)        730.0   662.3   808.4      NA         NA
     Folate equivs (mcg)       1192.3  1058.0  1311.4     100        100
          Vitamin C (mg)        183.1   133.8   237.0     100        100
         Vitamin D (mcg)          4.2     3.4     5.2      NA          5
          Vitamin E (mg)         18.1    15.5    20.4      NA        100
            Calcium (mg)       1697.2  1584.5  1798.3     100        100
               Iron (mg)         22.4    20.4    24.0      21          0
            Iodine (mcg)        301.5   276.5   331.7     100        100
          Magnesium (mg)        678.7   640.5   723.2     100        100
         Phosphorus (mg)       2969.5  2846.8  3079.5     100        100
          Potassium (mg)       5685.2  5415.1  5955.0      NA        100
             Sodium (mg)       2748.8  2360.8  3056.5      NA        100
               Zinc (mg)         23.0    21.7    28.5     100        100
        Cholesterol (mg)        398.5   308.5   499.1      NA         NA
          Selenium (mg)         137.7   119.1   153.6     100        100
         Vitamin B6 (mg)          2.5     2.3     3.1     100        100
       Vitamin B12 (mg)           9.8     8.9    11.8     100        100

         Percent energy from fat 27.3
     Percent energy from protein 22.4
Percent energy from carbohydrate 50.4
```

Preg.hitot5:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            9
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       28
[10,] AllOtherMeatEggsLeg  12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               21
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      13615.7 13202.5 14009.8      NA         NA
             Energy (kJ)      14076.4 13646.2 14494.1      NA         NA
             Protein (g)        179.6   174.1   184.6     100        100
                 Fat (g)        105.9    98.6   113.6      NA         NA
        Carbohydrate (g)        396.0   375.3   409.9      NA         NA
              Sugars (g)        148.2   133.4   158.3      NA         NA
              Starch (g)        246.0   232.6   258.2      NA         NA
               Fibre (g)         59.2    54.8    66.0      NA        100
       Saturated fat (g)         32.5    30.1    35.1      NA         NA
 Monounsaturated fat (g)         37.1    33.7    40.7      NA         NA
 Polyunsaturated fat (g)         28.1    25.9    31.2      NA         NA
       Linoleic acid (g)         25.6    23.4    28.5      NA        100
Alpha linolenic acid (g)          2.0     1.6     2.8      NA        100
  LC n3 fatty acids (mg)        341.6   181.6   618.3      NA        100
  Vitamin A equivs (mcg)       1723.2  1459.7  2014.4     100        100
            Retinol (mcg)        574.2   520.2   643.5      NA         NA
      Provitamin A (mcg)        6810.3  5395.8  8288.6      NA         NA
            Thiamin (mg)          3.2     2.9     3.4     100        100
         Riboflavin (mg)          3.8     3.4     4.2     100        100
             Niacin (mg)         85.5    80.3    91.3     100        100
      Folate (mcg total)        747.4   668.3   822.6      NA         NA
     Folate equivs (mcg)       1216.2  1142.4  1342.9     100        100
          Vitamin C (mg)        205.8   155.3   242.6     100        100
         Vitamin D (mcg)          4.8     4.1     6.2      NA         27
          Vitamin E (mg)         19.4    17.2    22.3      NA        100
            Calcium (mg)       1702.4  1601.3  1788.1     100        100
               Iron (mg)         22.7    21.6    25.1      31          0
            Iodine (mcg)        302.1   278.7   328.0     100        100
          Magnesium (mg)        677.4   644.7   715.5     100        100
         Phosphorus (mg)       2948.8  2848.2  3087.3     100        100
          Potassium (mg)       5810.7  5551.1  6065.6      NA        100
             Sodium (mg)       2723.7  2483.8  3098.5      NA        100
               Zinc (mg)         23.0    21.8    28.0     100        100
        Cholesterol (mg)        404.0   317.6   538.4      NA         NA
          Selenium (mcg)        134.5   125.2   147.1     100        100
         Vitamin B6 (mg)          2.6     2.3     2.9     100        100
       Vitamin B12 (mcg)          9.7     8.6    11.8     100        100

         Percent energy from fat 28.5
     Percent energy from protein 22.2
Percent energy from carbohydrate 49.4
```

Preg.hitot6:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            9
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       28
[10,] AllOtherMeatEggsLeg  12
[11,] RedMeats             12
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           21
[16,] PolyMarg             24
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               28
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      13688.6 13333.0 14119.7      NA         NA
             Energy (kJ)      14131.1 13785.1 14561.4      NA         NA
             Protein (g)        179.4   174.0   184.7     100        100
                 Fat (g)        105.5    97.8   113.9      NA         NA
        Carbohydrate (g)        401.7   386.9   422.8      NA         NA
              Sugars (g)        152.7   139.5   165.6      NA         NA
              Starch (g)        247.1   232.5   269.3      NA         NA
               Fibre (g)         57.4    52.3    65.7      NA        100
       Saturated fat (g)         33.2    30.3    36.2      NA         NA
 Monounsaturated fat (g)         37.3    34.2    42.1      NA         NA
 Polyunsaturated fat (g)         26.9    24.7    29.2      NA         NA
       Linoleic acid (g)         24.3    22.3    26.3      NA        100
Alpha linolenic acid (g)          2.0     1.6     3.0      NA        100
  LC n3 fatty acids (mg)        359.1   157.3   677.7      NA        100
  Vitamin A equivs (mcg)       1638.4  1390.7  1871.4     100        100
           Retinol (mcg)        541.2   486.8   607.5      NA         NA
      Provitamin A (mcg)       6498.6  4935.1  7733.9      NA         NA
             Thiamin (mg)          3.2     2.9     3.4     100        100
         Riboflavin (mg)           3.8     3.5     4.1     100        100
              Niacin (mg)         85.8    82.0    89.5     100        100
      Folate (mcg total)        715.5   650.6   801.0      NA         NA
     Folate equivs (mcg)       1180.5  1076.2  1274.4     100        100
          Vitamin C (mg)        182.1   131.8   224.1     100        100
         Vitamin D (mcg)          4.7     4.1     5.8      NA         24
          Vitamin E (mg)         18.8    16.1    22.3      NA        100
            Calcium (mg)       1690.9  1585.9  1829.6     100        100
               Iron (mg)         22.2    20.5    23.7      15          0
            Iodine (mcg)        301.3   272.5   327.0     100        100
          Magnesium (mg)        668.4   634.8   711.7     100        100
         Phosphorus (mg)       2943.9  2839.8  3034.8     100        100
          Potassium (mg)       5651.5  5468.0  5918.6      NA        100
             Sodium (mg)       2782.7  2393.0  3079.7      NA        100
               Zinc (mg)         22.6    21.6    27.7     100        100
        Cholesterol (mg)        404.6   306.8   518.1      NA         NA
          Selenium (mg)         135.9   121.5   149.2     100        100
         Vitamin B6 (mg)          2.5     2.2     2.9     100        100
       Vitamin B12 (mg)           9.8     8.6    11.3     100        100

         Percent energy from fat 28.2
     Percent energy from protein 22.1
Percent energy from carbohydrate 49.7
```

A15.43 Lactation Girls 14-18 years mid energy level

Average age 16yrs; light to moderate activity PAL 1.7

Lact.avtot1:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            14
 [6,] OtherVeg             21
 [7,] TotalFruit           14
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       30
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             17
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      12043.4 11640.1 12416.4      NA         NA
             Energy (kJ)      12477.4 12043.5 12871.4      NA         NA
             Protein (g)        154.7   149.3   160.5     100        100
                 Fat (g)         87.6    80.3    96.9      NA         NA
        Carbohydrate (g)        367.1   353.3   383.8      NA         NA
              Sugars (g)        121.9   108.8   132.3      NA         NA
              Starch (g)        244.0   231.5   256.8      NA         NA
               Fibre (g)         56.5    52.4    62.4      NA        100
       Saturated fat (g)         24.0    21.8    26.8      NA         NA
 Monounsaturated fat (g)         32.6    29.2    37.6      NA         NA
 Polyunsaturated fat (g)         24.4    21.0    28.3      NA         NA
       Linoleic acid (g)         22.5    19.5    26.2      NA        100
Alpha linolenic acid (g)          1.7     1.2     3.1      NA         97
  LC n3 fatty acids (mg)        201.7    96.5   501.4      NA         79
  Vitamin A equivs (mcg)       1471.7  1182.1  1673.5     100        100
           Retinol (mcg)        392.0   338.2   444.6      NA         NA
      Provitamin A (mcg)       6384.6  4717.8  7624.5      NA         NA
            Thiamin (mg)          3.1     2.9     3.4     100        100
         Riboflavin (mg)          3.7     3.5     4.1     100        100
             Niacin (mg)         75.5    71.6    79.4     100        100
      Folate (mcg total)        713.4   640.6   799.2      NA         NA
     Folate equivs (mcg)       1181.1  1071.0  1295.7     100        100
          Vitamin C (mg)        170.0   122.8   212.4     100        100
         Vitamin D (mcg)          3.6     3.0     4.7      NA          0
          Vitamin E (mg)         17.6    14.3    21.0      NA        100
            Calcium (mg)       1784.9  1692.2  1880.3     100        100
               Iron (mg)         20.1    18.9    22.0     100        100
            Iodine (mcg)        306.5   281.9   339.1     100        100
          Magnesium (mg)        663.3   605.3   699.6     100        100
         Phosphorus (mg)       2783.7  2675.7  2876.9     100        100
          Potassium (mg)       5359.0  5173.2  5610.6      NA        100
             Sodium (mg)       2370.8  2052.3  2622.5      NA        100
               Zinc (mg)         19.6    18.4    20.4     100        100
        Cholesterol (mg)        250.3   183.0   366.3      NA         NA
          Selenium (mcg)        109.8    99.4   121.4     100        100
         Vitamin B6 (mg)          2.4     2.1     2.8     100        100
       Vitamin B12 (mcg)          9.0     8.2    10.6     100        100

         Percent energy from fat 26.6
     Percent energy from protein 21.6
Percent energy from carbohydrate 51.8
```

Lact.avtot2:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            14
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       26.5
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11790.2 11481.8 12180.6      NA         NA
             Energy (kJ)      12202.2 11901.0 12595.8      NA         NA
             Protein (g)        150.9   147.7   154.1     100        100
                 Fat (g)         89.6    84.3    97.3      NA         NA
        Carbohydrate (g)        351.5   336.8   368.7      NA         NA
              Sugars (g)        119.8   112.4   130.3      NA         NA
              Starch (g)        230.5   217.3   241.6      NA         NA
               Fibre (g)         53.5    49.1    60.0      NA        100
       Saturated fat (g)         24.6    22.7    26.9      NA         NA
 Monounsaturated fat (g)         33.0    29.8    38.1      NA         NA
 Polyunsaturated fat (g)         25.5    23.3    28.0      NA         NA
       Linoleic acid (g)         23.5    21.7    25.4      NA        100
Alpha linolenic acid (g)          1.7     1.3     3.0      NA        100
  LC n3 fatty acids (mg)        199.1    82.6   424.1      NA         78
  Vitamin A equivs (mcg)       1469.4  1120.3  1769.0     100        100
           Retinol (mcg)        433.3   387.1   486.0      NA         NA
      Provitamin A (mcg)       6120.8  4031.9  7813.3      NA         NA
            Thiamin (mg)          3.0     2.6     3.2     100        100
         Riboflavin (mg)          3.7     3.4     4.0     100        100
             Niacin (mg)         73.9    69.6    77.6     100        100
      Folate (mcg total)        682.4   618.5   782.1      NA         NA
     Folate equivs (mcg)       1139.3  1018.0  1239.7     100        100
          Vitamin C (mg)        148.0   113.0   187.9     100        100
         Vitamin D (mcg)          3.8     3.3     4.8      NA          0
          Vitamin E (mg)         17.7    14.8    20.9      NA        100
            Calcium (mg)       1751.5  1661.2  1834.9     100        100
               Iron (mg)         19.3    17.8    20.7     100        100
            Iodine (mcg)        300.5   275.7   333.8     100        100
          Magnesium (mg)        642.5   613.3   669.6     100        100
         Phosphorus (mg)       2715.3  2624.4  2806.8     100        100
          Potassium (mg)       5168.0  4976.6  5347.1      NA        100
             Sodium (mg)       2332.4  2050.8  2563.9      NA        100
               Zinc (mg)         19.0    18.1    20.4     100        100
        Cholesterol (mg)        250.2   189.8   329.1      NA         NA
          Selenium (mcg)        107.7    99.5   119.6     100        100
         Vitamin B6 (mg)          2.3     2.0     2.5     100        100
       Vitamin B12 (mcg)          8.8     8.1    10.4     100        100

         Percent energy from fat 27.8
     Percent energy from protein 21.5
Percent energy from carbohydrate 50.7
```

Lact.avtot3:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            11
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       26.5
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             17
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11569.4 11235.8 11985.9      NA         NA
             Energy (kJ)      11957.0 11613.0 12359.9      NA         NA
             Protein (g)        147.7   142.6   152.6     100        100
                 Fat (g)         85.3    76.8    91.6      NA         NA
        Carbohydrate (g)        351.5   336.1   365.8      NA         NA
              Sugars (g)        129.3   114.5   139.0      NA         NA
              Starch (g)        220.9   209.3   235.2      NA         NA
               Fibre (g)         50.5    46.6    62.4      NA        100
       Saturated fat (g)         26.0    23.6    28.5      NA         NA
 Monounsaturated fat (g)         30.7    26.0    34.7      NA         NA
 Polyunsaturated fat (g)         22.2    20.1    25.3      NA         NA
       Linoleic acid (g)         20.4    18.3    23.6      NA        100
Alpha linolenic acid (g)          1.6     1.2     2.5      NA        100
  LC n3 fatty acids (mg)        208.2    90.8   464.9      NA         80
  Vitamin A equivs (mcg)       1478.0  1287.8  1715.7     100        100
           Retinol (mcg)        417.0   360.8   472.6      NA         NA
      Provitamin A (mcg)       6268.7  5131.0  7455.5      NA         NA
            Thiamin (mg)          2.8     2.5     3.0     100        100
         Riboflavin (mg)          3.6     3.4     3.9     100        100
             Niacin (mg)         70.5    66.1    74.1     100        100
      Folate (mcg total)        649.6   562.4   740.1      NA         NA
     Folate equivs (mcg)       1060.4   964.4  1167.9     100        100
          Vitamin C (mg)        152.0   116.1   189.2     100        100
         Vitamin D (mcg)          3.7     3.1     4.7      NA          0
          Vitamin E (mg)         15.8    12.9    19.0      NA        100
            Calcium (mg)       1731.2  1641.4  1836.0     100        100
               Iron (mg)         18.4    16.9    19.4     100        100
            Iodine (mcg)        293.8   272.6   316.4     100        100
          Magnesium (mg)        603.4   575.1   628.3     100        100
         Phosphorus (mg)       2643.2  2539.5  2745.9     100        100
          Potassium (mg)       5083.1  4856.4  5275.9      NA        100
             Sodium (mg)       2345.6  2078.7  2592.9      NA        100
               Zinc (mg)         18.5    17.6    19.4     100        100
        Cholesterol (mg)        266.5   197.1   387.0      NA         NA
          Selenium (mcg)        104.2    93.5   113.0     100        100
         Vitamin B6 (mg)          2.2     2.0     2.5     100         95
       Vitamin B12 (mcg)          8.9     8.2    10.3     100        100

         Percent energy from fat 27.0
     Percent energy from protein 21.5
Percent energy from carbohydrate 51.5
```

Lact.avtot4:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            4
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       26.5
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             17
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               28
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11874.7 11454.6 12253.2      NA         NA
             Energy (kJ)      12265.6 11845.4 12637.8      NA         NA
             Protein (g)        147.8   142.4   151.6     100        100
                 Fat (g)         80.8    71.8    87.8      NA         NA
        Carbohydrate (g)        379.9   364.4   404.5      NA         NA
              Sugars (g)        143.7   132.1   158.3      NA         NA
              Starch (g)        234.8   221.2   254.7      NA         NA
               Fibre (g)         52.5    45.7    61.3      NA        100
       Saturated fat (g)         28.0    24.9    31.1      NA         NA
 Monounsaturated fat (g)         26.9    23.1    29.9      NA         NA
 Polyunsaturated fat (g)         19.5    17.6    21.6      NA         NA
       Linoleic acid (g)         17.6    16.0    19.4      NA        100
Alpha linolenic acid (g)          1.5     1.3     2.6      NA        100
  LC n3 fatty acids (mg)        216.3   105.5   608.1      NA         81
  Vitamin A equivs (mcg)       1516.7  1099.1  1752.2     100         99
           Retinol (mcg)        449.7   379.8   523.8      NA         NA
      Provitamin A (mcg)       6302.4  4018.7  7546.7      NA         NA
            Thiamin (mg)          2.7     2.5     3.0     100        100
         Riboflavin (mg)          3.6     3.4     3.9     100        100
             Niacin (mg)         69.5    65.5    73.1     100        100
      Folate (mcg total)        631.3   550.5   697.7      NA         NA
     Folate equivs (mcg)       1039.5   928.2  1139.3     100        100
          Vitamin C (mg)        174.0   130.4   213.4     100        100
         Vitamin D (mcg)          3.8     3.2     5.5      NA          2
          Vitamin E (mg)         13.6    11.1    15.7      NA         97
            Calcium (mg)       1753.4  1661.1  1866.3     100        100
               Iron (mg)         18.7    17.1    20.1     100        100
            Iodine (mcg)        299.2   273.8   329.9     100        100
          Magnesium (mg)        588.7   558.9   617.3     100        100
         Phosphorus (mg)       2667.1  2535.5  2754.0     100        100
          Potassium (mg)       5455.3  5230.9  5654.2      NA        100
             Sodium (mg)       2534.1  2256.5  2944.6      NA        100
               Zinc (mg)         18.4    17.5    23.1     100        100
        Cholesterol (mg)        281.6   209.5   371.2      NA         NA
          Selenium (mcg)        102.7    94.7   117.6     100        100
         Vitamin B6 (mg)          2.2     1.9     2.5     100         93
        Vitamin B12 (mcg)         9.1     8.1    10.6     100        100

         Percent energy from fat 25
     Percent energy from protein 21
Percent energy from carbohydrate 54
```

Lact.avtot5:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           14
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            2
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       26.5
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               21
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11883.7 11573.8 12251.8      NA         NA
             Energy (kJ)      12285.0 11968.5 12658.3      NA         NA
             Protein (g)        147.0   140.8   152.3     100        100
                 Fat (g)         85.3    79.3    91.5      NA         NA
        Carbohydrate (g)        370.9   355.0   386.0      NA         NA
              Sugars (g)        137.5   123.8   150.6      NA         NA
              Starch (g)        232.1   222.6   243.9      NA         NA
               Fibre (g)         54.1    47.9    63.6      NA        100
       Saturated fat (g)         28.5    25.7    30.4      NA         NA
 Monounsaturated fat (g)         27.3    24.7    30.2      NA         NA
 Polyunsaturated fat (g)         22.9    21.5    24.7      NA         NA
       Linoleic acid (g)         20.9    19.7    22.5      NA        100
Alpha linolenic acid (g)          1.7     1.5     2.8      NA        100
  LC n3 fatty acids (mg)        215.9    89.4   423.9      NA         80
  Vitamin A equivs (mcg)       1690.0  1404.7  1973.5     100        100
           Retinol (mcg)        557.4   495.9   657.0      NA         NA
      Provitamin A (mcg)       6688.1  5207.5  8392.4      NA         NA
            Thiamin (mg)          2.7     2.5     2.9     100        100
         Riboflavin (mg)          3.7     3.3     3.9     100        100
             Niacin (mg)         68.7    64.8    73.0     100        100
      Folate (mcg total)        646.3   575.4   705.9      NA         NA
     Folate equivs (mcg)       1054.3   957.9  1143.2     100        100
          Vitamin C (mg)        201.3   162.5   244.5     100        100
         Vitamin D (mcg)          4.5     3.8     5.4      NA          9
          Vitamin E (mg)         14.8    12.5    16.5      NA        100
            Calcium (mg)       1757.9  1669.1  1843.6     100        100
               Iron (mg)         19.0    17.5    20.1     100        100
            Iodine (mcg)        297.8   274.7   323.5     100        100
          Magnesium (mg)        584.5   560.3   611.7     100        100
         Phosphorus (mg)       2646.5  2535.5  2741.4     100        100
          Potassium (mg)       5553.0  5379.5  5847.9      NA        100
             Sodium (mg)       2535.9  2205.5  2839.5      NA        100
               Zinc (mg)         18.3    17.2    19.3     100        100
        Cholesterol (mg)        278.7   207.3   454.4      NA         NA
          Selenium (mcg)        100.6    91.3   113.7     100        100
         Vitamin B6 (mg)          2.2     1.9     2.7     100         97
       Vitamin B12 (mcg)          9.0     8.3    10.9     100        100

         Percent energy from fat 26.3
     Percent energy from protein 20.8
Percent energy from carbohydrate 52.8
```

Lact.avtot6:

```
      AllFoodGroups   N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            2
 [6,] OtherVeg             14
 [7,] TotalFruit           14
 [8,] WholegrainCereals    42
 [9,] RefinedCereals       26.5
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             24
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               28
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      11688.9 11258.3 12114.3      NA         NA
             Energy (kJ)      12055.9 11627.7 12484.1      NA         NA
             Protein (g)        144.0   138.2   148.6     100        100
                 Fat (g)         83.4    77.3    90.1      NA         NA
        Carbohydrate (g)        367.1   348.6   383.6      NA         NA
              Sugars (g)        141.9   132.1   157.6      NA         NA
              Starch (g)        223.8   210.7   240.4      NA         NA
               Fibre (g)         47.7    44.3    56.5      NA        100
       Saturated fat (g)         28.9    26.5    32.6      NA         NA
 Monounsaturated fat (g)         26.9    24.6    29.6      NA         NA
 Polyunsaturated fat (g)         21.1    19.7    22.3      NA         NA
       Linoleic acid (g)         19.1    18.1    20.3      NA        100
Alpha linolenic acid (g)          1.6     1.4     2.2      NA        100
  LC n3 fatty acids (mg)        198.3    96.4   436.4      NA         79
  Vitamin A equivs (mcg)       1600.4  1326.7  1891.1     100        100
           Retinol (mcg)        522.4   467.9   591.6      NA         NA
      Provitamin A (mcg)       6372.1  4724.1  7901.5      NA         NA
            Thiamin (mg)          2.6     2.4     2.8     100        100
         Riboflavin (mg)          3.6     3.3     4.0     100        100
             Niacin (mg)         66.8    63.7    71.2     100        100
      Folate (mcg total)        603.5   522.1   670.7      NA         NA
     Folate equivs (mcg)       1012.0   911.9  1156.2     100        100
          Vitamin C (mg)        161.0   125.9   205.8     100        100
         Vitamin D (mcg)          4.2     3.6     5.2      NA          1
          Vitamin E (mg)         14.1    12.4    16.5      NA        100
            Calcium (mg)       1740.5  1655.0  1889.7     100        100
               Iron (mg)         17.8    16.3    19.1     100        100
            Iodine (mcg)        298.3   276.8   328.2     100        100
          Magnesium (mg)        551.9   526.5   575.1     100        100
         Phosphorus (mg)       2573.7  2477.5  2695.9     100        100
          Potassium (mg)       4970.2  4782.3  5172.7      NA        100
             Sodium (mg)       2539.5  2128.5  2760.7      NA        100
               Zinc (mg)         17.8    16.8    23.5     100        100
        Cholesterol (mg)        280.2   213.5   379.3      NA         NA
          Selenium (mcg)         99.6    88.8   110.8     100        100
         Vitamin B6 (mg)          2.0     1.8     2.3     100         50
       Vitamin B12 (mcg)          9.0     8.3    10.5     100        100

         Percent energy from fat 26.2
     Percent energy from protein 20.8
Percent energy from carbohydrate 53.0
```

A15.44 Lactation Girls *total* diets higher energy level

High activity PAL 2.0, older age 18years

Lact.hitot1:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            21
 [6,] OtherVeg             21
 [7,] TotalFruit           28
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       33.5
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      14213.7 13833.2 14651.9      NA         NA
             Energy (kJ)      14761.5 14377.0 15227.2      NA         NA
             Protein (g)        170.5   164.4   176.2     100        100
                 Fat (g)        112.9   105.2   121.7      NA         NA
        Carbohydrate (g)        424.8   410.2   443.2      NA         NA
              Sugars (g)        155.8   147.0   165.5      NA         NA
              Starch (g)        266.9   251.4   282.9      NA         NA
               Fibre (g)         70.7    65.7    78.3      NA        100
       Saturated fat (g)         28.6    26.9    30.7      NA         NA
 Monounsaturated fat (g)         42.1    38.1    46.5      NA         NA
 Polyunsaturated fat (g)         34.1    30.8    37.5      NA         NA
       Linoleic acid (g)         31.6    28.0    34.2      NA        100
Alpha linolenic acid (g)          2.2     1.6     4.0      NA        100
  LC n3 fatty acids (mg)        213.8    88.6   428.7      NA         82
  Vitamin A equivs (mcg)       1675.1  1451.4  1945.2     100        100
           Retinol (mcg)        513.8   469.7   545.8      NA         NA
      Provitamin A (mcg)       6876.5  5681.5  8466.3      NA         NA
            Thiamin (mg)          3.5     3.2     3.9     100        100
         Riboflavin (mg)          4.0     3.6     4.3     100        100
             Niacin (mg)         83.6    80.0    87.3     100        100
      Folate (mcg total)        899.3   829.6  1004.2      NA         NA
     Folate equivs (mcg)       1390.4  1281.6  1545.0     100        100
          Vitamin C (mg)        217.5   167.4   284.0     100        100
         Vitamin D (mcg)          4.3     3.8     5.6      NA          5
          Vitamin E (mg)         24.2    19.5    27.5      NA        100
            Calcium (mg)       1877.1  1785.9  1955.0     100        100
               Iron (mg)         23.3    21.8    24.8     100        100
            Iodine (mcg)        314.4   290.9   344.2     100        100
          Magnesium (mg)        779.3   732.6   832.4     100        100
         Phosphorus (mg)       3042.8  2910.6  3160.0     100        100
          Potassium (mg)       6266.0  5941.8  6561.9      NA        100
             Sodium (mg)       2561.0  2321.3  2892.8      NA        100
               Zinc (mg)         21.7    20.8    27.7     100        100
        Cholesterol (mg)        251.4   184.2   341.8      NA         NA
          Selenium (mg)         122.8   111.3   142.0     100        100
         Vitamin B6 (mg)          2.8     2.5     3.3     100        100
       Vitamin B12 (mg)           9.0     8.2    10.8     100        100

         Percent energy from fat 29.0
     Percent energy from protein 20.1
Percent energy from carbohydrate 50.9
```

Lact.hitot2:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              14
 [5,] NutsSeeds            14
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       40.5
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             21
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               0
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      13489.0 12994.1 13908.4      NA         NA
             Energy (kJ)      13985.6 13486.7 14415.7      NA         NA
             Protein (g)        166.4   160.4   172.0     100        100
                 Fat (g)         93.8    82.6   105.9      NA         NA
        Carbohydrate (g)        427.4   407.8   444.3      NA         NA
              Sugars (g)        137.5   127.4   147.9      NA         NA
              Starch (g)        288.2   270.6   302.7      NA         NA
               Fibre (g)         64.4    58.9    75.8      NA        100
       Saturated fat (g)         25.3    22.3    28.1      NA         NA
 Monounsaturated fat (g)         34.0    28.7    39.0      NA         NA
 Polyunsaturated fat (g)         27.3    23.5    31.0      NA         NA
       Linoleic acid (g)         25.1    21.8    28.9      NA        100
Alpha linolenic acid (g)          1.9     1.5     2.9      NA        100
  LC n3 fatty acids (mg)        220.2    76.0   431.2      NA         88
  Vitamin A equivs (mcg)       1518.0  1282.6  1753.7     100        100
           Retinol (mcg)        439.4   386.0   490.6      NA         NA
      Provitamin A (mcg)       6376.7  5005.4  7666.0      NA         NA
            Thiamin (mg)          3.3     3.1     3.6     100        100
         Riboflavin (mg)          3.8     3.6     4.2     100        100
             Niacin (mg)         79.7    73.9    84.3     100        100
      Folate (mcg total)        804.1   734.9   874.3      NA         NA
     Folate equivs (mcg)       1324.5  1238.3  1456.3     100        100
          Vitamin C (mg)        168.0   121.9   203.1     100        100
         Vitamin D (mcg)          3.9     3.3     5.0      NA          0
          Vitamin E (mg)         19.2    15.4    22.3      NA        100
            Calcium (mg)       1844.8  1758.8  1964.1     100        100
               Iron (mg)         22.3    20.9    24.2     100        100
            Iodine (mcg)        323.5   302.7   358.0     100        100
          Magnesium (mg)        713.6   674.4   757.5     100        100
         Phosphorus (mg)       2941.9  2823.4  3046.3     100        100
          Potassium (mg)       5714.0  5523.8  5916.0      NA        100
             Sodium (mg)       2620.5  2336.0  2895.6      NA        100
               Zinc (mg)         20.7    19.8    21.6     100        100
        Cholesterol (mg)        254.2   191.0   363.9      NA         NA
          Selenium (mcg)        120.3   111.7   128.9     100        100
         Vitamin B6 (mg)          2.5     2.3     3.2     100        100
       Vitamin B12 (mcg)          9.2     8.2    10.6     100        100

         Percent energy from fat 25.5
     Percent energy from protein 20.7
Percent energy from carbohydrate 53.8
```

Lact.hitot3:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            18
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       33.5
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             17
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               14
                        Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      13471.8 13042.4 13905.2      NA         NA
             Energy (kJ)      13939.9 13505.2 14377.4      NA         NA
             Protein (g)        162.3   154.2   169.5     100        100
                 Fat (g)         99.8    91.9   109.7      NA         NA
        Carbohydrate (g)        418.1   401.5   436.7      NA         NA
              Sugars (g)        151.5   138.9   162.3      NA         NA
              Starch (g)        264.9   250.9   281.9      NA         NA
               Fibre (g)         60.6    56.6    68.2      NA        100
       Saturated fat (g)         27.9    25.7    30.0      NA         NA
 Monounsaturated fat (g)         37.6    33.2    43.1      NA         NA
 Polyunsaturated fat (g)         27.0    24.0    30.2      NA         NA
       Linoleic acid (g)         24.8    22.2    27.7      NA        100
Alpha linolenic acid (g)          1.8     1.3     2.9      NA        100
  LC n3 fatty acids (mg)        214.7    95.7   461.8      NA         86
  Vitamin A equivs (mcg)       1493.2  1271.1  1742.4     100        100
            Retinol (mcg)        419.3   371.3   472.2      NA         NA
      Provitamin A (mcg)        6343.2  4989.6  7783.6      NA         NA
            Thiamin (mg)          3.3     3.0     3.5     100        100
         Riboflavin (mg)          3.9     3.6     4.2     100        100
             Niacin (mg)         79.8    74.8    84.3     100        100
      Folate (mcg total)        773.7   699.9   843.9      NA         NA
     Folate equivs (mcg)       1262.7  1167.3  1388.4     100        100
          Vitamin C (mg)        177.1   144.1   232.8     100        100
         Vitamin D (mcg)          3.7     3.1     4.9      NA          0
          Vitamin E (mg)         19.6    15.0    23.2      NA        100
            Calcium (mg)       1833.1  1745.0  1930.7     100        100
               Iron (mg)         21.2    19.8    22.8     100        100
            Iodine (mcg)        317.2   297.6   339.1     100        100
          Magnesium (mg)        711.7   674.2   743.5     100        100
         Phosphorus (mg)       2922.0  2807.4  3022.3     100        100
          Potassium (mg)       5672.7  5438.5  5875.2      NA        100
             Sodium (mg)       2606.1  2323.0  2907.5      NA        100
               Zinc (mg)         20.5    19.2    21.8     100        100
        Cholesterol (mg)        264.6   185.7   377.0      NA         NA
          Selenium (mg)         117.9   105.2   137.0     100        100
         Vitamin B6 (mg)          2.5     2.3     2.9     100        100
       Vitamin B12 (mg)           9.2     8.3    11.0     100        100

         Percent energy from fat 27.1
     Percent energy from protein 20.3
Percent energy from carbohydrate 52.6
```

Lact.hitot4:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            11
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       33.5
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             17
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               28
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      13494.7 13147.9 13844.1      NA         NA
             Energy (kJ)      13948.1 13589.0 14289.1      NA         NA
             Protein (g)        160.3   155.0   165.3     100        100
                 Fat (g)         94.8    86.8   103.7      NA         NA
        Carbohydrate (g)        433.1   415.0   452.6      NA         NA
              Sugars (g)        162.9   150.8   176.8      NA         NA
              Starch (g)        268.3   252.4   278.6      NA         NA
               Fibre (g)         58.7    54.2    66.1      NA        100
       Saturated fat (g)         29.9    27.2    32.9      NA         NA
 Monounsaturated fat (g)         33.8    29.8    37.4      NA         NA
 Polyunsaturated fat (g)         23.7    21.6    27.2      NA         NA
       Linoleic acid (g)         21.6    19.4    25.1      NA        100
Alpha linolenic acid (g)          1.8     1.4     3.0      NA        100
  LC n3 fatty acids (mg)        230.8   117.4   397.8      NA         94
  Vitamin A equivs (mcg)       1569.0  1278.4  1835.7     100        100
           Retinol (mcg)        451.8   387.8   520.7      NA         NA
      Provitamin A (mcg)       6600.8  5002.9  8053.3      NA         NA
            Thiamin (mg)          3.2     3.0     3.4     100        100
         Riboflavin (mg)          3.9     3.6     4.2     100        100
             Niacin (mg)         77.2    71.3    81.6     100        100
      Folate (mcg total)        733.7   667.0   810.8      NA         NA
     Folate equivs (mcg)       1220.0  1123.2  1314.1     100        100
          Vitamin C (mg)        181.4   142.1   220.4     100        100
         Vitamin D (mcg)          3.9     3.2     4.8      NA          0
          Vitamin E (mg)         17.2    14.5    19.4      NA        100
            Calcium (mg)       1847.4  1769.5  1963.5     100        100
               Iron (mg)         21.0    19.3    22.5     100        100
            Iodine (mcg)        321.9   296.1   350.8     100        100
          Magnesium (mg)        673.6   642.3   715.3     100        100
         Phosphorus (mg)       2884.7  2753.2  3014.8     100        100
          Potassium (mg)       5590.1  5424.8  5853.0      NA        100
             Sodium (mg)       2772.0  2440.9  3078.6      NA        100
               Zinc (mg)         20.1    18.9    25.4     100        100
        Cholesterol (mg)        282.2   215.9   419.1      NA         NA
          Selenium (mcg)        114.8   102.9   124.2     100        100
         Vitamin B6 (mg)          2.4     2.1     2.8     100        100
       Vitamin B12 (mcg)          9.3     8.5    10.7     100        100

         Percent energy from fat 25.8
     Percent energy from protein 20.0
Percent energy from carbohydrate 54.2
```

Lact.hitot5:

```
      AllFoodGroups N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       14
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            9
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       33.5
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             28
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               21
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      13488.7 13092.9 13921.4      NA         NA
             Energy (kJ)      13953.8 13536.2 14388.0      NA         NA
             Protein (g)        159.6   153.2   165.5     100        100
                 Fat (g)         99.7    93.1   106.9      NA         NA
        Carbohydrate (g)        422.3   401.1   439.4      NA         NA
              Sugars (g)        156.3   144.7   167.6      NA         NA
              Starch (g)        264.2   250.9   279.2      NA         NA
               Fibre (g)         60.2    56.7    67.2      NA        100
       Saturated fat (g)         30.6    28.5    33.3      NA         NA
 Monounsaturated fat (g)         34.1    30.9    37.7      NA         NA
 Polyunsaturated fat (g)         27.5    25.5    29.3      NA         NA
       Linoleic acid (g)         25.1    23.0    27.1      NA        100
Alpha linolenic acid (g)          2.0     1.5     2.9      NA        100
  LC n3 fatty acids (mg)        224.3    98.3   507.8      NA         85
  Vitamin A equivs (mcg)       1705.9  1459.0  1985.6     100        100
           Retinol (mcg)        559.9   508.8   617.7      NA         NA
      Provitamin A (mcg)       6783.5  5336.9  8283.0      NA         NA
            Thiamin (mg)          3.2     3.0     3.4     100        100
         Riboflavin (mg)          3.9     3.6     4.2     100        100
             Niacin (mg)         76.4    72.2    81.0     100        100
      Folate (mcg total)        754.2   682.3   824.4      NA         NA
     Folate equivs (mcg)       1242.5  1125.0  1348.3     100        100
          Vitamin C (mg)        212.3   175.3   273.1     100        100
         Vitamin D (mcg)          4.5     3.9     6.1      NA          9
          Vitamin E (mg)         18.4    16.4    21.4      NA        100
            Calcium (mg)       1853.0  1782.0  1929.6     100        100
               Iron (mg)         21.3    20.0    22.7     100        100
            Iodine (mcg)        321.6   300.7   345.4     100        100
          Magnesium (mg)        671.9   643.4   718.8     100        100
         Phosphorus (mg)       2868.1  2743.6  2968.2     100        100
          Potassium (mg)       5718.2  5507.7  6007.2      NA        100
             Sodium (mg)       2750.5  2409.5  3063.6      NA        100
               Zinc (mg)         20.1    19.1    25.4     100        100
        Cholesterol (mg)        277.7   197.2   394.1      NA         NA
          Selenium (mcg)        112.3   101.1   123.1     100        100
         Vitamin B6 (mg)          2.4     2.2     2.8     100        100
       Vitamin B12 (mcg)          9.2     8.3    11.5     100        100

         Percent energy from fat 27.1
     Percent energy from protein 19.9
Percent energy from carbohydrate 53.0
```

Lact.hitot6:

```
      AllFoodGroups   N.serves
 [1,] StarchyVeg           7
 [2,] GreenBrassicas       7
 [3,] OrangeVeg            7
 [4,] Legumes              7
 [5,] NutsSeeds            9
 [6,] OtherVeg             14
 [7,] TotalFruit           21
 [8,] WholegrainCereals    49
 [9,] RefinedCereals       33.5
[10,] AllOtherMeatEggsLeg  7
[11,] RedMeats             7
[12,] EggsLegumesNutsSeeds 0
[13,] HiFatDairy           3.5
[14,] MidFatDairy          0
[15,] LoFatDairy           25
[16,] PolyMarg             24
[17,] Pasta                0
[18,] Rice                 0
[19,] Extras               28
                         Daily intake minimum maximum met EAR met RDI/AI
  Energy excl fibre (kJ)      13569.1 13197.3 13968.2      NA         NA
             Energy (kJ)      14017.4 13647.4 14422.9      NA         NA
             Protein (g)        158.5   153.7   162.4     100        100
                 Fat (g)         99.1    92.8   106.3      NA         NA
        Carbohydrate (g)        429.9   413.2   449.3      NA         NA
              Sugars (g)        161.7   147.5   175.7      NA         NA
              Starch (g)        266.3   248.7   279.7      NA         NA
               Fibre (g)         58.4    53.8    66.9      NA        100
       Saturated fat (g)         31.3    29.0    34.7      NA         NA
 Monounsaturated fat (g)         34.3    30.7    37.2      NA         NA
 Polyunsaturated fat (g)         25.9    24.4    28.1      NA         NA
       Linoleic acid (g)         23.7    22.4    25.4      NA        100
Alpha linolenic acid (g)          1.9     1.6     2.9      NA        100
  LC n3 fatty acids (mg)        211.5    99.8   487.6      NA         84
  Vitamin A equivs (mcg)       1641.4  1434.4  1878.2     100        100
            Retinol (mcg)        531.3   468.2   607.6      NA         NA
      Provitamin A (mcg)       6564.4  5403.6  8031.8      NA         NA
            Thiamin (mg)          3.1     2.9     3.4     100        100
         Riboflavin (mg)          3.9     3.6     4.2     100        100
             Niacin (mg)         76.1    71.7    81.2     100        100
      Folate (mcg total)        728.4   666.2   812.9      NA         NA
     Folate equivs (mcg)       1216.2  1117.7  1354.2     100        100
          Vitamin C (mg)        184.7   146.4   225.0     100        100
         Vitamin D (mcg)          4.3     3.5     5.6      NA          3
          Vitamin E (mg)         17.8    15.0    20.2      NA        100
            Calcium (mg)       1845.1  1736.2  1934.6     100        100
               Iron (mg)         20.9    19.5    22.5     100        100
            Iodine (mcg)        322.5   302.9   352.3     100        100
          Magnesium (mg)        660.6   630.1   697.6     100        100
         Phosphorus (mg)       2853.2  2732.4  2946.4     100        100
          Potassium (mg)       5539.1  5324.5  5737.4      NA        100
             Sodium (mg)       2810.3  2491.6  3084.7      NA        100
               Zinc (mg)         19.8    19.1    20.8     100        100
        Cholesterol (mg)        285.6   219.9   413.7      NA         NA
          Selenium (mcg)        112.3    98.9   124.1     100        100
         Vitamin B6 (mg)          2.3     2.1     2.7     100        100
       Vitamin B12 (mcg)          9.2     8.6    10.6     100        100

         Percent energy from fat 26.8
     Percent energy from protein 19.7
Percent energy from carbohydrate 53.5
```