



National Nutrition Survey Selected Highlights Australia

1995



Commonwealth Department of
Health and
Family Services





NEW ISSUE

National Nutrition Survey Selected Highlights Australia

1995

**W. McLennan
Australian Statistician
Australian Bureau of Statistics**

and

**A. Podger
Secretary
Department of Health and Family Services**

**AUSTRALIAN BUREAU OF STATISTICS
DEPARTMENT OF HEALTH AND FAMILY SERVICES
EMBARGO: 11:30AM (CANBERRA TIME) 22 DECEMBER 1997**

ABS Catalogue No. 4802.0

ISBN 0 642 25793 0

© Commonwealth of Australia 1997

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced by any process without written permission from the Australian Government Publishing Service. Requests or inquiries concerning reproduction should be addressed to the Manager, Commonwealth Information Services, Australian Government Publishing Service, GPO Box 84, Canberra, ACT, 2601.

In all cases the ABS must be acknowledged as the source when reproducing or quoting any part of an ABS publication or other product.

Photographs of specific food types used on the cover of this publication are reproduced with the permission of the National Heart Foundation, the Australian Food Council, the Canned Food Information Service, and the Australian Dairy Corporation. Other photographs reproduced with the permission of Marelle Rawson, Joanne Sims and Gary Sutton.

Produced by the Australian Bureau of Statistics

INQUIRIES

- For information about other ABS statistics and services, please refer to the back page of this publication.
- For further information about these statistics, contact Kate Wright on Canberra (02) 6252 6183 or 1800 060 050.

C O N T E N T S

Page

EDITORIAL

Preface v
Introduction 1
Selected highlights 3
List of tables 15

ADDITIONAL INFORMATION

Explanatory notes 41
Appendix 49
Technical notes 53
Glossary 57
List of references 60



PREFACE

This publication presents selected data from the 1995 National Nutrition Survey which collected information on food and nutrition from the Australian population. Information is provided on food and beverage consumption, nutrient intake, eating habits, and dietary attitudes. Physical measurements, such as body mass index, are also included.

The 1995 NNS was a joint project between the Australian Bureau of Statistics (ABS) and the Commonwealth Department of Health and Family Services (HFS). In recognition of the special nature of the data to be collected, expert groups were established to provide advice on appropriate methods for the collection of dietary data and protocols for taking physical measurements such as blood pressure. Qualified nutritionists were recruited and trained jointly by ABS and HFS to ensure the quality of the dietary data being recorded. Coding, processing and review of data were a joint responsibility of the ABS and HFS.

Our thanks are also due to the Agricultural Research Service of the United States' Department of Agriculture for giving permission to use and modify their 24-hour dietary recall methodology and associated materials, the Australia and New Zealand Food Authority for developing a customised nutrient database for use in the NNS, and the UK Ministry of Agriculture, Fisheries and Food and the Royal Society of Chemistry for the use of folate values and general nutrient data.

ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated: without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the *Census and Statistics Act 1905*.

W. McLennan
Australian Statistician
Australian Bureau of Statistics

and

A. Podger
Secretary
Department of Health and Family Services



INTRODUCTION

BACKGROUND

Food and nutrition have long been recognised as important contributors to health. However, food and nutrition affect more than just the physical aspects of our health and wellbeing. The buying, preparing and eating of food is part of everyday life. For many Australians, food is a focus for social interactions with family and friends. For some, it is also an economic concern.

As part of Australia's participation in the World Health Organisation (WHO) initiative 'Health for All by the Year 2000', a Better Health Commission was established to propose priority areas for preventive health programs and actions in Australia. The Commission decided to concentrate on three major areas, namely cardiovascular disease, nutrition and injury (Better Health Commission 1986).

The Commission's Nutrition Taskforce supported the existing Dietary guidelines for Australia and the Recommended Dietary Intakes for use in Australian (RDIs). The taskforce recommended that the dietary guidelines be reviewed regularly by the National Health and Medical Research Council (NHMRC). This has led to the most recent revisions:

- *Recommended dietary intakes for use in Australia* (NHMRC 1991);
- *Dietary guidelines for Australians* (NHMRC 1991); and
- *Dietary guidelines for children and adolescents* (NHMRC 1995).

The need for a national dietary survey was identified in many forums, culminating in the conduct of the National Nutrition Survey (NNS) in 1995. The overall objective of this survey is the provision of food and nutrient data to assist with the implementation of Australia's 'Food and Nutrition Policy', future revisions of the RDIs and future revisions of National Health Goals and Targets. More specific objectives are to provide data on food intake for comparison with dietary guidelines and nutrient intake for comparison with RDIs — for Australians in general, and for those population groups at risk of health problems related to diet. The NNS also provides benchmark data against which future surveys can be compared to assess changes over time in the dietary status of Australians.

SURVEY FEATURES

The NNS was conducted during the period from February 1995 to March 1996. Approximately 13,800 people aged two years or over from urban and rural areas in all States and Territories participated in the survey. The NNS was conducted on a sub-sample of respondents in the 1995 National Health Survey (NHS). The NNS was conducted under the *Census and Statistics Act 1905*, on a voluntary basis.

SURVEY FEATURES CONTINUED

Two approaches were used in the NNS to collect data on food and beverage intake:

- The daily food consumption (24-hour recall) method was used as the main indicator of food intake. All participants were interviewed by trained nutritionists who sought detailed information on all foods and beverages consumed during the day prior to the interview (from midnight until midnight). Each food and beverage was described in sufficient detail to allow its nutrient composition to be determined. A sample of approximately 10% of the NNS participants provided intake data for a second 24-hour period.
- A Food Frequency Questionnaire (FFQ) was used to assess usual frequency of intake for those aged 12 years or more. This self-completion form requested data on usual frequency of intake of selected foods, and vitamin and mineral supplements over the previous 12 months.

In addition, the personal interviews collected information on:

- Physical measurements. With participants' written consent, interviewers took the following measurements: height and weight, waist and hip circumferences, and blood pressure (from participants aged 16 years and over). Pregnant women were excluded from this component of the survey.
- Eating habits and patterns. Participants were asked a series of questions on topics such as their usual type of diet, addition of salt to food and desired dietary changes.

DATA INTERPRETATION

This publication reports food and beverage intake data collected by the daily food consumption (24-hour recall) method. Nutrient intakes are based on one day's food and beverage intake only. Data from the second 24-hour recall period will be incorporated into the nutrient analysis proposed for a later publication.

A classification of foods and beverages has been developed by HFS and the Australia and New Zealand Food Authority (ANZFA) for this survey. Two issues associated with this food classification are:

- The classification of items as beverages was partly based on nutritional content considerations. For example, milk has not been classified as a beverage, but is included within 'milk products and dishes'.
- Products and dishes were classified according to their major ingredient. For example, pizzas and commercial hamburgers are classified as 'cereal-based products'.

Consequently, comparisons with the dietary guidelines need to be made with care as basic food groups referred to in the guidelines do not align closely with food groupings used in this classification. Users should refer to the definitions of the food groups provided in Appendix 2.

Although the target sample size was achieved, the response rate was low by ABS standards for household surveys due to the heavy response load in the survey and its voluntary nature. Characteristics of respondents and non-respondents have been compared, using information available from the NHS, and adjustments were made during estimation to reduce non-response bias. Notwithstanding, the results of the survey may be subject to higher errors than normally expected in household surveys and interpretation of the data should take this into account. For further information see paragraphs 24–38 of the Explanatory Notes.

SELECTED HIGHLIGHTS

INTRODUCTION

The NHMRC Dietary guidelines for Australians (1991) provides advice to the general population about healthy food choices, for a diet that contributes to a healthy life style with minimal risk of developing diet-related diseases. In part, the guidelines encourage Australians to enjoy a wide variety of nutritious foods; eat plenty of breads, cereals, fruit and vegetables; eat a diet low in fat, particularly saturated fat; and maintain a healthy body weight. They also encourage Australians to eat foods containing two specific nutrients, calcium and iron.

In Australia a wide range of food is available in fresh, processed, mixed or prepared forms. Overall, the food supply is adequate to meet the nutritional needs of Australians, as assessed using the RDIs, see *Apparent Consumption of Foodstuffs and Nutrients* (ABS 1997a). Although the vast majority of Australians do have access to a wide range of food, there are regions in Australia where this is not the case. However, within the range of food available, the types and quantities of food consumed are an individual choice influenced by many factors, including culture, age, sex, income, health and dietary knowledge.

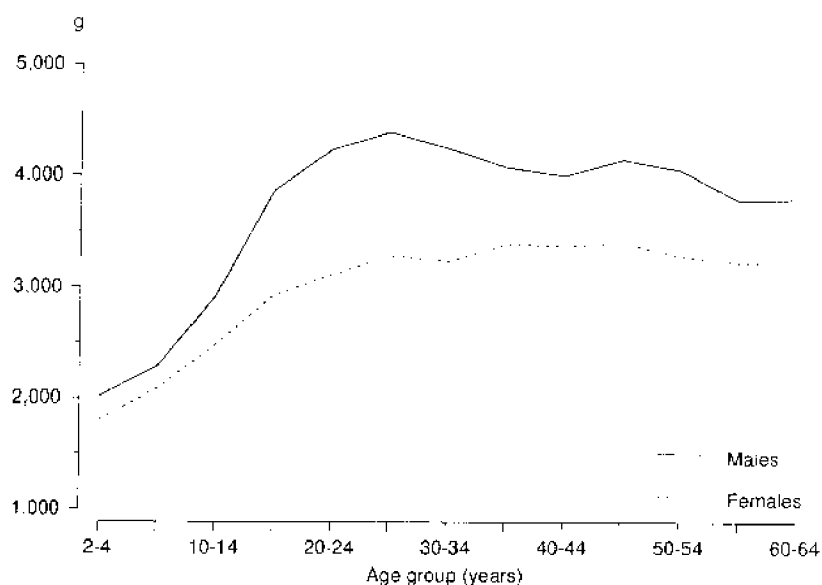
Over the years, health problems related to under-nutrition and deficiencies have decreased in Australia while those associated with over-nutrition and more sedentary lifestyles have become a major concern.

Food intake

The dietary guidelines recommend that Australians enjoy a wide variety of nutritious foods. During the day prior to the interview more than 90% of Australians reported consuming something from the cereal and cereal products, and the milk and milk products food groups. However, over half the males aged 12-44 years and approximately a third of children aged 4-11 years had not eaten fruit or fruit products. Further, more than 20% of children under 12 had not eaten vegetables or vegetable products on the day prior to interview (see table 1).

On average, Australian males consumed a higher quantity of food and beverages than females in all age groups. Daily food and beverage consumption peaked at 4,240 g for males aged 19-24 years, and 3,320 g for females aged 25-44 years. Non-alcoholic and alcoholic beverages accounted for between 40% and 60% of total food and beverage intake, by weight. The percentage contribution of beverages initially increased with age up to 25-44 years and was generally higher for females than for males (see table 2).

Average intake of food and beverages



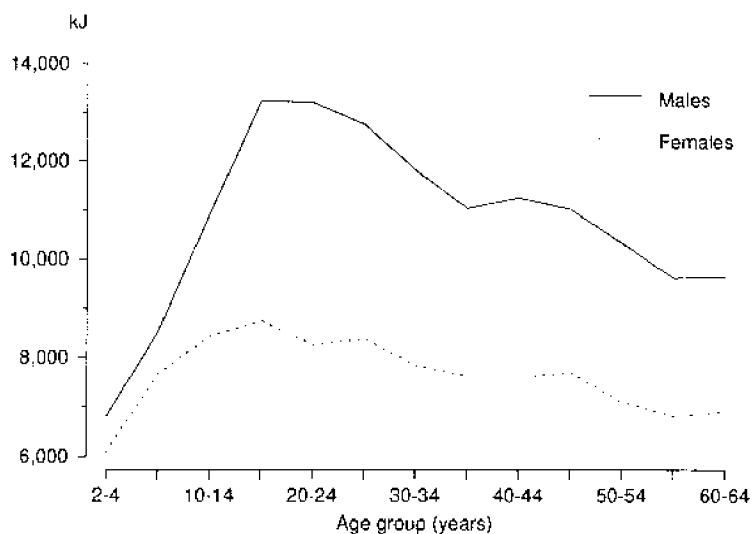
Nutrient intake

The type and quantity of food eaten determines our daily nutrient intake. All Australians need the same range of nutrients. However, the quantities required depend on age, sex, physical size, state of health and activity levels.

The macronutrients (protein, fat, carbohydrate and alcohol) contained in foods eaten provide the energy needed for physical activity, and for keeping organs working, replacing cells, repairing damage and building tissue. Vitamins and minerals also play an important role in our health and well-being.

On the day prior to interview, average daily energy intake was 11,050 kJ for men, compared to 7,480 kJ for women. Energy intake increased sharply to a peak of 13,530 kJ for adolescent boys aged 16–18 years, and 8,690 kJ for girls aged 16–18 years and then declined with age (see table 5).

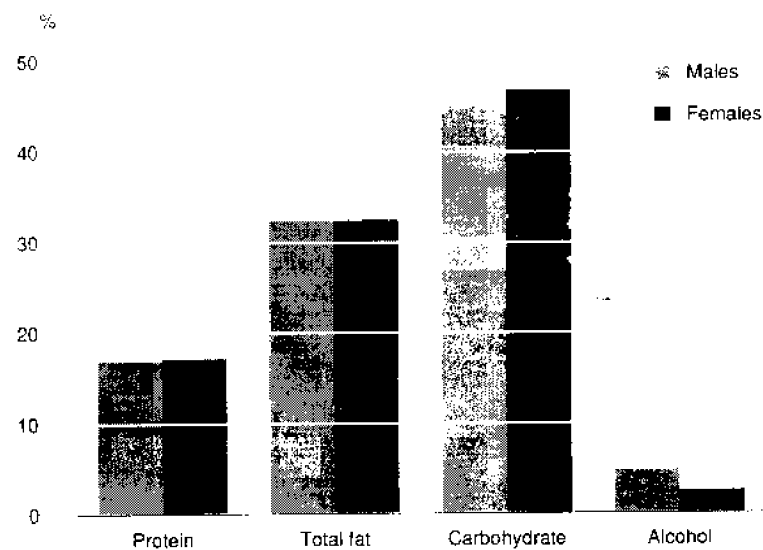
Average energy intake



Nutrient intake *continued*

Carbohydrate contributed about 52% of daily energy intake for children aged 2–11 years, reducing to approximately 45% for Australian adults aged 45–64 years. Within carbohydrates, starch and sugar exhibited different patterns, with the percent contribution of sugar decreasing with age and the contribution of starch increasing slightly with age. Fat contributed between 32% and 34% of energy in all age groups. The proportion of energy from saturated fat was highest for children aged 2–3 years (16%), steadily decreasing to 12% for adults aged 45 years or more. The contribution of protein to energy intake steadily increased from 14% at age 2–3 years to 18% for adults aged 45 years or more (see table 9).

Contribution of macronutrients to energy intake of adults



RDIs are the levels of intake of essential nutrients considered adequate to meet the nutritional needs of most healthy individuals. They are based on estimates of requirements for age/sex groups and, therefore, apply to group needs. As they incorporate generous factors to allow for variations in metabolism, absorption and individual needs, RDIs exceed the actual nutrient requirements for most healthy persons. Therefore they are not synonymous with requirements (NHMRC, 1991).

Australians' mean nutrient intake from food and beverages was very close to or exceeded the RDIs for most vitamins and minerals in all age groups. The exceptions were calcium for adolescent boys aged 12–15 years and females in most age groups except those aged 2–3 years and 16–18 years, zinc for females aged 12 years or more, and magnesium for adolescent girls aged 16–18 years (see table 6).

Vitamin and mineral supplements

The NNS collected information on whether vitamin or mineral supplements were taken the day prior to interview, but did not obtain quantitative data. Australian adults reported taking a variety of supplements the previous day. A higher proportion of women (27%) reported taking a supplement, than men (15%). Vitamin C was the most common supplement taken by adults (10% of women and 7% of men). Other supplements frequently taken were vitamin B (8% of women and 4% of men), multivitamins (6% of women and 4% of men), calcium (7% of women) and vitamin E (5% of women) (see table 10).

CHILDREN AGED 2 – 11 YEARS

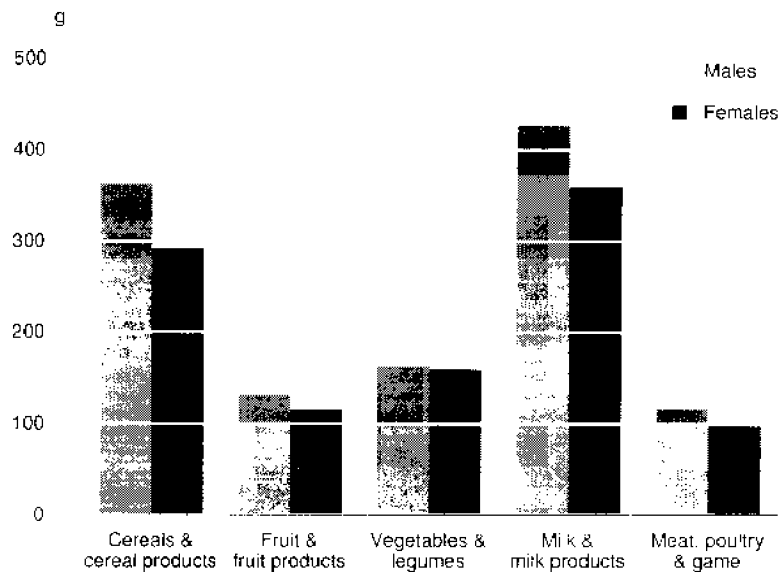
The childhood years are a time of growth and development. Boys and girls had reached an average height of almost 150 cm by the age of 11 years, being 55–60 cm taller than children aged 2. Body weight also increased substantially over the same period, from about 14 kg on average at age 2 to about 40 kg on average at age 11.

Food intake

The diet of Australian children changed considerably between the ages of 2–3 years and 8–11 years. During this time, the total food and beverage consumption increased by 30%, reaching 2,580 g, for boys and by 26% to 2,270 g for girls aged 8–11 years. Consumption increased with age in most food groups with the exception of milk and milk products, and fruit and fruit products, which both decreased. Nevertheless, milk and milk products still contributed significantly to average daily food intake, 430 g for boys and 360 g for girls aged 8–11 years (see table 2).

Non-alcoholic beverage consumption increased to 1,120 g for girls and 1,210 g for boys aged 8–11 years, an increase of over 40% for both. Consumption of meats, poultry and game almost doubled between these ages while consumption of vegetables and legumes increased by approximately 65%, and cereals and cereal-based products increased by about 78% for boys and about 46% for girls (see table 2).

Average intake from selected food groups, children 8–11 years



On the day prior to interview, more girls in all age groups consumed fruit and fruit products (between 63% and 75%) and vegetables and vegetable products (between 77% and 80%) than sugar products and dishes (between 56% and 64%) and confectionery (between 52% and 56%). Similar patterns were observed for boys with the exception that more 4–11 year old boys consumed sugar products and dishes than fruit products and dishes. However, the proportion consuming fruit and fruit products decreased noticeably into the adolescent years, particularly for boys (see table 1).

Energy intake

Energy intake increased by 46% to 9,660 kJ for boys and by 37% to 8,310 kJ for girls between the ages of 2–3 years and 8–11 years. Although beverages accounted for between 42% and 50% of total food and beverages consumed by weight, their contribution to energy intake was less than 11% for children in all age groups (see table 5).

Across the food groups, cereals and cereal-based products were the major source of energy intake for boys (increasing from 30% to 39%) and girls (increasing from 32% to 36%). Although the contribution of milk and milk products to energy intake decreased with age, they remained the second most important source of energy for children (25% for children aged 2–3 years, declining to 16% for children aged 8–11 years) (see table 5).

Carbohydrate made a greater contribution to energy intake for children (52%) than adults (46%), while the contribution of protein was lower for children, 14% compared to 18% for adults aged 45–64 years (see table 9).

The contribution of total fat to energy intake remained constant at about 33% for children in all age groups. As age increased, the contribution of saturated fats declined while the percentage of monounsaturated and polyunsaturated fats increased for both boys and girls (see table 9).

Eating patterns

Children tended to eat more frequently than either adolescents or adults, with almost 90% usually eating five or more times per day (see table 16). Approximately 30% of 2–3 year olds ate seven or more times per day, and this proportion decreased with age.

Over 90% of children usually ate breakfast five or more times per week, compared with 77% of adults. (see table 17).

Almost all children had eaten some food at home during the day before the interview. Foods consumed at home provided 75% of energy intake for children aged 2–3 years but only 67% for children aged 8–11 years. As children reached school age they were more likely to eat food away from home that they had brought from home, with this pattern continuing until 12–15 years (see tables 12 and 13).

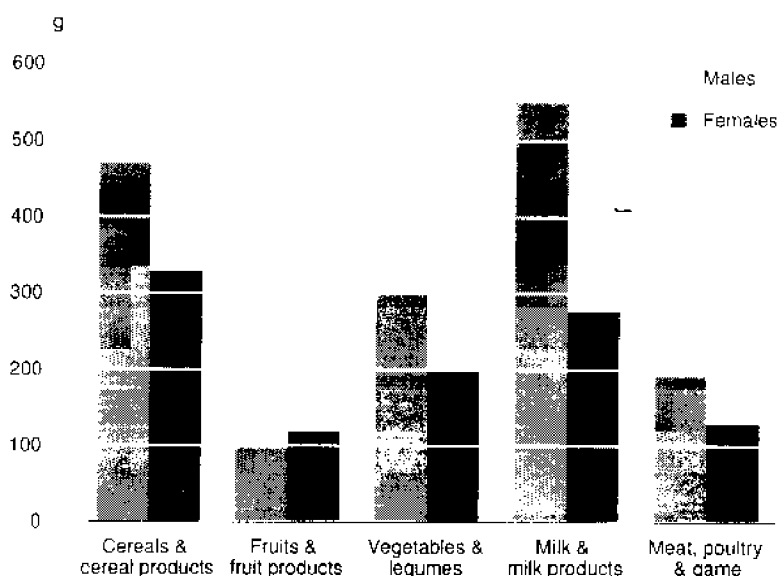
ADOLESCENTS AGED 12 – 18 YEARS

Growth and development continues through the adolescent years. By the age of 18, boys had reached an average height of 177 cm, while girls had reached an average height of 164 cm. Body weight had also increased substantially to an average of 75 kg for boys and 63 kg for girls.

Food intake

Food and beverage consumption for boys increased by 28% from 3,100 g for those aged 12–15 years to 3,960 g for those aged 16–18 years, compared to a 9% increase to 2,870 g for girls. The consumption in most food groups increased with age. The main exceptions were decreases in fruit and fruit products for both boys and girls and milk and milk products for girls (see table 2).

Average intake from selected food groups, adolescents 16–18 years



The types of food consumed by adolescents differed from those reported by children. Fewer Australian adolescents reported consuming cereals and cereal-based products, fruit and fruit products, sugar products and dishes, confectionery, and fats and oils. In contrast, a higher proportion of adolescents reported consuming vegetables and vegetable products than children (see table 1).

Energy intake

Energy intake for boys increased by 17%, from 11,590 kJ to 13,530 kJ, between the ages of 12–15 years and 16–18 years. In contrast energy intake reported by girls increased by only 2% to 8,690 kJ for those aged 16–18 years. Non-alcoholic beverages accounted for between 49% and 57% of total food and beverage consumed and contributed between 9% and 11% of energy intake (see table 5).

Across the food groups, cereals and cereal-based products were the major source of energy for Australian adolescents, contributing between 34% to 37%. Milk and milk products also made a significant contribution to energy intake, from 13% for girls aged 16–18 years to 17% for boys aged 12–15 years (see table 5).

Of the macronutrients, carbohydrate provided about half the energy intake for adolescent boys and girls, while fat accounted for about one-third of energy intake. The contribution of protein to energy intake was approximately 15% for Australian adolescents (see table 9).

Eating patterns

Adolescent girls were more likely to be on a special diet than boys. By the age of 16–18 years almost 20% of girls reported being on some form of special diet, 5% were on a vegetarian diet, 6% were on a weight reduction diet and a further 8% were on some other form of diet (see table 11).

Boys tended to eat more frequently than girls, with about 20% of 16-18 year old boys usually eating on seven or more occasions per day compared to 7% of girls the same age. In contrast 44% of girls aged 16–18 years reported eating on average only two to four times a day, compared to 31% of boys the same age (see table 16).

Adolescent boys were more likely to regularly eat breakfast (5 days or more per week) than girls. At 12–15 years 87% of boys and 71% of girls regularly ate breakfast. However, this had dropped to 72% and 63% respectively at 16–18 years (see table 17).

Take away and other pre-prepared foods are forming an increasing proportion of the diet. The NNS obtained information on where food and beverages were eaten but, for food eaten at home, did not distinguish between pre-prepared food and home prepared food. It did, however, identify whether food eaten away from home was obtained elsewhere or brought from home.

Adolescents aged 16-18 years were much more likely to obtain and consume food and beverages away from home (70% for boys and 68% for girls) than all younger age groups. The contribution to daily energy intake of food and beverages, obtained and consumed away from home, was higher for 16-18 year olds than for children and younger adolescents. In particular, the contribution recorded for girls aged 16-18 (37%) was higher than for females in any other age group (see tables 12 and 13). Generally, food and beverages obtained and eaten away from home had a higher relative fat content than those brought from home (see table 14).

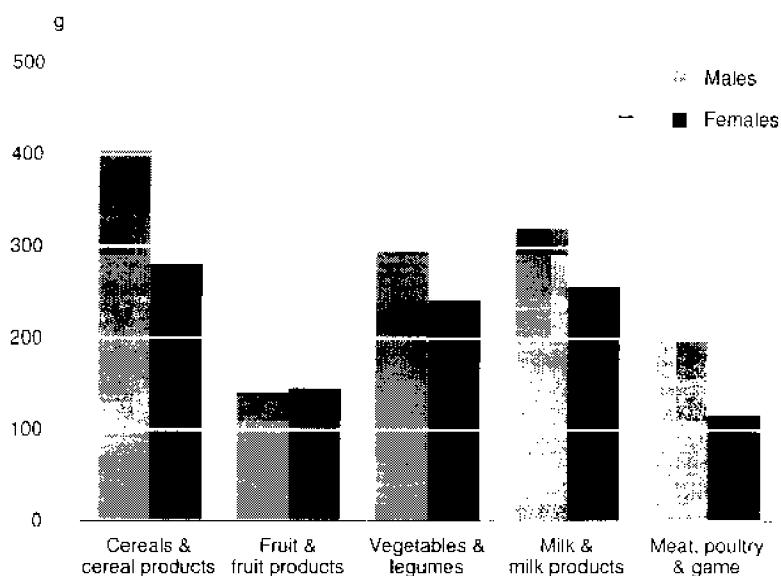
ADULTS AGED 19 YEARS AND OVER

Food intake

Non-alcoholic and alcoholic beverages accounted for over 60% of total food and beverage intake, by weight, for adult Australians (2,460 g for men and 2,020 g for women). The contribution of beverages to the total weight of food and beverage intake may have been influenced by climate and was highest in the Northern Territory (74% for men) and one of the lowest in Tasmania (59% for men). The contribution of alcoholic beverages to food and beverage intake was higher for men (10%) than women (3%) (see tables 2 and 3)

Excluding beverages, cereals and cereal-based products contributed the greatest amount to food intake for men (400 g) and women (280 g). Cereals were followed by milk and milk products (320 g for men and 260 g for women) and vegetables and legumes (300 g and 240 g) (see table 2).

Average intake from selected food groups, adults



For men, consumption of fruit and fruit products increased with age, while daily intake of cereals and cereal-based products, milk and milk products, and meat poultry and game decreased. A similar pattern was observed for women (see table 2).

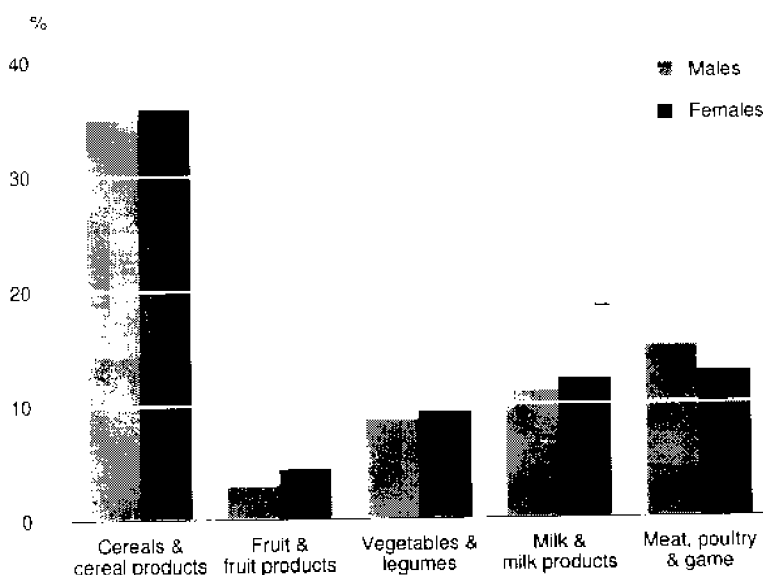
Both the types and quantities of food and beverages consumed differed between the States and Territories. Adults in the Northern Territory reported consuming more meat, poultry, and game, and alcoholic and non-alcoholic beverages, and less fruit and vegetables than other Australians. Tasmanians had the lowest consumption of beverages and cereals (see table 3).

Energy intake

Although beverages (alcoholic and non-alcoholic) contributed more than 60% of the total weight of food and beverages consumed, their contribution to energy intake was only 12% for men and 9% for women (see table 5).

Across all food groups, cereals and cereal-based products were the major source of energy for both men and women (35% and 36% respectively). Men also obtained significant energy from meat, poultry and game (15%). Milk and milk products (11% for men and 12% for women) and vegetables and legumes (9%) were also major contributors to energy intake (see table 5).

Contribution of selected food groups to energy intake, adults



For Australian adults the proportion of energy obtained from fruit and fruit products increased while energy intake from beverages decreased with age. The proportion of energy from cereals and cereal-based products also declined with age for men, while it remained constant for women (see table 5).

Carbohydrate contributed the largest proportion of energy intake for men (45%) and women (46%). The contribution of fat to energy intake remained constant, at approximately 32% for men and women, in all age groups. However, the contribution of saturated fat continued to decrease with age. Protein contributed approximately 17% of energy intake for Australian adults (see table 9).

Eating patterns

Women were more likely to report being on a special diet than men (42% compared to 29%). The proportion of people on a fat modified diet increased with age, with 26% of women and 23% of men aged 65 years or more reporting this type of diet. Almost 9% of women aged 25-64 years reported that their usual diet was a weight reduction diet (see table 11).

Eating patterns continued

Generally, for foods and beverages eaten away from home, those obtained elsewhere had a higher fat content than those brought from home. Women were less likely than men to purchase and consume food and beverages away from home (57% compared with 64%). When they did, however, this food had a higher fat content than food purchased by men (36% compared with 34%). This difference may be partly explained by men's more frequent and higher consumption of alcoholic beverages which in general contribute energy but no fat to the diet. Consequently, food purchased and consumed away from home contributed a smaller proportion of total energy for women (22%) than men (26%) (see tables 12 to 14).

Young adults aged 19–24 years were less likely to eat breakfast regularly than any other age group. Approximately 39% of young adults reported eating breakfast less than 5 days per week, with 15% reporting rarely or never eating breakfast. By the age of 65 years and more, 96% of both men and women ate breakfast five or more times per week (see table 17).

Desired change in diet

When asked about desired changes to the types of foods consumed, over 90% of adults did not see a need to change the quantity of bread and cereals they ate. Approximately 30% of adults considered they should be eating more fruit and vegetables and about 25% of adults thought they should be eating less foods high in fat. Persons aged 19–24 years were most likely to report a desire to change their intake of selected foods, while those aged 65 years or more generally did not desire a change in their diet (see table 18).

Ran out of food

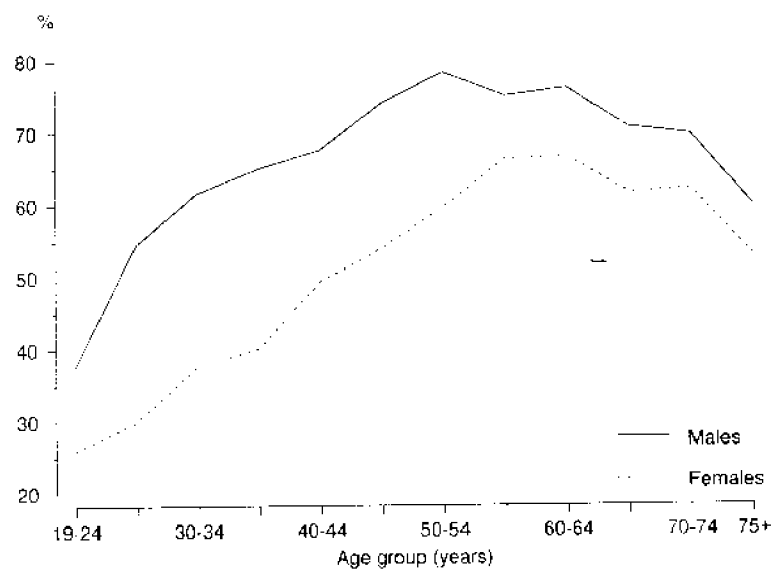
Respondents aged 16 years or more were asked whether, during the previous 12 months, they had run out of food and had no money to buy more. Young men and women aged between 19 and 24 were most likely to have been in this situation with almost 10% reporting this to be the case. This corresponds to the age group most likely to buy food away from home. The proportion who had run out of food and had no money to buy more declined with age, with only 1% of people aged 65 and over reporting this to be the case (see table 19).

Body mass index

Body Mass Index (BMI) (see Glossary) has been calculated for adults to assess the extent to which the Australian population is overweight or obese

At every age, men are more likely than women to be overweight or obese. The proportion who were overweight or obese increased with age and peaked at 50-54 years for men and 60-64 years for women. Overall, 45% of men and 29% of women were considered to be overweight with a further 18% of both men and women being classified as obese. For people aged 45 and over, only about 25% of men and 35% of women were within an acceptable weight range for their height (see table 22).

Overweight and obese adults



The 1995 National Health Survey (NHS) derived a BMI from respondents' self reported height and weight. This produced an estimate of the proportion of adults who were overweight or obese (45%) which was considerably lower than that from the NNS based on actual measurements (55%) implying a tendency for respondents to understate weight and/or overstate height.

In general, excess weight is the outcome of a long-term imbalance between food and energy intake from food and energy expenditure for maintenance of normal physiological processes and for physical activity. The NNS does not provide any long-term data on food and energy intake. However, on the day before interview, the average energy intakes of men classified as overweight (10,850 kJ) or obese (10,390 kJ) was lower than that recorded for men whose weight was in the acceptable range (11,780 kJ). The same pattern was evident for women although the differences were smaller. A higher proportion of overweight and obese men and women were on special diets, both weight reduction and fat modified diets and this may be a contributing factor to the lower average energy intakes on the day before interview (see tables 23 and 24).



LIST OF TABLES

		Page
FOOD INTAKE		
1	Persons: Proportion who consumed from major food groups by age by sex	16
2	Mean daily food intake (g) : Amount consumed from major food groups by age by sex	17
3	Mean daily food intake for persons aged 19 years and over (g) : Major food groups by State by sex	18
4	Mean daily food intake for persons aged 19 years and over (g) : Major food groups by part of State by sex	19
NUTRIENT INTAKE		
5	Total energy intake (kJ) : Proportion obtained from major food groups by age by sex	20
6	Mean daily energy and nutrient intake : Age by sex	21
7	Mean daily energy and nutrient intake : Persons aged 19 years and over by State by sex	22
8	Mean daily energy and nutrient intake : Persons aged 19 years and over by part of State by sex	23
9	Mean per cent contribution to energy intake : Protein, fat, carbohydrate and alcohol by age by sex	24
10	Persons aged 19 years and over : Vitamin and mineral supplements taken the day before interview by age by sex	25
EATING PATTERNS		
11	Persons : Self-reported type of diet by age by sex	26
12	Persons : Where food and beverages consumed by age by sex	27
13	Total energy intake (kJ) : Proportion of energy by eating location by age by sex	28
14	Contribution of fat to energy intake : Eating location by age by sex	29
15	Persons : Eating occasion by broad food groups by age by sex	30
16	Persons : Number of times food is usually consumed per day by age by sex	32
17	Persons : Number of times per week usually has breakfast	33
18	Persons aged 16 years and over : Desired change in amount of selected foods consumed by age by sex	34
19	Persons aged 16 years and over : Whether ran out of food and had no money to buy more by age by sex	35
PHYSICAL MEASUREMENT		
20	Persons : Measured height by age by sex	36
21	Persons : Measured weight by age by sex	37
22	Persons aged 19 years and over : Body mass index by age by sex	38
23	Persons aged 19 years and over : Body mass index by self-reported type of diet by sex	39
24	Mean daily energy and nutrient intake : Persons aged 19 years and over by body mass index by sex	40

TABLE 1. PERSONS : PROPORTION WHO CONSUMED FROM MAJOR FOOD GROUPS

Major food groups	Per cent									
	Age group (years)									
	2-3	4-7	8-11	12-15	16-18	19-24	25-44	45-64	65 and over	19 and over
Males										
Cereals and cereal-based products										
Cereals and cereal products	99.4	98.7	98.7	98.1	93.9	91.4	92.4	95.1	98.3	93.9
Cereal-based products and dishes	80.4	81.3	80.0	73.6	64.7	71.3	68.5	68.1	70.3	69.0
Fruit products and dishes	77.6	65.6	56.4	49.9	39.9	31.9	45.8	59.5	69.6	51.4
Vegetables and legumes										
Vegetable products and dishes	68.1	72.7	77.0	78.8	83.1	84.7	86.6	91.0	91.7	88.3
Legume and pulse products and dishes	8.6	6.7	3.7	7.1	5.8	5.6	7.3	9.8	6.9	7.7
Milk products and dishes	98.2	95.5	90.9	92.8	94.2	89.1	93.7	91.3	94.5	92.5
Meat, poultry and game products and dishes	76.7	72.4	77.0	78.8	80.9	84.1	84.4	87.6	84.7	85.4
Fish and seafood products and dishes	9.6	10.6	11.8	12.8	8.8	16.0	16.6	20.8	20.3	18.3
Egg products and dishes	12.6	11.1	14.0	12.3	18.1	15.7	17.9	20.5	17.6	18.3
Snack foods, sugar and confectionery										
Snack foods	23.7	34.1	32.7	28.7	24.4	18.9	9.3	4.7	2.4	8.3
Sugar products and dishes	68.4	69.7	67.3	58.1	56.8	60.5	72.2	76.3	78.1	72.7
Confectionery	44.8	53.3	53.4	46.7	37.2	26.8	21.7	15.9	14.1	19.6
Other foods										
Seed and nut products and dishes	18.2	20.7	15.1	10.9	7.7	10.3	13.5	13.1	10.2	12.5
Fats and oils	84.2	81.3	80.8	76.5	65.7	72.9	73.7	78.6	85.9	76.8
Soup	4.3	6.9	9.4	5.7	3.6	6.4	8.4	12.9	19.6	11.0
Savoury sauces and condiments	42.2	42.4	51.7	56.9	61.8	61.6	57.4	57.0	50.0	56.8
Beverages										
Non-alcoholic beverages(a)	98.5	100.0	99.8	99.6	99.7	99.8	99.7	99.6	99.9	99.7
Alcoholic beverages(b)	0.4	0.2		0.5	16.0	28.8	41.0	48.5	43.6	41.9
Total(c)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total persons ('000)	265.4	530.6	529.2	524.1	389.5	866.7	2,795.0	1,900.7	939.3	6,501.6
Females										
Cereals and cereal-based products										
Cereals and cereal products	98.8	98.9	97.0	95.1	93.0	90.2	93.8	97.0	98.6	95.1
Cereal-based products and dishes	71.5	79.8	77.7	70.0	71.2	62.0	69.8	69.1	72.4	69.1
Fruit products and dishes	75.4	72.8	62.5	58.0	41.1	41.4	55.0	69.8	75.6	61.1
Vegetables and legumes										
Vegetable products and dishes	79.2	79.7	77.0	85.9	85.8	86.5	88.0	91.0	91.5	89.3
Legume and pulse products and dishes	4.0	4.1	2.8	5.8	8.3	8.2	7.3	6.8	4.9	6.9
Milk products and dishes	98.1	96.0	93.3	90.8	87.3	90.1	94.3	94.7	95.6	94.1
Meat, poultry and game products and dishes	71.7	73.6	78.3	80.2	74.5	74.0	76.9	77.5	79.7	77.2
Fish and seafood products and dishes	13.3	16.8	11.5	11.2	16.7	15.8	17.2	20.5	18.8	18.2
Egg products and dishes	13.9	12.2	10.7	8.7	8.5	12.8	15.2	16.8	14.2	15.2
Snack foods, sugar and confectionery										
Snack foods	21.5	29.7	36.5	38.4	24.1	17.7	10.9	3.6	1.6	8.0
Sugar products and dishes	56.2	63.8	56.4	53.2	44.9	59.4	61.4	62.1	66.8	62.3
Confectionery	52.2	56.3	55.0	51.3	39.9	32.4	24.2	19.2	14.0	22.0
Other foods										
Seed and nut products and dishes	19.5	20.4	14.4	8.3	9.8	10.8	13.7	13.6	8.5	12.3
Fats and oils	82.2	83.4	81.7	73.2	66.9	63.7	72.3	75.1	82.8	73.9
Soup	5.0	6.0	4.9	5.8	4.5	10.8	11.9	16.5	19.3	14.4
Savoury sauces and condiments	41.8	44.5	52.2	52.8	63.0	51.7	52.0	53.2	46.9	51.4
Beverages										
Non-alcoholic beverages(a)	99.0	99.0	99.7	100.0	100.0	99.7	100.0	100.0	100.0	100.0
Alcoholic beverages(b)	1.9	0.1	0.4	1.3	12.0	17.6	25.0	28.7	21.0	24.4
Total(c)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total persons ('000)	252.1	504.0	503.5	495.8	368.5	832.7	2,797.2	1,852.3	1,221.4	6,703.6

(a) Includes plain drinking water. (b) Includes all alcoholic beverages containing alcohol (e.g. whiskey, reduced alcoholic beer) and does not indicate amount of pure alcohol consumed. (c) Total includes infant formulae and food, special dietary foods and miscellaneous foods.

TABLE 2. MEAN DAILY FOOD INTAKE : AMOUNT CONSUMED FROM MAJOR FOOD GROUPS

Major food groups	(Grams)									
	Age group (years)									
	2-3	4-7	8-11	12-15	16-18	19-24	25-44	45-64	65 and over	19 and over
Males										
Cereals and cereal-based products										
Cereals and cereal products	136.1	168.1	208.1	250.0	269.9	272.7	262.5	240.8	212.3	250.2
Cereal-based products and dishes	68.1	111.3	154.5	159.2	199.8	229.9	173.2	127.4	81.7	154.1
Fruit products and dishes	153.8	146.1	131.4	122.0	97.1	88.7	126.8	168.2	178.8	141.3
Vegetables and legumes										
Vegetable products and dishes	92.6	102.2	157.5	219.9	282.6	272.1	275.3	301.4	281.7	283.4
Legume and pulse products and dishes	7.1	8.9	5.3	13.6	16.2	12.0	11.2	15.2	9.2	12.2
Milk products and dishes	507.8	417.6	427.1	501.5	549.9	396.9	330.9	290.7	288.6	321.9
Meat, poultry and game products and dishes	62.2	81.2	116.7	145.0	191.8	225.4	212.7	196.1	146.0	199.9
Fish and seafood products and dishes	6.9	10.6	14.5	19.5	13.8	27.4	27.8	32.8	25.6	28.9
Egg products and dishes	5.9	7.1	9.9	11.4	14.9	17.5	15.8	17.9	13.7	16.3
Snack foods, sugar and confectionery										
Snack foods	6.8	11.0	11.4	12.6	14.0	9.8	4.4	1.7	0.8	3.8
Sugar products and dishes	18.6	30.9	33.9	22.4	25.5	18.5	21.6	25.4	28.4	23.3
Confectionery	14.4	19.4	22.1	23.8	27.1	15.0	10.6	6.6	4.0	9.1
Other foods										
Seed and nut products and dishes	1.9	3.3	2.9	3.1	1.4	3.9	6.8	4.3	2.8	5.1
Fats and oils	6.6	8.9	11.1	12.3	12.2	14.4	13.9	15.1	16.9	14.8
Soup	12.2	18.4	31.4	26.1	21.4	39.4	40.3	61.0	76.9	51.5
Savoury sauces and condiments	10.1	14.8	21.3	28.8	41.0	34.5	37.4	29.7	25.2	33.0
Beverages										
Non-alcoholic beverages(a)	858.1	991.7	1,213.1	1,525.9	2,004.6	2,223.7	2,161.9	2,014.6	1,643.9	2,052.3
Alcoholic beverages(b)	0.2	—	—	0.5	175.1	333.5	453.2	436.5	299.4	410.1
Total(c)	1,978.0	2,154.1	2,575.7	3,101.5	3,963.1	4,238.3	4,189.5	3,987.1	3,337.2	4,013.7
Females										
Cereals and cereal-based products										
Cereals and cereal products	132.0	140.4	175.7	175.7	194.6	195.7	192.3	171.9	159.7	181.2
Cereal-based products and dishes	67.7	83.4	116.2	120.7	134.9	115.7	116.3	88.1	70.7	100.1
Fruit products and dishes	137.0	141.3	115.5	130.6	118.0	92.3	132.2	169.8	176.2	145.7
Vegetables and legumes										
Vegetable products and dishes	88.8	114.2	156.7	185.7	192.8	224.2	220.2	256.1	243.6	234.9
Legume and pulse products and dishes	6.7	5.6	2.8	6.7	9.0	9.1	8.4	8.0	3.6	7.5
Milk products and dishes	467.1	343.1	359.4	336.6	277.7	264.4	257.4	259.1	251.7	257.7
Meat, poultry and game products and dishes	55.3	80.1	98.4	116.0	128.5	133.0	120.9	115.1	94.9	116.1
Fish and seafood products and dishes	6.5	13.6	12.8	16.4	17.8	25.5	20.0	27.0	20.0	22.6
Egg products and dishes	7.4	7.9	9.0	6.4	8.4	9.2	11.9	11.6	10.3	11.2
Snack foods, sugar and confectionery										
Snack foods	5.9	10.3	12.3	12.5	8.8	8.5	4.4	1.1	0.4	3.2
Sugar products and dishes	14.7	17.2	24.4	25.3	24.1	13.2	13.9	16.4	17.1	15.1
Confectionery	12.6	18.4	23.5	22.2	18.3	13.6	10.1	6.6	4.1	8.5
Other foods										
Seed and nut products and dishes	2.8	3.5	3.9	2.3	3.8	4.7	4.1	3.6	1.7	3.6
Fats and oils	6.5	7.5	9.7	8.8	7.1	8.2	8.8	10.0	12.2	9.7
Soup	14.6	20.5	13.3	20.9	20.0	46.6	52.7	63.7	69.1	57.9
Savoury sauces and condiments	9.5	11.5	15.9	25.9	27.8	29.1	27.4	25.0	19.7	25.5
Beverages										
Non-alcoholic beverages(a)	756.3	961.3	1,122.2	1,386.0	1,620.3	1,813.4	2,004.1	1,964.5	1,714.3	1,916.7
Alcoholic beverages(b)	0.4	—	—	14.4	52.4	123.8	114.4	105.2	55.3	102.2
Total(c)	1,796.5	1,984.3	2,274.4	2,617.8	2,866.1	3,133.1	3,321.1	3,304.3	2,925.9	3,221.1

(a) Includes plain drinking water. (b) Includes all alcoholic beverages containing alcohol (e.g. whiskey, reduced alcoholic beer) and does not indicate amount of pure alcohol consumed. (c) Total includes infant formulae and food, special dietary foods and miscellaneous foods.

TABLE 3. MEAN DAILY FOOD INTAKE FOR PERSONS AGED 19 YEARS AND OVER : MAJOR FOOD GROUPS BY STATE

(Grams)									
Major food groups	ASW	Vic.	Qld	S.I	WA	Tas.	NT(a)	ACT	Aust.
Males									
Cereals and cereal-based products									
Cereals and cereal products	252.5	266.5	222.6	238.1	270.4	222.6	203.0	290.1	250.2
Cereal-based products and dishes	146.2	173.9	133.6	189.0	154.7	125.9	178.6	115.1	154.1
Fruit products and dishes	141.1	133.2	150.6	151.9	148.0	110.3	116.9	134.5	141.3
Vegetables and legumes									
Vegetable products and dishes	284.0	268.2	301.4	257.1	302.8	318.1	240.4	284.3	283.4
Legume and pulse products and dishes	14.1	11.5	9.6	10.5	15.6	6.8	5.1	14.0	12.2
Milk products and dishes	295.3	325.0	327.6	377.3	356.1	281.9	322.0	360.4	321.9
Meat, poultry and game products and dishes	194.5	193.6	216.9	189.9	207.1	189.5	228.3	224.0	199.9
Fish and seafood products and dishes	34.9	24.6	20.4	23.2	38.5	41.4	19.9	28.2	28.9
Egg products and dishes	15.6	16.0	20.3	13.6	16.1	15.0	15.4	9.2	16.3
Snack foods, sugar and confectionery									
Snack foods	3.6	4.0	3.4	5.4	3.8	2.9	6.3	3.6	3.8
Sugar products and dishes	21.7	23.3	24.8	23.1	24.2	30.7	19.9	25.8	23.3
Confectionery	7.2	9.5	8.2	12.2	11.8	13.3	11.4	13.0	9.1
Other foods									
Seed and nut products and dishes	6.4	4.9	4.7	4.6	3.2	2.7	4.3	5.0	5.1
Fats and oils	15.1	15.0	14.4	13.8	13.3	20.3	11.5	13.3	14.8
Soup	47.8	72.4	27.3	56.3	57.4	38.4	17.8	71.4	51.5
Savoury sauces and condiments	31.8	35.9	32.4	28.5	34.6	34.2	27.5	34.1	33.0
Beverages									
Non-alcoholic beverages(b)	1,938.6	1,873.8	2,449.7	1,963.8	2,262.1	1,650.7	3,159.7	1,919.2	2,052.3
Alcoholic beverages(c)	422.8	372.2	422.1	353.9	451.0	458.8	823.6	359.8	410.1
Total(d)	3,875.5	3,825.8	4,392.5	3,914.3	4,374.3	3,566.2	5,413.1	3,907.0	4,013.7
Total persons (*000)	2,214.9	1,620.1	1,229.3	524.7	584.5	167.2	52.0	108.9	6,501.6
Females									
Cereals and cereal-based products									
Cereals and cereal products	192.1	187.2	157.1	173.8	179.3	148.7	163.9	225.8	181.2
Cereal-based products and dishes	90.6	110.3	105.2	106.2	97.3	80.3	99.7	108.0	100.1
Fruit products and dishes	140.4	147.5	149.3	146.0	161.9	127.1	109.2	140.1	145.7
Vegetables and legumes									
Vegetable products and dishes	239.9	220.2	243.3	234.0	243.2	243.5	203.4	222.9	234.9
Legume and pulse products and dishes	7.7	8.5	5.3	6.2	9.5	3.6	9.4	10.2	7.5
Milk products and dishes	242.8	247.6	283.7	276.1	270.2	256.4	329.3	255.6	257.7
Meat, poultry and game products and dishes	119.7	106.8	120.2	111.6	117.3	110.5	159.0	144.5	116.1
Fish and seafood products and dishes	28.2	16.6	16.6	21.7	30.1	21.3	21.0	25.3	22.6
Egg products and dishes	11.2	11.5	12.8	8.2	10.7	9.8	10.1	9.3	11.2
Snack foods, sugar and confectionery									
Snack foods	4.0	3.6	2.2	2.5	2.1	2.2	6.2	4.3	3.2
Sugar products and dishes	13.9	14.5	18.3	15.5	14.5	17.6	14.5	13.9	15.1
Confectionery	7.0	9.5	8.5	9.8	9.4	8.4	8.6	12.7	8.5
Other foods									
Seed and nut products and dishes	3.2	4.0	3.8	4.3	3.1	1.9	3.6	4.4	3.6
Fats and oils	9.9	10.0	9.2	9.8	8.6	11.7	6.6	9.1	9.7
Soup	54.3	86.3	25.5	61.9	54.1	50.6	38.7	66.3	57.9
Savoury sauces and condiments	25.0	26.7	24.2	26.0	27.1	24.6	22.9	25.6	25.5
Beverages									
Non-alcoholic beverages(b)	1,848.2	1,835.0	2,118.3	1,918.4	2,038.5	1,705.3	2,404.1	1,823.6	1,916.7
Alcoholic beverages(c)	110.1	79.9	115.9	107.1	100.3	74.9	200.8	120.1	102.2
Total(d)	3,149.7	3,127.8	3,421.3	3,240.4	3,379.2	2,900.4	3,812.8	3,224.2	3,221.1
Total persons (*000)	2,326.2	1,705.7	1,178.2	537.5	641.5	169.3	53.3	92.1	6,703.6

(a) Estimates relate to urban areas mainly. (b) Includes plain drinking water. (c) Includes all alcoholic beverages containing alcohol (e.g. whiskey, reduced alcoholic beer) and does not indicate amount of pure alcohol consumed. (d) Total includes infant formulae and food, special dietary foods and miscellaneous foods.

TABLE 4. MEAN DAILY FOOD INTAKE FOR PERSONS AGED 19 YEARS AND OVER : MAJOR FOOD GROUPS BY PART OF STATE

Major food groups	(Grams)					
	Capital city			Rest of State		
	Males	Females	Persons	Males	Females	Persons
Cereals and cereal-based products						
Cereals and cereal products	266.7	193.0	229.3	220.6	159.9	189.8
Cereal-based products and dishes	163.1	103.4	132.8	138.0	94.3	115.8
Fruit products and dishes	144.0	144.0	144.0	136.6	148.6	142.7
Vegetables and legumes						
Vegetable products and dishes	277.5	231.5	254.1	294.1	241.0	267.1
Legume and pulse products and dishes	13.2	9.1	11.1	10.2	4.7	7.4
Milk products and dishes	319.9	252.6	285.7	325.4	267.0	295.7
Meat, poultry and game products and dishes	196.2	115.0	155.0	206.7	117.9	161.6
Fish and seafood products and dishes	29.7	25.1	27.4	27.5	18.1	22.7
Egg products and dishes	14.6	10.0	12.3	19.4	13.4	16.3
Snack foods, sugar and confectionery						
Snack foods	3.8	3.5	3.7	3.8	2.8	3.3
Sugar products and dishes	21.4	14.5	17.9	26.8	16.1	21.4
Confectionery	9.3	9.0	9.1	8.7	7.5	8.1
Other foods						
Seed and nut products and dishes	5.4	3.8	4.6	4.7	3.2	3.9
Fats and oils	13.5	9.0	11.2	17.1	10.9	13.9
Soup	56.8	66.2	61.6	42.1	43.0	42.6
Savoury sauces and condiments	32.5	26.7	29.6	33.8	23.4	28.5
Beverages						
Non-alcoholic beverages(a)	1,992.5	1,894.1	1,942.5	2,159.7	1,957.2	2,056.9
Alcoholic beverages(b)	362.9	96.6	227.7	495.0	112.4	300.7
Total(c)	3,925.4	3,208.7	3,561.6	4,172.4	3,243.2	3,700.6
Total persons ('000)	5,515.5	5,585.6	11,101.1	3,225.0	3,241.8	6,466.8

(a) Includes plain drinking water. (b) Includes all alcoholic beverages containing alcohol (e.g. whiskey, reduced alcoholic beer) and does not indicate amount of pure alcohol consumed. (c) Total includes infant formulae and food, special dietary foods and miscellaneous foods.

TABLE 5. TOTAL ENERGY INTAKE (kJ) : PROPORTION OBTAINED FROM MAJOR FOOD GROUPS

Major food groups	Per cent									
	Age group (years)									
	2-3	4-7	8-11	12-15	16-18	19-24	25-44	45-64	65 and over	19 and over
Males										
Cereals and cereal-based products										
Cereals and cereal products	18.1	19.6	21.2	20.6	18.6	18.9	19.8	20.4	21.1	20.0
Cereal-based products and dishes	12.0	16.3	17.5	15.9	15.7	17.4	15.7	13.8	11.6	15.0
Fruit products and dishes	5.6	4.1	3.1	2.3	1.6	1.6	2.6	3.8	5.0	3.0
Vegetables and legumes										
Vegetable products and dishes	5.7	6.0	7.8	9.1	9.8	8.4	8.2	8.3	8.3	8.3
Legume and pulse products and dishes	0.3	0.4	0.2	0.4	0.4	0.3	0.4	0.5	0.4	0.4
Milk products and dishes	24.9	19.1	15.7	16.6	14.8	11.4	11.1	10.5	11.8	11.1
Meat, poultry and game products and dishes	8.1	8.3	10.2	10.7	11.7	14.5	15.2	15.6	13.9	15.0
Fish and seafood products and dishes	* 0.7	0.9	1.0	1.2	* 0.8	1.6	1.7	2.2	2.1	1.9
Egg products and dishes	0.6	0.6	0.7	0.7	0.8	* 0.9	0.9	1.2	1.1	1.0
Snack foods, sugar and confectionery										
Snack foods	2.2	3.0	2.5	* 2.3	* 2.2	1.6	0.8	* 0.3	0.2	0.7
Sugar products and dishes	1.9	2.6	2.4	1.7	1.8	1.6	2.4	3.2	4.2	2.7
Confectionery	3.7	4.0	3.7	3.5	3.5	2.0	1.7	1.1	0.9	1.5
Other foods										
Seed and nut products and dishes	0.7	1.0	0.7	* 0.7	* 0.3	0.6	1.4	1.0	0.8	1.1
Fats and oils	2.9	3.3	3.3	3.1	2.6	* 0.6	3.5	4.3	5.8	3.9
Soup	** 0.4	0.4	* 0.6	* 0.4	0.2	0.6	0.5	1.1	1.7	0.8
Savoury sauces and condiments	0.5	0.8	1.0	1.1	1.4	1.3	1.5	1.3	1.3	1.4
Beverages										
Non-alcoholic beverages(a)	10.6	9.1	8.0	9.3	11.0	9.6	6.0	3.8	3.3	5.7
Alcoholic beverages(b)	—	—	—	—	2.5	4.4	6.4	7.3	6.4	6.4
Total(c)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean energy (kJ)	6,610	7,850	9,660	11,590	13,530	13,250	11,730	10,300	8,510	11,050
Females										
Cereals and cereal-based products										
Cereals and cereal products	19.6	18.8	19.8	18.4	20.1	19.3	20.9	20.9	21.6	20.8
Cereal-based products and dishes	12.0	15.1	16.5	15.7	16.8	14.9	16.0	14.4	14.1	15.1
Fruit products and dishes	5.3	4.7	3.0	3.3	2.6	2.5	3.7	5.3	6.5	4.4
Vegetables and legumes										
Vegetable products and dishes	6.8	7.2	7.5	9.2	7.7	9.2	8.9	9.0	8.9	9.0
Legume and pulse products and dishes	* 0.3	0.2	* 0.1	* 0.3	* 0.5	0.4	0.4	* 0.4	0.2	0.4
Milk products and dishes	25.4	17.7	16.4	15.0	13.0	11.8	12.0	12.2	13.4	12.2
Meat, poultry and game products and dishes	7.3	9.1	9.7	11.7	11.7	13.3	12.8	12.8	12.0	12.8
Fish and seafood products and dishes	* 0.8	1.4	* 1.3	1.5	1.5	2.0	1.8	2.6	2.2	2.1
Egg products and dishes	* 0.8	* 0.8	0.8	0.5	** 0.7	0.7	1.0	1.1	1.0	1.0
Snack foods, sugar and confectionery										
Snack foods	2.1	3.1	3.1	3.1	2.1	2.1	1.2	0.3	0.1	0.9
Sugar products and dishes	1.5	1.9	2.2	1.9	2.2	1.9	2.2	2.4	3.0	2.3
Confectionery	3.6	4.3	4.8	4.4	4.1	3.0	2.3	1.6	1.2	2.1
Other foods										
Seed and nut products and dishes	* 1.1	1.2	1.2	** 0.7	* 0.8	1.1	1.2	1.1	0.7	1.1
Fats and oils	3.1	3.1	3.4	3.0	2.4	2.9	3.3	4.1	5.6	3.8
Soup	0.4	** 0.5	0.3	* 0.4	** 0.4	1.0	1.2	1.6	2.0	1.4
Savoury sauces and condiments	* 0.8	0.8	0.9	1.4	1.5	1.7	1.8	1.8	1.5	1.7
Beverages										
Non-alcoholic beverages(a)	8.4	9.8	8.5	8.9	9.7	8.4	5.4	4.1	3.6	5.2
Alcoholic beverages(b)	—	—	—	** 0.3	2.0	3.4	3.6	3.8	2.4	3.4
Total(c)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean energy (kJ)	6,080	7,010	8,310	8,530	8,690	8,370	7,880	7,220	6,370	7,480

(a) Includes plain drinking water. (b) Includes all alcoholic beverages containing alcohol (e.g. whiskey, reduced alcoholic beer) and does not indicate amount of pure alcohol consumed. (c) Total includes infant formulae and food, special dietary foods and miscellaneous foods.

TABLE 6. MEAN DAILY ENERGY AND NUTRIENT INTAKE

	Unit	Age group (years)									
		2-3	4-7	8-11	12-15	16-18	19-24	25-44	45-64	65 and over	19 and over
Males											
Energy	(kJ)	6,606.1	7,847.1	9,661.6	11,589.4	13,525.5	13,275.5	11,724.9	10,296.2	8,510.1	11,049.5
Moisture(a)	(g)	1,620.5	1,731.0	2,055.6	2,482.1	3,241.6	3,538.1	3,569.9	3,436.1	2,876.4	3,426.3
Macronutrients											
Protein	(g)	55.2	64.3	81.8	101.0	120.0	127.7	115.2	104.5	83.7	109.2
Total fat	(g)	59.1	70.4	86.8	106.2	119.6	119.1	105.6	90.6	74.0	98.5
Saturated fat	(g)	27.9	31.4	37.0	46.3	50.7	48.4	42.2	35.2	28.4	39.0
Monounsaturated fat	(g)	19.7	24.3	30.5	37.5	43.0	43.9	38.7	33.5	27.1	36.2
Polyunsaturated fat	(g)	7.2	9.2	12.3	14.1	16.4	17.0	15.6	13.7	11.6	14.7
Cholesterol	(mg)	170.0	195.7	254.1	316.4	393.3	416.5	375.4	346.4	273.0	357.6
Total carbohydrate	(g)	210.1	250.3	304.9	358.1	409.4	375.9	316.8	274.3	235.1	300.5
Total sugars	(g)	123.8	133.1	151.9	181.1	212.0	176.5	138.6	118.5	109.0	133.5
Total starch	(g)	85.2	116.1	151.8	175.8	196.0	198.0	176.5	154.0	124.1	165.2
Dietary fibre	(g)	13.7	16.6	20.6	24.0	26.5	26.2	26.1	26.3	24.0	25.9
Alcohol(b)	(g)	—	—	—	—	9.1	15.2	19.7	20.2	14.7	18.5
Vitamins											
Vitamin A retinol equivalent	(mcg)	785.8	831.7	1,012.5	1,388.7	1,267.9	1,300.1	1,333.6	1,371.8	1,310.3	1,336.9
Preformed Vitamin A	(mcg)	463.8	510.0	630.6	908.7	740.6	705.0	725.8	698.8	657.3	705.2
Provitamin A	(mcg)	1,931.7	1,930.2	2,290.9	2,880.2	3,163.9	3,570.4	3,647.1	4,037.6	3,917.7	3,790.1
Thiamin	(mg)	1.2	1.6	1.9	2.4	2.3	2.3	2.1	1.8	1.6	1.9
Riboflavin	(mg)	1.9	2.1	2.5	3.0	3.0	2.7	2.5	2.2	2.0	2.3
Niacin equivalent	(mg)	24.0	29.4	37.3	46.0	53.5	57.6	53.9	48.8	38.8	50.7
Folate	(mcg)	156.6	182.7	225.0	271.3	312.7	321.8	310.6	309.3	276.6	306.8
Vitamin C	(mg)	109.8	105.9	120.7	121.3	153.8	149.6	132.6	137.7	127.1	135.6
Minerals											
Calcium	(mg)	867.2	830.5	937.6	1,092.5	1,280.0	1,101.1	988.6	885.3	795.6	945.5
Phosphorus	(mg)	1,092.1	1,177.4	1,450.6	1,740.4	2,065.9	2,051.5	1,866.7	1,691.9	1,419.1	1,775.6
Magnesium	(mg)	203.6	225.5	276.8	323.4	379.6	390.1	392.5	383.3	334.2	381.1
Iron	(mg)	8.1	10.3	13.0	16.1	17.9	17.9	16.7	16.2	14.4	16.4
Zinc	(mg)	7.0	8.1	10.2	12.8	14.8	17.3	14.9	14.0	11.4	14.4
Potassium	(mg)	2,277.1	2,397.1	2,866.4	3,488.0	4,065.2	3,943.0	3,818.3	3,732.8	3,232.0	3,725.2
Females											
Energy	(kJ)	6,079.3	7,014.3	8,305.4	8,533.6	8,690.4	8,369.6	7,875.2	7,220.6	6,367.0	7,480.9
Moisture(a)	(g)	1,469.2	1,605.1	1,831.8	2,159.4	2,398.9	2,686.1	2,899.4	2,910.6	2,575.6	2,817.0
Macronutrients											
Protein	(g)	50.8	57.0	69.1	73.9	80.3	78.4	76.2	74.6	64.3	73.9
Total fat	(g)	55.6	62.5	77.4	77.7	76.4	75.4	72.0	64.4	56.9	67.6
Saturated fat	(g)	26.0	27.6	33.8	33.1	32.5	30.4	28.7	24.8	22.3	26.7
Monounsaturated fat	(g)	18.7	21.6	27.3	27.6	27.0	26.8	26.0	23.4	20.2	24.3
Polyunsaturated fat	(g)	6.6	8.3	10.4	10.8	10.4	11.8	10.8	10.1	8.8	10.4
Cholesterol	(mg)	166.1	184.3	226.6	227.4	242.2	245.1	250.0	244.2	206.7	239.9
Total carbohydrate	(g)	190.5	225.2	257.1	264.1	263.6	243.4	220.3	199.8	182.1	210.6
Total sugars	(g)	106.5	124.2	131.8	137.5	132.6	117.0	98.7	92.2	86.6	97.0
Total starch	(g)	82.9	99.9	124.3	125.4	129.8	125.3	120.3	105.8	93.8	112.1
Dietary fibre	(g)	13.0	15.3	16.9	18.6	19.4	19.2	20.0	21.5	20.2	20.3
Alcohol(b)	(g)	—	—	—	0.5	3.9	6.6	8.2	8.0	4.6	7.3
Vitamins											
Vitamin A retinol equivalent	(mcg)	691.4	764.2	958.1	1,162.4	915.7	903.7	1,038.5	1,153.8	1,064.4	1,058.3
Preformed Vitamin A	(mcg)	427.3	419.9	520.6	709.2	435.7	406.9	513.0	532.2	482.1	499.5
Provitamin A	(mcg)	1,584.5	2,065.8	2,625.2	2,719.2	2,880.1	2,980.9	3,152.8	3,729.4	3,493.9	3,352.9
Thiamin	(mg)	1.2	1.3	1.5	1.5	1.5	1.5	1.4	1.3	1.2	1.4
Riboflavin	(mg)	1.9	1.7	2.0	2.0	1.8	1.9	1.8	1.8	1.6	1.8
Niacin equivalent	(mg)	22.5	25.5	31.1	33.4	35.3	36.1	35.3	34.5	29.4	34.1
Folate	(mcg)	151.3	163.7	188.3	205.5	216.7	232.9	227.0	246.9	224.8	232.8
Vitamin C	(mg)	93.8	104.4	100.4	123.5	125.6	119.8	108.5	118.1	111.5	113.1
Minerals											
Calcium	(mg)	798.0	704.4	795.6	784.1	801.3	750.0	762.1	769.2	685.6	748.6
Phosphorus	(mg)	1,006.3	1,041.0	1,210.5	1,269.6	1,336.6	1,331.8	1,299.8	1,294.7	1,131.7	1,271.7
Magnesium	(mg)	187.8	202.5	229.0	243.4	257.3	272.5	283.6	297.1	267.9	283.1
Iron	(mg)	7.4	8.9	10.4	11.0	11.1	11.9	12.0	12.3	11.3	11.9
Zinc	(mg)	6.4	7.1	8.6	9.2	10.0	10.2	9.9	9.8	9.0	9.7
Potassium	(mg)	2,086.0	2,192.9	2,468.1	2,710.5	2,673.8	2,752.4	2,816.3	2,929.7	2,626.0	2,805.0

(a) Includes plain drinking water. (b) Represents pure alcohol.

TABLE 7. MEAN DAILY ENERGY AND NUTRIENT INTAKE : PERSONS AGED 19 YEARS AND OVER BY STATE

	Unit	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
Males										
Energy	(kJ)	10,859.6	11,213.9	10,797.8	11,386.4	11,536.7	10,736.2	11,522.0	11,323.8	11,049.5
Moisture(b)	(g)	3,299.8	3,229.6	3,816.3	3,309.9	3,757.6	2,999.0	4,809.1	3,303.1	3,426.3
Macronutrients										
Protein	(g)	107.9	110.1	107.3	111.8	113.3	104.8	110.8	113.9	109.2
Total fat	(g)	96.4	100.7	96.1	102.6	100.8	98.4	98.2	101.8	98.5
Saturated fat	(g)	37.3	40.0	38.5	41.2	40.7	40.9	39.8	41.3	39.0
Monounsaturated fat	(g)	35.7	37.1	35.5	37.3	36.4	35.1	35.3	36.6	36.2
Polyunsaturated fat	(g)	15.0	14.8	13.6	15.4	14.8	14.2	14.7	15.2	14.7
Cholesterol	(mg)	353.6	353.8	364.8	355.3	373.4	355.4	371.7	338.6	357.6
Total carbohydrate	(g)	292.7	306.2	295.3	310.7	319.4	287.2	298.5	304.7	300.5
Total sugars	(g)	128.0	131.7	137.7	143.6	141.6	128.6	142.9	135.3	133.5
Total starch	(g)	162.8	172.8	156.0	165.3	175.7	157.1	154.1	167.6	165.2
Dietary fibre	(g)	25.2	26.7	25.4	25.7	27.6	24.7	22.3	28.2	25.9
Alcohol(c)	(g)	19.7	17.5	17.2	17.8	19.2	18.2	35.2	18.5	18.5
Vitamins										
Vitamin A retinol equivalent	(mcg)	1,274.8	1,352.9	1,424.9	1,339.3	1,364.8	1,369.2	1,071.5	1,285.8	1,336.9
Preformed Vitamin A	(mcg)	667.4	722.7	757.4	748.6	682.6	695.3	592.2	608.6	705.2
Provitamin A	(mcg)	3,644.5	3,780.9	4,005.4	3,544.4	4,093.4	4,043.7	2,876.0	4,063.0	3,790.1
Thiamin	(mg)	1.9	2.0	1.9	1.9	2.0	1.9	1.9	2.1	1.9
Riboflavin	(mg)	2.3	2.4	2.4	2.4	2.4	2.3	2.3	2.6	2.3
Niacin equivalent	(mg)	50.0	51.2	50.3	51.0	52.2	49.2	51.7	53.2	50.7
Folate	(mcg)	308.6	306.7	301.8	298.0	317.0	301.8	306.9	321.8	306.8
Vitamin C	(mg)	138.6	134.3	131.6	134.2	129.5	137.1	182.3	150.6	135.6
Minerals										
Calcium	(mg)	910.0	962.6	913.9	1,045.5	1,002.9	882.9	987.8	1,055.4	945.5
Phosphorus	(mg)	1,740.6	1,790.5	1,742.4	1,843.3	1,883.8	1,677.6	1,797.5	1,873.1	1,775.6
Magnesium	(mg)	375.4	385.7	374.1	379.6	404.2	367.5	373.5	414.6	381.1
Iron	(mg)	16.0	16.8	16.4	16.2	16.9	15.8	14.9	17.6	16.4
Zinc	(mg)	14.4	14.4	14.2	15.0	14.6	13.5	14.2	15.3	14.4
Potassium	(mg)	3,656.4	3,750.6	3,705.9	3,808.5	3,858.1	3,642.0	3,690.0	3,997.8	3,725.2
Females										
Energy	(kJ)	7,436.7	7,522.9	7,429.8	7,589.8	7,495.3	7,023.7	8,025.7	8,263.1	7,480.9
Moisture(b)	(g)	2,749.3	2,720.6	3,019.3	2,829.1	2,972.8	2,523.1	3,391.2	2,776.0	2,817.0
Macronutrients										
Protein	(g)	74.2	72.6	73.7	74.1	75.5	69.1	79.6	81.9	73.9
Total fat	(g)	66.9	68.4	66.9	68.2	67.4	66.4	76.3	72.4	67.6
Saturated fat	(g)	25.8	27.1	27.0	26.5	27.0	28.4	31.1	28.4	26.7
Monounsaturated fat	(g)	24.2	24.8	24.1	24.6	24.0	22.9	27.3	26.0	24.3
Polyunsaturated fat	(g)	10.8	10.2	9.7	11.0	10.1	9.2	11.1	11.3	10.4
Cholesterol	(mg)	243.9	231.0	246.4	225.9	246.8	231.6	281.6	244.0	239.9
Total carbohydrate	(g)	206.9	214.8	210.0	215.5	210.2	194.5	210.1	235.0	210.6
Total sugars	(g)	93.3	97.2	101.5	100.5	97.5	93.3	103.0	108.0	97.0
Total starch	(g)	112.1	116.2	107.1	113.6	111.0	99.9	105.9	125.4	112.1
Dietary fibre	(g)	20.1	20.9	19.7	20.7	21.0	18.6	18.5	22.5	20.3
Alcohol(c)	(g)	8.4	6.0	6.9	7.3	7.3	5.2	11.8	9.3	7.3
Vitamins										
Vitamin A retinol equivalent	(mcg)	1,074.3	1,012.4	1,069.2	1,078.9	1,059.5	1,036.9	1,061.8	1,274.7	1,058.3
Preformed Vitamin A	(mcg)	530.8	434.1	524.7	506.9	482.9	456.3	528.0	732.7	499.5
Provitamin A	(mcg)	3,261.2	3,469.4	3,266.9	3,432.2	3,459.7	3,483.1	3,202.8	3,252.5	3,352.9
Thiamin	(mg)	1.3	1.3	1.4	1.3	1.4	1.3	1.3	1.5	1.4
Riboflavin	(mg)	1.7	1.8	1.9	1.8	1.8	1.8	1.9	1.9	1.8
Niacin equivalent	(mg)	34.2	33.3	34.4	34.3	34.6	32.3	36.2	37.9	34.1
Folate	(mcg)	237.2	232.0	229.1	227.7	234.2	215.5	219.5	248.0	232.8
Vitamin C	(mg)	115.5	110.8	111.8	113.5	110.7	110.1	122.9	127.5	113.1
Minerals										
Calcium	(mg)	721.9	752.9	761.1	788.6	770.2	740.9	777.5	799.6	748.6
Phosphorus	(mg)	1,260.3	1,256.9	1,285.2	1,295.1	1,305.4	1,185.0	1,348.4	1,406.6	1,271.7
Magnesium	(mg)	282.6	281.8	281.5	288.4	288.6	261.6	277.9	311.9	283.1
Iron	(mg)	12.0	12.0	11.8	11.8	11.8	11.0	12.4	13.5	11.9
Zinc	(mg)	9.8	9.7	9.7	9.6	9.8	9.1	10.3	10.5	9.7
Potassium	(mg)	2,773.1	2,792.6	2,811.5	2,879.2	2,868.6	2,718.6	2,824.9	3,030.5	2,805.0

(a) Estimates relate to urban areas mainly. (b) Includes plain drinking water. (c) Represents pure alcohol.

TABLE 8. MEAN DAILY ENERGY AND NUTRIENT INTAKE : PERSONS AGED 19 YEARS AND OVER BY PART OF STATE

	Unit	Males	Females	Persons
Capital city				
Energy	(kJ)	11,056.5	7,554.7	9,279.0
Moisture(a)	(g)	3,336.0	2,800.1	3,064.0
Macronutrients				
Protein	(g)	109.3	74.4	91.6
Total fat	(g)	97.7	67.7	82.4
Saturated fat	(g)	38.5	26.5	32.4
Monounsaturated fat	(g)	36.0	24.5	30.2
Polyunsaturated fat	(g)	14.5	10.5	12.5
Cholesterol	(mg)	351.5	238.3	294.0
Total carbohydrate	(g)	303.8	214.0	258.2
Total sugars	(g)	132.4	97.0	114.5
Total starch	(g)	169.5	115.5	142.1
Dietary fibre	(g)	26.3	20.6	23.4
Alcohol(b)	(g)	17.7	7.4	12.5
Vitamins				
Vitamin A retinol equivalent	(mcg)	1,325.6	1,078.5	1,200.1
Preformed Vitamin A	(mcg)	692.5	523.1	606.5
Provitamin A	(mcg)	3,798.4	3,332.3	3,561.8
Thiamin	(mg)	1.9	1.3	1.6
Riboflavin	(mg)	2.3	1.7	2.0
Niacin equivalent	(mg)	50.7	34.2	42.3
Folate	(mcg)	306.7	236.5	271.1
Vitamin C	(mg)	139.7	115.0	127.2
Minerals				
Calcium	(mg)	953.2	749.2	849.6
Phosphorus	(mg)	1,782.2	1,282.6	1,528.6
Magnesium	(mg)	382.2	286.0	333.4
Iron	(mg)	16.4	12.0	14.2
Zinc	(mg)	14.2	9.8	11.9
Potassium	(mg)	3,725.9	2,826.2	3,269.2
Rest of State				
Energy	(kJ)	11,036.9	7,348.4	9,164.1
Moisture(a)	(g)	3,588.6	2,847.3	3,212.2
Macronutrients				
Protein	(g)	108.9	72.9	90.6
Total fat	(g)	99.9	67.4	83.4
Saturated fat	(g)	39.9	27.0	33.4
Monounsaturated fat	(g)	36.6	24.0	30.2
Polyunsaturated fat	(g)	14.9	10.2	12.5
Cholesterol	(mg)	368.6	242.7	304.7
Total carbohydrate	(g)	294.5	204.4	248.8
Total sugars	(g)	135.4	96.9	115.9
Total starch	(g)	157.5	106.0	131.4
Dietary fibre	(g)	25.2	19.8	22.5
Alcohol(b)	(g)	20.0	7.2	13.5
Vitamins				
Vitamin A retinol equivalent	(mcg)	1,357.3	1,022.2	1,187.1
Preformed Vitamin A	(mcg)	728.1	457.2	590.6
Provitamin A	(mcg)	3,775.3	3,389.9	3,579.6
Thiamin	(mg)	1.9	1.4	1.7
Riboflavin	(mg)	2.3	1.8	2.1
Niacin equivalent	(mg)	50.7	33.9	42.2
Folate	(mcg)	306.9	226.2	265.9
Vitamin C	(mg)	128.0	109.7	118.7
Minerals				
Calcium	(mg)	931.7	747.6	838.3
Phosphorus	(mg)	1,763.7	1,252.1	1,504.0
Magnesium	(mg)	379.0	277.7	327.6
Iron	(mg)	16.3	11.8	14.0
Zinc	(mg)	14.8	9.7	12.2
Potassium	(mg)	3,724.0	2,767.0	3,238.0

(a) Includes plain drinking water. (b) Represents pure alcohol.

TABLE 9. MEAN PER CENT CONTRIBUTION TO ENERGY INTAKE : PROTEIN, FAT, CARBOHYDRATE AND ALCOHOL

Per cent										
Age group (years)										
Type of nutrients	2-3	4-7	8-11	12-15	16-18	19-24	25-44	45-64	65 and over	19 and over
Males										
Protein	14.2	13.9	14.5	15.1	15.4	16.6	16.8	17.6	17.0	17.0
Total fat(a)	32.9	32.8	32.9	33.5	32.9	32.9	32.8	31.9	31.6	32.4
Saturated fat	15.5	14.6	13.9	14.6	13.7	13.3	13.1	12.3	12.0	12.7
Monounsaturated fat	10.9	11.4	11.6	11.9	11.9	12.1	12.0	11.8	11.5	11.9
Polyunsaturated fat	4.0	4.3	4.7	4.5	4.5	4.7	4.9	4.9	4.9	4.9
Carbohydrate	52.1	52.7	52.1	50.9	49.6	46.9	45.0	44.1	45.8	45.1
Total sugar	30.3	27.3	25.1	24.7	24.5	21.5	19.1	18.4	20.6	19.4
Total starch	21.8	25.4	27.0	26.2	25.2	25.5	25.9	25.7	25.2	25.7
Alcohol(b)	—	—	—	—	1.6	3.1	4.7	5.6	4.8	4.8
Total energy(c)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean energy (kJ)	6,606.1	7,847.1	9,661.6	11,589.4	13,525.5	13,275.5	11,724.9	10,296.2	8,510.1	11,049.5
Females										
Protein	14.3	13.9	14.2	14.9	16.1	16.1	16.8	18.0	17.6	17.2
Total fat(a)	33.4	32.4	34.0	33.1	32.1	32.8	33.0	32.0	32.1	32.5
Saturated fat	15.6	14.3	14.7	13.9	13.5	13.1	13.1	12.2	12.4	12.7
Monounsaturated fat	11.2	11.2	11.9	11.8	11.4	11.7	11.9	11.6	11.4	11.7
Polyunsaturated fat	4.0	4.3	4.6	4.7	4.4	5.1	5.0	5.1	5.1	5.0
Carbohydrate	51.6	52.9	51.3	51.1	50.1	48.4	46.7	46.1	47.5	46.9
Total sugar	28.4	28.4	25.3	25.6	24.0	22.7	20.2	20.8	21.7	20.9
Total starch	23.2	24.6	26.0	25.5	26.1	25.8	26.5	25.4	25.7	26.0
Alcohol(b)	—	—	—	0.2	0.9	2.0	2.8	3.0	2.0	2.6
Total energy(c)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean energy (kJ)	6,079.3	7,014.3	8,305.4	8,533.6	8,690.4	8,369.6	7,875.2	7,220.6	6,367.0	7,480.9
Persons										
Protein	14.2	13.9	14.3	15.0	15.7	16.3	16.8	17.8	17.3	17.1
Total fat(a)	33.1	32.6	33.4	33.3	32.5	32.8	32.9	32.0	31.8	32.5
Saturated fat	15.6	14.5	14.3	14.3	13.6	13.2	13.1	12.2	12.2	12.7
Monounsaturated fat	11.0	11.3	11.8	11.8	11.7	11.9	11.9	11.7	11.4	11.8
Polyunsaturated fat	4.0	4.3	4.7	4.6	4.5	4.9	4.9	5.0	5.0	5.0
Carbohydrate	51.9	52.8	51.7	51.0	49.9	47.7	45.9	45.1	46.7	46.0
Total sugar	29.4	27.8	25.2	25.1	24.3	22.1	19.7	19.6	21.2	20.2
Total starch	22.5	25.0	26.5	25.9	25.6	25.6	26.2	25.5	25.5	25.8
Alcohol(b)	—	—	—	0.1	1.3	2.6	3.7	4.3	3.2	3.7
Total energy(c)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean energy (kJ)	6,349.5	7,441.5	9,000.4	10,104.0	11,175.0	10,871.6	9,799.3	8,778.2	7,298.6	9,237.9

(a) Differences between mean percent total fat contribution to energy intake and percentage contribution of total fat to energy intake in table 14 are due to methodology.

(b) Represents pure alcohol. (c) Due to the method of calculating percent contribution to energy intake, components do not add to total. See Glossary for explanation.

TABLE 10. PERSONS AGED 19 YEARS & OVER : VITAMIN & MINERAL SUPPLEMENTS TAKEN THE DAY BEFORE INTERVIEW

	Per cent				
	<i>Age group (years)</i>				
	<i>19-24</i>	<i>25-44</i>	<i>45-64</i>	<i>65 and over</i>	<i>19 and over</i>
Males					
Multivitamins	4.4	4.4	4.9	3.7	4.5
Multivitamins with iron	1.6	1.6	1.8	2.3	1.8
Vitamin A	* 0.3	0.9	1.6	2.1	1.2
Vitamin B	4.5	3.4	4.6	4.3	4.0
Vitamin C	6.9	6.5	8.4	7.9	7.3
Vitamin E	1.4	1.3	3.2	6.5	2.6
B Carotene	**0.2	0.5	0.8	* 0.8	0.6
Calcium	* 0.4	1.1	1.6	2.4	1.3
Folic acid	**0.2	0.4	0.6	* 0.4	0.4
Iron	* 0.5	0.7	0.9	1.4	0.8
Multivitamins with iron	1.6	1.5	2.1	2.5	1.8
Took selected supplements	12.8	13.7	17.3	19.2	15.4
Did not take selected supplements	87.2	86.2	82.4	80.4	84.4
Total(a)	100.0	100.0	100.0	100.0	100.0
Females					
Multivitamins	4.0	5.5	6.9	6.6	5.9
Multivitamins with iron	2.2	4.2	3.2	3.3	3.5
Vitamin A	* 1.0	1.1	2.3	1.7	1.5
Vitamin B	4.5	8.0	10.4	7.2	8.1
Vitamin C	9.6	8.5	11.1	10.8	9.8
Vitamin E	2.9	2.7	6.7	7.4	4.7
B Carotene	* 0.9	0.8	1.2	* 0.9	0.9
Calcium	1.6	4.3	9.8	10.9	6.7
Folic acid	* 0.7	2.0	0.8	* 0.6	1.3
Iron	5.3	4.8	3.3	1.8	3.9
Multivitamins with iron	2.0	1.9	2.4	2.5	2.2
Took selected supplements	21.0	24.8	32.5	29.8	27.4
Did not take selected supplements	79.0	75.1	67.3	70.1	72.5
Total(a)	100.0	100.0	100.0	100.0	100.0

(a) Total includes not stated category.

TABLE 11. PERSONS : SELF-REPORTED TYPE OF DIET

Per cent								
Type of diet	Age group (years)							
	2-11	12-15	16-18	19-24	25-44	45-64	65 and over	19 and over
Males								
No special diet	88.9	90.3	85.9	82.7	74.9	64.0	62.5	71.0
Special diet								
Vegetarian	2.2	* 1.3	* 0.6	2.4	2.9	2.6	1.9	2.6
Weight reduction	**0.1	**0.3	* 1.9	* 1.0	2.5	3.3	2.0	2.5
Diabetic	* 0.3	* 0.7	—	* 0.4	0.7	2.6	5.4	1.9
Fat modified	1.8	* 1.5	* 0.9	4.6	8.6	18.7	22.7	13.1
Other(a)	5.9	5.9	10.2	8.9	10.4	8.5	5.1	8.9
Total(b)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Females								
No special diet	88.1	87.7	80.8	72.4	61.4	49.0	53.5	57.9
Special diet								
Vegetarian	2.3	* 1.3	5.1	6.2	5.2	4.9	3.1	4.9
Weight reduction	* 0.3	2.2	5.9	7.6	8.7	8.5	3.6	7.6
Diabetic	**0.1	—	—	* 0.5	1.0	2.5	5.9	2.2
Fat modified	1.4	3.0	* 0.7	4.4	9.1	23.1	26.4	15.6
Other(a)	7.5	5.8	7.5	8.8	14.5	11.9	7.3	11.8
Total(b)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Persons								
No special diet	88.5	89.0	83.4	77.7	68.2	56.6	57.4	64.3
Special diet								
Vegetarian	2.3	1.3	2.8	4.3	4.0	3.8	2.6	3.7
Weight reduction	* 0.2	1.2	3.9	4.2	5.6	5.9	2.9	5.1
Diabetic	* 0.2	* 0.4	—	* 0.5	0.8	2.6	5.7	2.1
Fat modified	1.6	2.2	* 0.8	4.5	8.9	20.9	24.8	14.3
Other(a)	6.7	5.8	8.9	8.9	12.4	10.2	6.3	10.3
Total(b)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) Includes other forms of diet such as salt reduced/free, body-building, more fruit and vegetable, less red meat, etc. (b) Total includes not stated category.

TABLE 12. PERSONS : WHERE FOOD AND BEVERAGES CONSUMED

	Per cent									
	Age group (years)									
	2-3	4-7	8-11	12-15	16-18	19-24	25-44	45-64	65 and over	19 and over
Males										
Consumed at home	99.1	99.5	97.5	98.7	94.6	93.3	96.1	99.2	99.8	97.2
Consumed away from home,										
Obtained from home	35.0	52.4	62.3	54.5	34.2	25.6	36.0	31.0	6.2	28.8
Not obtained from home	52.4	57.5	55.9	58.9	70.2	74.5	74.5	59.4	33.1	64.1
Total(a)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Females										
Consumed at home	99.6	99.8	98.5	98.8	98.1	95.5	98.5	99.0	99.6	98.5
Consumed away from home,										
Obtained from home	33.1	58.4	62.0	51.3	30.2	25.6	26.1	22.9	6.9	21.7
Not obtained from home	57.1	55.9	53.6	57.5	68.4	73.5	64.2	54.5	31.3	56.7
Total(a)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Persons										
Consumed at home	99.3	99.6	98.0	98.8	96.3	94.4	97.3	99.1	99.7	97.8
Consumed away from home,										
Obtained from home	34.1	55.3	62.2	53.0	32.2	25.6	31.1	27.0	6.6	25.2
Not obtained from home	54.7	56.8	54.8	58.2	69.3	74.0	69.3	56.9	32.0	60.3
Total(a)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) Persons may have reported consuming more than one type of food and therefore components do not add to totals. Total includes not answered/don't know category

TABLE 13. TOTAL ENERGY INTAKE (kJ) : PROPORTION OF ENERGY BY EATING LOCATION

Per cent										
<i>Age group (years)</i>										
<i>Where foods and beverages consumed</i>	<i>2-3</i>	<i>4-7</i>	<i>8-11</i>	<i>12-15</i>	<i>16-18</i>	<i>19-24</i>	<i>25-44</i>	<i>45-64</i>	<i>65 and over</i>	<i>19 and over</i>
Males										
Consumed at home	76.0	69.2	65.8	69.5	61.4	55.6	60.9	73.9	87.4	66.5
Consumed away from home,										
Obtained from home	7.7	13.1	13.9	11.9	7.1	5.9	9.0	7.9	1.4	7.3
Not obtained from home	15.3	17.2	20.0	18.2	30.9	37.5	29.9	17.9	11.0	25.7
Total(a)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Females										
Consumed at home	74.1	67.6	67.3	66.6	57.4	58.3	70.2	77.1	87.8	73.1
Consumed away from home,										
Obtained from home	6.4	16.1	14.8	11.9	5.2	5.7	4.8	4.0	1.1	4.1
Not obtained from home	19.2	15.9	17.6	21.4	37.0	35.6	24.7	18.6	10.7	22.4
Total(a)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Persons										
Consumed at home	75.1	68.5	66.5	68.3	59.9	56.6	64.6	75.2	87.6	69.2
Consumed away from home,										
Obtained from home	7.1	14.5	14.3	11.9	6.4	5.8	7.3	6.3	1.3	6.0
Not obtained from home	17.1	16.6	18.9	19.5	33.2	36.8	27.8	18.2	10.8	24.4
Total(a)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) Total includes not answered/don't know category

TABLE 14. CONTRIBUTION OF FAT TO ENERGY INTAKE : EATING LOCATION

Per cent										
Where foods and beverages consumed	Age group (years)									
	2-3	4-7	8-11	12-15	16-18	19-24	25-44	45-64	65 and over	19 and over
Males										
Consumed at home	33.0	33.2	32.8	33.6	32.7	32.7	33.3	32.8	32.1	32.9
Consumed away from home, Obtained from home	29.6	31.5	31.5	33.1	30.4	34.1	32.0	29.4	33.9	31.6
Not obtained from home	34.8	34.3	35.8	35.6	33.3	33.8	33.7	33.0	32.5	33.5
Total fat from energy(a)	33.1	33.2	33.2	33.9	32.7	33.2	33.3	32.6	32.2	33.0
Females										
Consumed at home	33.8	33.3	35.0	33.9	31.9	33.2	33.3	32.5	32.4	32.9
Consumed away from home, Obtained from home	30.4	30.0	32.4	31.8	26.4	28.7	28.6	27.6	31.2	28.5
Not obtained from home	35.0	34.2	34.5	34.4	34.2	34.3	36.4	36.5	38.3	36.1
Total fat from energy(a)	33.8	33.0	34.5	33.7	32.5	33.4	33.8	33.0	33.0	33.4
Persons										
Consumed at home	33.4	33.3	33.8	33.7	32.4	32.9	33.3	32.7	32.3	32.9
Consumed away from home, Obtained from home	29.9	30.7	31.9	32.6	29.2	32.1	31.1	29.0	32.7	30.7
Not obtained from home	34.9	34.3	35.2	35.1	33.7	34.0	34.7	34.5	35.3	34.5
Total fat from energy(a)	33.4	33.1	33.8	33.8	32.6	33.3	33.5	32.8	32.6	33.2

(a) Differences between percentage contribution of total fat to energy intake and mean percent total fat contribution to energy intake in Table 9 are due to methodology. Totals include not answered/don't know category.

TABLE 15. PERSONS : EATING OCCASION BY BROAD FOOD GROUPS(a) (b)

Eating occasion	Per cent									
	Monday-Friday					Saturday and Sunday				
	Age group (years)									
	2-11	12-18	19-24	25-64	65 and over	2-11	12-18	19-24	25-64	65 and over
Males										
Breakfast										
Cereals and cereal-based products	92.5	82.3	67.0	72.6	93.3	90.7	79.2	63.3	72.3	90.7
Fruit products and dishes	8.9	4.5	6.3	13.2	32.8	7.9	6.2	* 4.5	10.0	26.7
Vegetables and legumes	1.9	4.6	4.5	5.3	6.6	5.1	* 3.2	5.9	6.7	7.5
Milk products and dishes	81.1	74.8	63.4	70.2	81.9	69.2	64.9	50.2	63.5	82.2
Meat, poultry and game products and dishes	2.6	5.8	6.3	6.8	7.8	9.0	8.3	12.8	10.8	8.2
Fish and seafood products and dishes	—	**0.1	—	0.7	* 1.1	* 1.2	—	—	* 0.6	* 2.8
Egg products and dishes	3.3	5.2	5.1	6.2	6.2	11.5	11.0	10.3	13.2	9.7
Snack foods; sugar; confectionery	46.3	39.4	42.6	53.4	66.5	42.1	33.2	29.0	53.3	65.2
Other foods	42.7	36.7	35.7	40.9	62.6	53.5	44.4	43.1	44.4	63.4
Non-alcoholic beverages(c)	29.7	33.8	46.4	67.1	80.3	35.2	35.1	48.3	66.6	87.3
Alcoholic beverages(d)	—	—	—	* 0.2	* 0.5	—	—	—	**0.1	* 1.1
Total persons who consumed breakfast(e)	97.0	87.8	78.2	87.2	97.4	97.5	83.8	75.8	83.3	95.4
Brunch/lunch										
Cereals and cereal-based products	84.0	77.2	75.9	75.8	75.5	79.3	74.0	71.4	71.9	69.8
Fruit products and dishes	18.8	14.2	11.3	22.4	27.5	13.1	* 4.1	9.9	13.4	26.9
Vegetables and legumes	20.3	26.5	42.0	49.6	52.8	38.4	39.1	40.5	51.7	54.7
Milk products and dishes	33.2	32.9	34.9	45.5	48.4	33.5	27.7	31.1	39.9	49.3
Meat, poultry and game products and dishes	30.6	37.9	44.8	49.0	45.5	40.2	34.8	43.9	47.7	56.0
Fish and seafood products and dishes	2.7	1.9	5.8	6.4	9.8	4.3	* 3.2	8.1	8.3	12.1
Egg products and dishes	1.3	* 1.1	4.2	3.4	5.6	* 2.7	* 2.5	8.7	6.0	* 3.1
Snack foods; sugar; confectionery	27.2	16.5	16.4	24.5	30.8	23.5	17.6	11.7	22.7	26.5
Other foods	70.0	62.1	57.8	62.4	72.1	58.5	55.6	52.4	62.9	68.0
Non-alcoholic beverages(c)	42.3	32.6	44.5	51.3	54.5	48.4	49.7	58.6	45.5	56.1
Alcoholic beverages(d)	—	—	* 1.0	2.6	5.3	**0.3	—	* 2.3	9.1	9.1
Total persons who consumed brunch/lunch(e)	94.7	88.6	84.9	89.7	91.2	93.2	83.6	86.0	85.6	91.3
Dinner										
Cereals and cereal-based products	61.2	56.8	59.6	59.5	50.4	67.4	59.9	66.0	60.0	58.4
Fruit products and dishes	11.9	11.5	3.8	14.2	30.5	14.1	9.4	5.5	13.4	22.7
Vegetables and legumes	62.2	75.4	69.9	75.8	76.4	54.5	62.3	72.8	68.1	61.5
Milk products and dishes	43.2	39.6	28.9	40.1	49.7	37.7	40.2	30.6	38.9	43.8
Meat, poultry and game products and dishes	61.0	67.1	65.2	67.2	68.0	46.8	57.8	68.2	59.6	49.3
Fish and seafood products and dishes	6.4	9.1	9.8	10.2	10.1	10.0	* 2.6	7.0	13.3	6.1
Egg products and dishes	5.3	5.4	4.0	6.8	5.4	7.6	7.3	* 2.1	8.2	6.2
Snack foods; sugar; confectionery	14.9	11.9	8.2	17.7	25.4	17.8	16.6	13.3	17.5	20.1
Other foods	50.3	55.6	47.1	55.2	57.6	52.9	42.6	61.4	56.4	60.5
Non-alcoholic beverages(c)	38.3	36.5	44.4	38.2	46.3	41.0	36.8	51.0	39.0	34.7
Alcoholic beverages(d)	—	1.6	7.7	18.3	13.8	**0.2	* 2.7	12.8	20.4	12.6
Total persons who consumed dinner(e)	95.7	95.4	96.2	95.8	95.7	94.4	92.9	91.7	91.8	88.6
Other										
Cereals and cereal-based products	73.6	65.8	51.3	57.3	56.4	61.9	57.3	60.0	52.2	59.9
Fruit products and dishes	50.5	34.6	16.7	25.1	24.0	37.0	21.7	33.3	23.2	23.6
Vegetables and legumes	10.3	13.9	12.4	11.5	5.8	7.5	8.1	19.8	9.3	6.1
Milk products and dishes	58.9	51.9	55.5	67.9	65.1	43.1	46.6	53.0	64.9	60.2
Meat, poultry and game products and dishes	9.4	9.3	12.5	14.3	4.6	4.6	10.8	15.1	11.5	* 3.2
Fish and seafood products and dishes	* 0.8	* 1.5	* 0.4	1.7	* 0.8	**0.3	* 2.6	* 2.2	1.4	* 1.8
Egg products and dishes	* 0.6	* 0.6	* 1.4	1.5	* 0.7	* 1.0	* 3.7	**0.7	1.0	**0.7
Snack foods; sugar; confectionery	69.2	61.9	56.3	58.7	50.8	63.7	51.9	54.6	54.1	46.6
Other foods	42.6	38.2	31.9	35.4	33.8	24.0	28.7	19.4	30.2	36.7
Non-alcoholic beverages(c)	57.3	64.8	68.8	83.1	80.1	68.1	66.7	64.5	79.3	76.3
Alcoholic beverages(d)	—	4.4	19.9	28.1	33.7	**0.2	8.6	25.6	36.1	31.7
Total persons who consumed other(e)	98.8	95.5	92.4	95.5	93.9	95.1	94.7	93.4	95.7	92.0

TABLE 15. PERSONS : EATING OCCASION BY BROAD FOOD GROUPS(a) (b)—continued

Eating occasion	Per cent									
	Monday-Friday					Saturday and Sunday				
	Age group (years)									
	2-11	12-18	19-24	25-64	65 and over	2-11	12-18	19-24	25-64	65 and over
	Females									
Breakfast										
Cereals and cereal-based products	91.2	72.5	67.9	79.3	93.0	87.4	74.2	64.0	78.1	92.0
Fruit products and dishes	9.4	6.5	10.6	19.4	32.0	6.5	8.2	8.0	15.9	30.3
Vegetables and legumes	2.6	3.7	5.0	4.2	5.6	* 2.1	5.0	8.4	8.5	8.7
Milk products and dishes	80.5	60.7	66.4	74.9	82.5	68.8	54.4	50.8	70.7	79.2
Meat, poultry and game products and dishes	3.0	2.4	3.1	3.4	3.0	5.7	5.0	8.6	7.5	5.3
Fish and seafood products and dishes	* 0.3	2.3	—	0.6	1.2	* 1.2	—	**1.0	* 0.8	* 3.1
Egg products and dishes	3.6	* 1.5	3.5	3.6	3.2	8.6	7.0	9.6	10.2	6.8
Snack foods; sugar; confectionery	41.0	30.2	42.2	42.1	53.6	40.5	24.8	24.3	42.9	51.7
Other foods	48.6	38.5	36.6	45.2	57.7	48.4	38.8	40.2	51.0	66.5
Non-alcoholic beverages(c)	32.0	35.9	52.5	72.5	81.5	30.5	32.7	44.6	72.0	80.2
Alcoholic beverages(d)	—	—	—	—	**0.1	—	—	—	* 0.3	* 0.9
Total persons who consumed breakfast(e)	96.8	82.5	85.7	91.1	97.5	94.6	85.2	76.2	87.9	94.6
Brunch/lunch										
Cereals and cereal-based products	84.2	74.7	76.3	78.7	75.6	72.5	74.3	53.1	75.5	72.6
Fruit products and dishes	21.7	16.5	14.9	24.3	31.9	18.1	9.2	6.1	16.5	31.0
Vegetables and legumes	23.8	31.8	55.8	52.2	57.2	40.4	39.6	33.4	51.9	55.6
Milk products and dishes	32.6	29.4	41.7	48.9	51.9	35.7	31.4	22.0	49.5	48.0
Meat, poultry and game products and dishes	29.8	27.9	36.1	37.4	39.3	36.2	39.9	36.2	39.9	46.4
Fish and seafood products and dishes	2.8	4.5	9.2	6.9	10.4	* 2.1	* 4.3	* 1.7	7.7	8.1
Egg products and dishes	2.2	**0.3	3.7	4.2	3.9	3.8	* 1.1	6.8	6.0	* 3.4
Snack foods; sugar; confectionery	27.0	19.2	15.3	16.6	17.7	17.7	13.1	12.4	17.4	14.1
Other foods	73.8	58.2	53.7	62.1	68.8	59.5	54.5	44.8	59.3	73.2
Non-alcoholic beverages(c)	46.0	39.9	45.0	50.1	56.9	45.6	40.0	40.0	48.6	55.4
Alcoholic beverages(d)	—	—	* 1.1	2.0	2.7	**0.6	* 2.7	4.5	7.7	—
Total persons who consumed brunch/lunch(e)	95.4	90.3	93.0	92.7	92.5	89.3	86.0	70.3	88.4	92.5
Dinner										
Cereals and cereal-based products	54.2	50.3	55.5	57.1	49.7	63.9	63.4	58.9	60.3	62.4
Fruit products and dishes	12.0	9.2	7.3	15.6	31.8	16.0	12.0	7.7	18.0	32.5
Vegetables and legumes	67.6	73.4	67.8	75.2	75.1	55.9	66.1	61.6	69.3	57.0
Milk products and dishes	44.0	34.2	32.1	40.1	50.6	38.1	28.7	36.5	40.7	45.6
Meat, poultry and game products and dishes	60.2	64.9	58.2	62.7	61.6	45.8	60.6	49.3	57.3	50.0
Fish and seafood products and dishes	11.7	7.3	8.7	11.0	9.9	8.5	9.4	6.2	13.0	5.7
Egg products and dishes	5.8	4.8	2.3	5.4	5.3	5.0	5.6	6.2	8.4	7.3
Snack foods; sugar; confectionery	13.2	13.2	9.7	13.4	16.3	17.3	9.0	12.9	15.5	17.9
Other foods	49.1	47.2	50.3	54.0	54.7	41.3	55.7	45.0	57.0	67.9
Non-alcoholic beverages(c)	40.8	35.7	36.9	37.1	46.5	36.4	32.1	36.1	39.4	44.2
Alcoholic beverages(d)	**0.1	* 1.0	3.9	13.6	7.8	* 1.4	* 3.9	7.1	16.1	6.4
Total persons who consumed dinner(e)	97.2	91.4	92.9	95.5	94.8	93.6	94.0	92.0	94.2	94.4
Other										
Cereals and cereal-based products	70.6	64.8	46.0	55.1	57.1	61.4	51.7	36.9	52.0	63.0
Fruit products and dishes	54.3	36.6	23.4	33.2	30.3	46.0	28.1	19.9	28.7	26.5
Vegetables and legumes	10.6	17.5	7.7	8.1	5.3	13.7	11.4	10.3	7.9	5.1
Milk products and dishes	54.7	60.3	60.4	71.5	64.5	52.1	44.4	46.0	70.4	60.0
Meat, poultry and game products and dishes	5.1	11.7	4.3	5.2	3.9	11.6	10.9	6.2	5.0	* 2.9
Fish and seafood products and dishes	* 0.5	* 1.5	**0.2	0.7	* 0.7	**0.2	**0.7	* 3.3	1.8	* 1.1
Egg products and dishes	* 0.3	**0.3	* 1.1	1.1	* 0.8	* 1.0	**0.8	**0.7	* 0.9	* 1.2
Snack foods; sugar; confectionery	68.2	64.9	64.3	50.0	38.6	63.2	60.6	53.8	50.8	39.1
Other foods	33.5	38.7	26.3	31.8	34.8	29.5	28.1	25.4	30.8	34.9
Non-alcoholic beverages(c)	57.3	58.1	75.2	85.6	82.5	55.6	62.8	65.9	83.8	82.1
Alcoholic beverages(d)	**0.2	3.0	11.0	11.9	13.1	**0.2	8.2	20.5	19.3	14.9
Total persons who consumed other(e)	98.2	96.4	92.5	95.6	91.9	92.4	92.8	88.7	95.5	90.9

(a) See Appendix 2 for explanation of broad food groups. (b) Proportion of age, sex and day of week population who consume food by broad food group and eating occasion. (c) Excludes plain drinking water; see Glossary. (d) Includes all alcoholic beverages containing alcohol (e.g. whiskey, reduced alcoholic beer) and does not indicate amount of pure alcohol consumed. (e) Persons may have reported consuming more than one type of food and therefore components do not add to totals.

TABLE 16. PERSONS : NUMBER OF TIMES FOOD IS USUALLY CONSUMED PER DAY

Per cent								
<i>Age group (years)</i>								
	<i>2-11</i>	<i>12-15</i>	<i>16-18</i>	<i>19-24</i>	<i>25-44</i>	<i>45-64</i>	<i>65 and over</i>	<i>19 and over</i>
Males								
Once	—	—	—	* 0.6	1.1	1.0	* 0.5	0.9
Two to four times	9.6	19.1	30.8	42.6	57.8	61.0	63.0	57.5
Five to six times	65.7	60.6	47.7	44.4	34.2	32.8	33.1	35.0
Seven or more times	23.4	19.5	19.2	11.0	5.7	4.1	3.0	5.6
Total(a)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Females								
Once	—	—	* 0.6	* 0.4	1.0	0.6	—	0.6
Two to four times	11.0	22.0	43.6	53.6	51.9	57.1	62.9	55.5
Five to six times	70.4	65.9	47.9	40.4	42.4	38.0	34.3	39.5
Seven or more times	17.9	12.1	6.5	4.4	3.9	3.0	2.1	3.4
Total(a)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Persons								
Once	—	—	* 0.3	* 0.5	1.1	0.8	* 0.2	0.8
Two to four times	10.3	20.5	37.0	48.0	54.8	59.1	62.9	56.5
Five to six times	68.0	63.2	47.8	42.4	38.3	35.4	33.8	37.3
Seven or more times	20.7	15.9	13.0	7.8	4.8	3.6	2.5	4.5
Total(a)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) Total includes not stated, don't know/varies/depends categories.

TABLE 17. PERSONS : NUMBER OF TIMES PER WEEK USUALLY HAS BREAKFAST

Per cent								
Number of times breakfast is consumed per week	Age group (years)							
	2-11	12-15	16-18	19-24	25-44	45-64	65 and over	19 and over
Males								
Rarely or never	* 0.2	* 0.9	7.3	16.5	12.5	8.6	1.9	10.4
One to two days	1.3	6.2	8.8	10.3	12.0	7.0	* 0.7	8.7
Three to four days	3.8	5.3	11.5	15.3	8.5	3.9	* 1.0	7.0
Five or more days	93.7	86.5	71.7	57.5	66.5	80.0	95.6	73.5
Total(a)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Females								
Rarely or never	* 0.3	6.4	7.9	12.4	8.6	4.9	1.7	6.8
One to two days	2.6	12.8	13.7	11.4	8.5	4.3	* 0.6	6.3
Three to four days	4.7	9.3	14.6	11.1	7.5	2.7	1.6	5.6
Five or more days	92.2	70.9	63.3	65.5	74.9	87.8	95.5	80.8
Total(a)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Persons								
Rarely or never	* 0.3	3.6	7.6	14.5	10.6	6.8	1.8	8.5
One to two days	1.9	9.4	11.2	10.9	10.3	5.7	0.6	7.5
Three to four days	4.2	7.2	13.0	13.2	8.0	3.3	1.3	6.3
Five or more days	93.0	78.9	67.6	60.4	70.7	83.8	95.5	77.2
Total(a)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) Total includes not stated, don't know/varies/depends categories.

TABLE 18. PERSONS AGED 16 AND OVER : DESIRED CHANGE IN AMOUNT OF SELECTED FOODS CONSUMED

		Per cent					
		<i>Age group (years)</i>					
		<i>16-18</i>	<i>19-24</i>	<i>25-44</i>	<i>45-64</i>	<i>65 and over</i>	<i>19 and over</i>
Males							
Bread and cereals							
No change desired		90.9	83.3	89.8	94.9	98.3	91.6
Change desired							
consume more		9.1	15.0	9.2	3.8	* 0.8	7.2
consume less		..	1.7	1.0	1.3	* 0.9	1.2
Fruit and vegetables							
No change desired		68.5	54.6	62.4	78.2	90.8	70.1
Change desired							
consume more		30.5	45.3	37.3	21.5	9.2	29.7
consume less		* 1.0	---	* 0.2	* 0.3	---	* 0.2
Foods high in fat							
No change desired		72.0	66.2	67.8	78.4	93.8	74.4
Change desired							
consume more		3.2	* 0.5	1.0	1.2	* 0.4	0.9
consume less		24.8	33.3	31.1	20.1	5.9	24.6
Total(a)		100.0	100.0	100.0	100.0	100.0	100.0
Females							
Bread and cereals							
No change desired		91.3	83.6	92.8	93.6	96.3	92.5
Change desired							
consume more		8.6	14.3	5.5	3.3	1.8	5.3
consume less		* 0.1	2.0	1.7	3.0	1.9	2.1
Fruit and vegetables							
No change desired		59.8	54.7	64.0	79.0	91.0	71.9
Change desired							
consume more		39.9	45.0	35.8	20.6	8.2	27.7
consume less		---	* 0.3	* 0.2	* 0.4	* 0.7	0.3
Foods high in fat							
No change desired		53.3	54.2	66.1	78.8	93.9	73.2
Change desired							
consume more		* 0.9	* 0.6	* 0.3	* 0.5	* 0.4	0.4
consume less		45.8	45.2	33.5	20.6	5.7	26.3
Total(a)		100.0	100.0	100.0	100.0	100.0	100.0

(a) Total includes not stated category.

TABLE 19. PERSONS AGED 16 AND OVER : WHETHER RAN OUT OF FOOD(a) AND HAD NO MONEY TO BUY MORE

	Per cent					
	Age group (years)					
	16-18	19-24	25-44	45-64	65 and over	19 and over
Males						
Ran out of food and had no money	7.9	9.4	5.3	2.2	* 0.8	4.3
Didn't run out of food	84.6	90.6	94.4	97.7	97.5	95.3
Not applicable/Not stated	7.5	..	* 0.3	**0.1	1.8	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Females						
Ran out of food and had no money	4.8	10.5	7.6	3.3	1.4	5.6
Didn't run out of food	91.3	89.4	92.4	96.3	97.5	94.0
Not applicable/Not stated	3.9	**0.1		* 0.4	1.1	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Persons						
Ran out of food and had no money	6.4	9.9	6.4	2.7	1.1	5.0
Didn't run out of food	87.9	90.0	93.4	97.0	97.5	94.7
Not applicable/Not stated	5.7	**0.1	* 0.2	* 0.3	1.4	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

(a) At any time in the last twelve months.

TABLE 20. PERSONS : HEIGHT BY AGE

Per cent										
Age group (years)										
Height	2-3	4-7	8-11	12-15	16-18	19-24	25-44	45-64	65 and over	19 and over
Males										
Less than 90 cm	10.9	** 0.2	—	—	—	—	—	—	—	—
90-99 cm	58.8	* 1.4	—	—	—	—	—	—	—	—
100-109 cm	19.3	21.6	—	—	—	—	—	—	—	—
110-119 cm	** 0.5	38.2	* 0.8	—	—	—	—	—	—	—
120-129 cm	—	27.7	12.8	—	—	—	—	—	—	—
130-139 cm	—	9.7	39.5	* 0.6	—	—	—	—	—	—
140-149 cm	—	** 0.1	35.7	8.4	—	—	—	—	* 0.3	—
150-159 cm	—	—	10.1	28.8	* 1.5	* 0.4	1.1	2.1	4.3	1.8
160-169 cm	—	—	* 0.8	29.9	12.1	10.5	16.0	25.6	42.0	21.9
170-179 cm	—	—	—	24.4	58.3	50.9	54.4	52.5	40.3	51.4
180-189 cm	—	—	—	7.3	26.3	33.6	26.1	18.6	7.8	22.3
190 cm or more	—	—	—	** 0.3	** 0.4	4.4	1.9	0.5	* 0.3	1.6
Total(a)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean height (cm)	96.1	117.1	139.6	164.1	176.5	178.0	176.0	174.0	170.1	174.9
Females										
Less than 90 cm	15.3	—	—	—	—	—	—	—	—	—
90-99 cm	53.1	* 2.0	—	—	—	—	—	—	—	—
100-109 cm	24.7	24.0	—	—	—	—	—	—	—	—
110-119 cm	* 1.2	36.2	* 1.6	—	—	—	—	—	—	—
120-129 cm	—	29.6	11.1	—	—	—	—	—	—	—
130-139 cm	—	7.6	38.1	** 0.2	—	—	** 0.1	** 0.1	* 0.8	0.2
140-149 cm	—	—	33.5	5.0	* 1.8	2.0	2.2	3.9	11.7	4.4
150-159 cm	—	—	14.5	39.2	25.9	22.0	27.8	38.2	54.4	34.8
160-169 cm	—	—	* 1.2	49.0	53.7	56.0	51.7	47.6	25.9	46.4
170-179 cm	—	—	—	6.3	17.5	15.9	12.6	8.5	1.4	9.9
180-189 cm	—	—	—	—	** 0.2	** 0.2	* 0.1	** 0.1	—	* 0.1
190 cm or more	—	—	—	—	—	—	—	—	—	—
Total(a)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean height (cm)	95.8	116.6	140.5	160.7	164.1	163.9	162.9	161.1	156.7	161.4

(a) Total includes persons for whom a height measurement was not obtained.

TABLE 21. PERSONS : WEIGHT BY AGE

Per cent

Weight	Age group (years)									
	2-3	4-7	8-11	12-15	16-18	19-24	25-44	45-64	65 and over	19 and over
Males										
Less than 15 kg	40.9	* 1.2								
15-19 kg	53.1	34.2	* 1.1							
20-24 kg	* 2.6	41.8	6.5	* 0.4						
25-29 kg	** 0.1	15.1	21.3							
30-34 kg		5.2	28.7	2.9						
35-39 kg		* 1.4	20.3	7.9						
40-44 kg		** 0.1	10.8	10.4	* 1.2				* 0.2	
45-49 kg			7.9	9.9	** 0.4	** 0.2	* 0.2		** 0.1	* 0.1
50-59 kg		** 0.3	2.4	32.5	12.6	5.8	3.2	2.1	5.9	3.6
60-69 kg			** 0.3	23.0	33.4	26.1	13.7	11.9	19.4	15.7
70-79 kg			* 0.4	6.7	30.0	30.7	29.4	24.7	28.5	28.1
80-89 kg				2.4	12.6	17.3	28.4	28.7	26.3	26.7
90-99 kg				2.2	4.5	11.1	13.8	18.8	12.2	14.7
100-109 kg				* 1.1	* 1.6	5.1	6.9	8.4	4.0	6.7
110-129 kg				** 0.3	* 1.9	2.9	3.3	4.2	* 1.0	3.2
130 kg and over					** 0.2	* 0.7	0.6	0.5	** 0.1	0.5
Total(a)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean weight (kg)	15.5	22.3	34.6	56.5	72.3	78.3	82.4	84.4	78.6	81.9
Females										
Less than 15 kg	47.8	* 2.0								
15-19 kg	43.7	34.5								
20-24 kg	5.7	38.1	6.5							
25-29 kg		18.1	13.6	** 0.3						
30-34 kg		5.0	28.4	** 0.2				* 0.4	* 0.2	
35-39 kg		* 1.2	21.9	4.1	* 0.7	* 0.7		** 0.1	* 0.4	0.2
40-44 kg		* 0.6	12.6	9.7	* 1.8	1.9	1.0	* 0.5	1.4	1.1
45-49 kg			8.3	21.1	10.7	8.7	4.3	3.1	6.1	4.8
50-59 kg			6.0	38.3	38.8	34.2	26.8	17.6	25.1	24.9
60-69 kg			2.1	18.1	30.8	28.0	31.8	31.6	30.8	31.1
70-79 kg			* 0.6	5.1	9.1	12.9	15.5	22.5	20.1	17.9
80-89 kg				2.2	4.3	5.6	7.2	12.4	8.5	8.7
90-99 kg				** 0.3	* 2.3	* 1.3	4.3	6.4	2.8	4.2
100-109 kg					** 0.1	1.9	1.5	3.0	1.1	1.9
110-129 kg					** 0.5	* 0.8	1.5	1.3	* 0.3	1.1
130 kg and over						* 0.5	* 0.3	* 0.2		0.2
Total(a)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean weight (kg)	15.3	22.4	36.7	54.5	61.4	63.4	67.3	71.2	66.1	67.7

(a) Total includes persons for whom a weight measurement was not obtained.

TABLE 22. PERSONS AGED 19 YEARS AND OVER : BODY MASS INDEX

Per cent

Body mass index	Age group (years)				
	19-24	25-44	45-64	65 and over	19 and over
Males					
Underweight	2.4	0.5	* 0.2	* 0.5	0.6
Acceptable					
18.5 to less than 20	5.0	2.5	1.2	1.5	2.3
20.0 to less than 25	54.8	34.3	22.0	25.7	32.2
Total acceptable	59.8	36.8	23.2	27.1	34.5
Overweight	27.7	46.1	50.4	48.0	45.2
Obese	9.9	16.2	25.4	19.1	18.5
Not applicable/Not stated	**0.1	0.5	0.8	5.2	1.2
Total	100.0	100.0	100.0	100.0	100.0
Females					
Underweight	5.4	2.2	1.0	1.6	2.2
Acceptable					
18.5 to less than 20	15.0	6.5	2.3	3.0	5.7
20.0 to less than 25	49.6	46.2	34.3	30.9	40.6
Total acceptable	64.6	52.7	36.6	33.8	46.3
Overweight	17.4	24.7	35.5	35.6	28.8
Obese	8.6	14.5	25.1	22.9	18.2
Not applicable/Not stated	3.9	5.9	1.8	6.1	4.5
Total	100.0	100.0	100.0	100.0	100.0
Persons					
Underweight	3.9	1.3	0.6	1.1	1.4
Acceptable					
18.5 to less than 20	9.9	4.5	1.8	2.3	4.1
20.0 to less than 25	52.3	40.3	28.1	28.6	36.5
Total acceptable	62.2	44.8	29.8	30.9	40.5
Overweight	22.7	35.4	43.1	41.0	36.9
Obese	9.3	15.3	25.3	21.2	18.3
Not applicable/Not stated	2.0	3.2	1.3	5.7	2.9
Total	100.0	100.0	100.0	100.0	100.0

TABLE 23. PERSONS AGED 19 YEARS AND OVER : BODY MASS INDEX BY SELF-REPORTED TYPE OF DIET

Per cent						
Self-reported type of diet	Body mass index					Total
	Underweight	Acceptable	Overweight	Obese	Not applicable Not stated	
Males						
No special diet	75.0	73.3	68.9	71.4	72.2	71.0
Special diet						
Vegetarian	* 18.9	4.3	1.7	1.3	—	2.6
Weight reduction	—	0.7	2.7	5.0	* 6.3	2.5
Diabetic	—	0.9	2.1	3.1	* 6.6	1.9
Fat modified	**1.4	11.0	15.1	12.7	* 8.2	13.1
Other(a)	**4.6	9.5	9.4	6.6	* 5.4	8.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total persons ('000)	41.5	2,244.6	2,937.4	1,200.6	77.5	6,501.6
Females						
No special diet	71.3	59.3	54.6	56.1	65.6	57.9
Special diet						
Vegetarian	10.9	5.7	4.1	3.2	4.6	4.9
Weight reduction	—	5.4	9.0	12.2	6.6	7.6
Diabetic	**1.3	1.1	2.0	5.6	* 3.2	2.2
Fat modified	* 4.2	13.5	20.1	17.0	7.2	15.6
Other(a)	12.3	15.0	10.2	5.8	12.2	11.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total persons ('000)	146.1	3,104.6	1,929.0	1,220.8	303.1	6,703.6
Persons						
No special diet	72.2	65.2	63.3	63.7	66.9	64.3
Special diet						
Vegetarian	12.6	5.1	2.7	2.2	3.7	3.7
Weight reduction	—	3.4	5.2	8.6	6.6	5.1
Diabetic	**1.0	1.0	2.0	4.4	3.9	2.1
Fat modified	* 3.6	12.5	17.1	14.9	7.4	14.3
Other(a)	10.6	12.7	9.7	6.2	10.8	10.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total persons ('000)	187.6	5,349.2	4,866.4	2,421.4	380.6	13,205.3

(a) Includes other forms of diet such as salt reduced/free, body-building, more fruit and vegetable, less red meat, etc

TABLE 24. MEAN DAILY ENERGY AND NUTRIENT INTAKE : PERSONS AGED 19 YEARS AND OVER BY BODY MASS INDEX

	Unit	Underweight	Acceptable	Overweight	Obese	Total(a)
Males						
Energy	(kJ)	10,684.9	11,775.5	10,847.1	10,387.8	11,049.5
Moisture(b)	(g)	3,463.6	3,407.3	3,451.7	3,456.1	3,426.3
Macronutrients						
Protein	(g)	96.3	112.1	109.5	105.2	109.2
Total fat	(g)	94.1	104.3	96.8	93.2	98.5
Saturated fat	(g)	38.3	41.7	37.9	37.2	39.0
Monounsaturated fat	(g)	33.4	38.1	35.6	34.6	36.2
Polyunsaturated fat	(g)	14.2	15.5	14.8	13.2	14.7
Cholesterol	(mg)	343.7	363.6	358.7	347.8	357.6
Total carbohydrate	(g)	308.1	328.7	291.3	275.5	300.5
Total sugars	(g)	129.1	148.4	126.8	124.7	133.5
Total starch	(g)	177.9	178.6	162.6	149.2	165.2
Dietary fibre	(g)	26.0	26.7	26.2	23.9	25.9
Alcohol(c)	(g)	14.6	18.3	18.7	19.2	18.5
Vitamins						
Vitamin A retinol equivalent	(mcg)	1,178.2	1,275.4	1,327.2	1,275.5	1,336.9
Preformed Vitamin A	(mcg)	459.6	628.3	700.2	656.6	705.2
Provitamin A	(mcg)	4,311.5	3,882.2	3,762.3	3,713.6	3,790.1
Thiamin	(mg)	1.7	2.1	1.9	1.8	1.9
Riboflavin	(mg)	2.2	2.5	2.3	2.1	2.3
Niacin equivalent	(mg)	43.1	52.4	50.7	48.6	50.7
Folate	(mcg)	318.0	318.5	308.2	281.8	306.8
Vitamin C	(mg)	138.7	143.1	138.5	114.2	135.6
Minerals						
Calcium	(mg)	934.9	993.7	947.6	865.1	945.5
Phosphorus	(mg)	1,568.9	1,849.0	1,782.5	1,661.2	1,775.6
Magnesium	(mg)	355.0	394.8	385.3	352.0	381.1
Iron	(mg)	14.9	16.9	16.5	15.3	16.4
Zinc	(mg)	13.4	14.4	14.6	14.4	14.4
Potassium	(mg)	3,515.0	3,808.5	3,763.1	3,540.9	3,725.2
Females						
Energy	(kJ)	8,821.3	7,788.7	7,128.0	6,976.1	7,480.9
Moisture(b)	(g)	2,653.2	2,828.8	2,791.6	2,862.2	2,817.0
Macronutrients						
Protein	(g)	84.2	75.4	71.6	71.1	73.9
Total fat	(g)	83.0	70.1	64.0	63.5	67.6
Saturated fat	(g)	34.2	27.9	25.0	24.7	26.7
Monounsaturated fat	(g)	29.8	25.2	23.1	23.0	24.3
Polyunsaturated fat	(g)	11.9	10.7	10.0	9.9	10.4
Cholesterol	(mg)	281.3	242.9	231.2	233.3	239.9
Total carbohydrate	(g)	244.1	219.2	200.4	195.5	210.6
Total sugars	(g)	113.6	101.7	92.3	87.4	97.0
Total starch	(g)	129.0	116.0	106.6	106.7	112.1
Dietary fibre	(g)	20.6	21.0	20.0	19.2	20.3
Alcohol(c)	(g)	8.4	8.8	6.9	5.4	7.3
Vitamins						
Vitamin A retinol equivalent	(mcg)	1,110.9	1,095.9	993.8	974.0	1,058.3
Preformed Vitamin A	(mcg)	576.6	511.5	441.8	453.1	499.5
Provitamin A	(mcg)	3,205.8	3,506.9	3,312.3	3,125.2	3,352.9
Thiamin	(mg)	1.7	1.4	1.3	1.3	1.4
Riboflavin	(mg)	1.9	1.8	1.7	1.7	1.8
Niacin equivalent	(mg)	39.1	34.8	33.0	32.7	34.1
Folate	(mcg)	255.2	236.3	224.2	219.4	232.8
Vitamin C	(mg)	149.8	117.9	107.4	102.0	113.1
Minerals						
Calcium	(mg)	769.1	769.1	729.7	704.9	748.6
Phosphorus	(mg)	1,398.5	1,308.8	1,236.7	1,196.2	1,271.7
Magnesium	(mg)	301.4	293.7	277.1	262.7	283.1
Iron	(mg)	13.0	12.4	11.6	11.3	11.9
Zinc	(mg)	11.1	9.9	9.6	9.3	9.7
Potassium	(mg)	3,089.4	2,885.8	2,739.2	2,638.6	2,805.0

(a) Total includes persons in the not applicable/not stated categories. (b) Includes plain drinking water. (c) Represents pure alcohol.

EXPLANATORY NOTES

INTRODUCTION

1 The 1995 National Nutrition Survey (NNS) is a comprehensive survey of Australians' diets. Detailed information was collected from people aged two years and over on food and beverage intake, physical measures, food-related habits and attitudes, and usual frequency of consumption of selected foods. Nutrient intake was later derived from reported food and beverage intake. The survey was a joint project between ABS and the Department of Health and Family Services (HFS).

2 The survey was conducted from February 1995 to March 1996 in all States and Territories across urban and rural areas. A sample of participants from the National Health Survey (NHS) were invited to participate in the NNS, with the NNS interview taking place several weeks after the NHS interview.

3 The survey was conducted under the authority of the *Census and Statistics Act 1905*, but participation was voluntary.

SCOPE

4 The NHS sampled approximately 23,800 private dwellings (houses, flats, etc.) and non-private dwellings (including hotels, boarding houses and institutions). Households were selected at random using a stratified multi-stage area sample which ensured that persons within each State and Territory had a known and, in the main, equal chance of selection in the NHS.

5 Certain groups of persons were excluded from the scope of the NHS. These were non-Australian diplomatic personnel and non-Australian members of their households, persons from overseas holidaying in Australia, members of non-Australian defence forces and their dependents stationed in Australia, and persons in special dwellings (including hotels, boarding houses and institutions).

6 The NNS sample was systematically selected from the base NHS sample of private dwellings only. The estimates presented in this publication are based on information obtained from 13,800 persons aged two years and over who agreed to participate in the NNS.

7 The NNS was conducted on a maximum of two in-scope people per household in urban areas and three in-scope people in rural households. To increase the sample in Queensland, three persons were taken in both urban and rural households. These people were randomly selected from those living in the household. In addition, all people aged 65 years and over, who lived in households selected for the NNS, were invited to participate in the NNS.

METHODOLOGY

8 Qualified nutritionists conducted personal interviews in participants' homes on all seven days of the week. Proxy interviews were conducted for children aged 2–4 years and adult participants unable to report for themselves because of physical or mental limitations. Children aged 5–11 years were asked to provide their own food intake data with the assistance of an adult household member. Interviewers were closely supervised by nutritionists from HFS and provided with ongoing training as required.

9 Topics covered in the survey were:

- food and beverage intake;
- nutrient intake, derived from food and beverage intake (see paragraphs 22 to 23);
- supplementary information on food intake (e.g. whether the amount consumed the previous day was about usual, more than usual or less than usual);
- physical measurements;
- food habits and attitudes; and
- usual frequency of intake of selected foods, and vitamin and mineral supplements.

10 An extensive range of demographic and socioeconomic information was obtained during the NHS interview, as well as information on health status, use of health services and facilities, and health-related aspects of lifestyle such as smoking, alcohol consumption and exercise. All data items collected in the NHS are available for NNS participants.

11 The method used to collect information on food and nutrient intake involved a daily food consumption method (24-hour dietary recall). Detailed information was requested on all foods and beverages consumed the day before the interview (from midnight to midnight). Information included the time of consumption, the eating occasion, detailed food/beverage description, the amount eaten, the source of the food/beverage, whether it was consumed in the home and whether it was ever in the home. The 24-hour dietary recall questionnaire was based on material developed by the Agricultural Research Service of the United States' Department of Agriculture (USDA) and used in the Continuing Survey of Food Intakes of Individuals 1994–96.

12 Additional information on food intake during the previous day was also collected, such as consumption of plain drinking water. Participants were asked to report the total amount of plain drinking water consumed the previous day. This information was not collected as part of the 24-hour recall unless something has been added to the water (e.g. cordial concentrate). Plain drinking water has been included in estimates of non-alcoholic beverages presented in this publication.

13 With participants' written consent, interviewers measured blood pressure (of people aged 16 years and over), height, weight, and waist and hip circumferences. Pregnant women were excluded from this component of the survey. Physical measurements were preferably taken over one layer of light clothing and respondents were notified of this prior to the interview.

METHODOLOGY CONTINUED

14 Protocols for taking physical measurements were developed for the survey based on the 1989 Risk Factor Prevalence Study and draft World Health Organisation protocols. A brief description of the protocols follow:

- Blood pressure — Two consecutive blood pressure readings were taken from respondents aged 16 years and over and recorded to the nearest 2 mmHg. A third reading was taken if the two systolic readings differed by more than 6 mmHg and/or the diastolic readings differed by more than 4 mmHg.
- Height — Two height measurements were taken from respondents and recorded to the nearest 0.1 cm. A third measurement was taken if the first two measurements differed by 0.5 cm or more.
- Weight — One weight measurement to the nearest 0.1 kg was taken from respondents, using digital scales. The scales measured to a maximum weight of 140 kg. For the calculation of mean weight, these participants have been allocated a weight of 140 kg.
- Waist and hip circumference — Two measurements each were taken of the waist and hip circumference. The waist measurement was taken midway between the inferior margin of the last rib and the crest of the ilium in the mid-axillary plane. The hip measurement was taken at the maximum circumference around the buttocks, when viewed from the side.

15 In cases where two measurements were taken, the average of the two measurements was calculated for each person. When a third height or blood pressure measurement was taken, the average of the closest two measurements was calculated.

16 Additional information was obtained on eating habits and patterns, through a series of questions on topics such as usual frequency of eating breakfast, addition of salt to food and barriers to desired dietary change.

17 A Food Frequency Questionnaire (FFQ) was left with people aged 12 years and over to complete and mail back to the ABS at their convenience. The FFQ requested usual frequency of intake of 107 food items and 11 vitamin and mineral supplements over the past 12 months. The FFQ was designed to complement the information collected in the 24-hour recall.

18 A sub-sample of approximately 1,500 NNS participants provided intake data for a second 24-hour period, on a different day of the week and usually within 10 days of the first interview. This publication reports on information collected in the first 24-hour recall only. Data from the second 24-hour recall period will be incorporated into the nutrient analysis proposed for a later publication.

19 Definitions for items covered in this publication are provided in the Glossary. Comprehensive details of all the concepts, methodologies and procedures used in this survey will be provided in ABS (forthcoming)a.

DATA PROCESSING

20 Data from the 24-hour recall was entered using an automated food coding system, Survey Net-Ansurs (ANSURS). ANSURS allowed direct data entry from the 24-hour recall questionnaire with on-line coding. Information such as the type of food consumed, and serving type and size (e.g. one cup) was used to convert food intake into grams. Food coding was supervised and reviewed by nutritionists at HFS.

DATA PROCESSING CONTINUED

21 ANSURS is an Australian version of Survey Net, which was developed by the USDA in conjunction with the University of Texas. With the permission of the USDA, HFS contracted the University of Texas to modify Survey Net specifically for use in the NNS. Qualified nutritionists at HFS adapted Survey Net to the Australian food supply. Experts from the USA came to Australia to demonstrate ANSURS and coders received intensive training in its use.

22 The Australia and New Zealand Food Authority (ANZFA) developed a customised nutrient composition database. This database was applied to food intake data in ANSURS and converted the food intakes (in grams) into nutrient intakes. Nutrient intakes were derived for 29 nutrients, including energy, water, protein, fats, carbohydrates, alcohol, vitamins (e.g. Vitamin A and niacin) and minerals (e.g. calcium and iron). There was no nutrient analysis of sodium intake. However, the 24-hour recall questionnaire recorded whether or not salt was added to foods.

23 Many reference sources were consulted to obtain nutrient composition information including data from ANZFA (1989), unpublished food composition data commissioned by ANZFA, Australian scientific literature and food industry data. Where Australian data was not available, data from overseas references were used, mainly the official food tables of the United Kingdom and the United States. Official permission was obtained for the use of up to 4,000 total folate values and general nutrient data for up to 1,000 foods from the UK Ministry of Agriculture, Fisheries and Food and Royal Society of Chemistry. In using this data the following acknowledgment should be provided "Data from *The Composition of Foods*, 5th Edition and its supplements as produced with the permission of The Royal Society of Chemistry and the Controller of Her Majesty's Stationary Office".

SURVEY RESPONSE

24 Approximately 13,800 people completed the NNS, in terms of completing a 24-hour recall. There were several stages in the selection process.

- The first stage was the invitation to participate, with 76.8% of those selected from the NHS agreeing to be interviewed in the NNS. Analysis of the characteristics of people who accepted compared to those who declined revealed that income and age were major factors in non-response. People with a high income or age greater than 59 were more likely to decline. Those people who did not take part in the NHS but would otherwise have been selected for the NNS have been excluded from this analysis since no information was available about them.
- The second stage was completing the interview at a later date: of those who initially agreed to participate in the NNS, 80% completed the interview. Marital status and employment status were major factors in non-response. Generally, unmarried people were less likely to participate and unmarried people who were also unemployed were the least likely to participate.
- Finally, people aged 12 years and over were invited to complete a FFQ: of these, 76.2% returned a usable FFQ. (A respondent's FFQ was classified as 'unusable' if more than 20 out of the 107 foodlines were completed incorrectly and could not be resolved (see ABS (forthcoming)a.) The major factors in non-response were marital status and age. For people aged over 20 years, non-response declined with age and non-response was higher for unmarried people than for married people.

SURVEY RESPONSE CONTINUED

25 The overall response rate is low by ABS standards for household surveys. It is a direct result of the survey methodology where a sub-sample of individuals who had already completed a detailed health survey interview were subsequently invited to participate in the NNS. In this sense, the survey was not only voluntary, it was also optional. Characteristics of respondents and non-respondents have been compared (see paragraph 24). Furthermore, adjustments to sample weights have been made during estimation to reduce non-response bias. Notwithstanding, users are cautioned to bear in mind the high non-response rate in their analysis and interpretation of the data.

26 Overall response rates varied by State and Territory of residence, as shown in the table below.

State and territory	NNS participants		Participants as proportion of those invited	
	No.			%
New South Wales	2 881			59.9
Victoria	2 805			60.7
Queensland	2 396			58.9
South Australia	1 727			62.9
Western Australia	1 852			60.0
Tasmania	1 177			71.1
Northern Territory	357			65.5
Australian Capital Territory	663			64.7
Australia	13 858			61.4

ESTIMATION PROCEDURES

27 The survey was conducted over a 14-month period from February 1995 to March 1996. The estimation procedure developed for this survey ensures that survey estimates conform to independent estimates of the Australian population for the third quarter of 1995. Specifically, the estimates conform to Australian age by sex estimates and Australian State by part of State estimates.

28 The estimation procedure also uses response information collected in the course of the survey to counter known biases in target variables resulting from partial response. This information, in the form of models, was used to adjust data for differential response by class, and also to specify weighting classes for applying benchmarks. Target variables for which adjustments were made included household size, income, age, State, marital status and employment status.

29 Separate estimates were calculated for the main survey and the FFQ sub-sample, as participation in the FFQ was voluntary. This publication only includes estimates for the main survey.

30 Further details of the estimation procedures will be contained in ABS (forthcoming)a.

RELIABILITY OF ESTIMATES

31 Since the estimates are based on a sample they are subject to sampling variability (see Technical Note for further details). Only estimates with relative standard errors (RSE) less than 25% are considered sufficiently reliable for most purposes. However, estimates with RSEs between 25% and 50% have been included in this publication and are preceded by an asterisk (e.g. *4.3) to indicate they are subject to high standard errors (SE) and should be used with caution. Estimates with relative standard errors greater than 50% are also included and are preceded by a double asterisk (e.g. **0.1). Such estimates are considered too unreliable for general use.

32 In addition to sampling errors, the estimates are subject to non-sampling errors. These may be caused by errors in reporting (e.g. because some answers were based on memory, or because of misunderstanding or unwillingness of respondents to reveal all details) or errors arising during processing (e.g. coding, data recording). Such errors may occur in any statistical collection whether it is a full census count or a sample survey. Every effort is made to reduce non-sampling errors in the survey to a minimum by careful design and testing of questionnaires, by intensive training and supervision of interviewers, and by efficient operating procedures.

33 Non-response bias is another type of non-sampling error. Non-response bias may occur when people choose not to participate, or cannot be contacted. Non-response can introduce a bias to the results obtained in that non-respondents may have different characteristics and behaviour patterns in relation to their diet than those persons who responded to the survey. The estimation procedures made some adjustments for non-response (see paragraph 24).

DATA QUALITY

34 One problem commonly associated with dietary surveys is that, on average, people under-report their consumption of food and beverages. Particular strategies were used in the NNS to overcome the extent of response errors in the dietary data and physical measurements. However, it is likely that deliberate under-reporting by some respondents would be only marginally improved by these strategies.

35 All data have been scrutinised during data entry, coding and output processing for accuracy and quality. Although the focus was on retaining data as reported by participants, the quality of the data was investigated to ensure responses were meaningful. Food and nutrient data were primarily the responsibility of nutritionists at HFS. Other data were scrutinised by the ABS with expert assistance from nutritionists, initially at HFS, and later from a consultant to the ABS.

36 Food and nutrient intake data were checked at a number of stages. The initial data quality review was conducted through the data entry phase including the examination of extreme food intakes. A second data quality review was conducted after all food data had been coded and nutrient compositions from ANZFA had been applied. Checks at this stage included the investigation of extreme intakes of energy, macronutrients, vitamins and minerals. Amendments were made in only a small number of cases. Consequently some food intakes contain implausible data (e.g. half a cup of butter on one slice of bread).

DATA QUALITY CONTINUED

37 During entry of physical measurements data, computer edits checked individual values against ranges based on previous Australian and overseas studies to focus investigation on only very extreme values. Guidelines were established to ensure a consistent treatment of the cases identified and any necessary amendments. At a later stage, the distributions of heights, weights and measures, such as Body Mass Index (see Glossary) for adults and weight-for-height for children, were studied. Some systematic errors were identified in the use of the height measurement equipment, particularly for children, and these were amended appropriately.

38 Blood pressure readings were initially taken with a mercury sphygmomanometer, but due to technical problems this equipment was changed to an aneroid sphygmomanometer on 1 May 1995. Analysis of readings before and after that date indicated that there was no significant difference between blood pressure measurements taken with the two types of sphygmomanometers.

COMPARISON WITH OTHER STUDIES

39 Dietary information recorded in this survey may differ from that which might be obtained using a different method to assess food and beverage intake, such as a weighed record or a semi-quantitative food frequency questionnaire, or using a different food composition database to assess nutrient intake.

40 In terms of the methodologies used, data from this survey are broadly comparable with data from,

- the National Heart Foundation's Risk Factor Prevalence Studies,
- the National dietary survey of adults: 1983 and
- the National dietary survey of schoolchildren (aged 10–15 years): 1985.

However, comparisons should be made with care and take into account factors such as procedures for collecting physical measures, the dietary intake assessment method, food classifications, and the food composition database used to derive nutrient intake. As well as non-response levels and sampling errors, other methodological issues, such as the scope of each survey, will also have an impact on the comparability of the results.

RELATED PUBLICATIONS

41 The following publications will be released:

Australian Bureau of Statistics (forthcoming)a, *National Nutrition Survey: Users' Guide, Australia, 1995*, Cat. no. 4801.0, ABS, Canberra.

Australian Bureau of Statistics (forthcoming)b, *National Nutrition Survey: Foods Eaten in Australia, 1995*, Cat. no. 4804.0, ABS, Canberra.

Australian Bureau of Statistics (forthcoming)c, *National Nutrition Survey: Nutrient Intake in Australia, 1995*, Cat. no 4805.0, ABS, Canberra.

RELATED PUBLICATIONS CONTINUED

42 There are wide range of other related publications. The *1995 National Health Survey Data Reference Package* contains detailed information on the NHS. Information about all the publications and other products planned for release from the 1995 NHS is contained in the brochure *National Health Survey: Guide to Products and Services* which is available free of charge from any office of the ABS. Other ABS publications which may be of interest include:

Australian Bureau of Statistics 1996, *Children's Health Screening, 1995*, Cat. no. 4337.0, ABS, Canberra.

Australian Bureau of Statistics 1997a, *Apparent Consumption of Foodstuffs, Australia*, Cat. no. 4306.0, ABS, Canberra.

Australian Bureau of Statistics 1997b, *Apparent Consumption of Selected Foodstuffs, Australia, Preliminary, April 1995*, Cat. no. 4315.0, ABS, Canberra.

Australian Bureau of Statistics 1997c, *National Health Survey: Summary of Results, 1995*, Cat. no. 4364.0, ABS, Canberra.

Lester J. H. 1994, *Australia's food and nutrition*, AGPS, Canberra.

SYMBOLS AND OTHER USAGES

ABS	Australian Bureau of Statistics
ANZFA	Australia and New Zealand Food Authority
BMI	Body mass index
FFQ	Food frequency questionnaire
g	grams
HFS	Department of Health and Family Services
kJ	kilojoules
mcg	micrograms
mg	milligrams
NHMRC	National Health and Medical Research Council
NHS	National Health Survey
NNS	National Nutrition Survey
RDI	recommended dietary intake
RSE	relative standard error
SE	standard error
USDA	United States Department of Agriculture
WHO	World Health Organisation
*	relative standard error of 25% to 50%
**	relative standard error over 50%
..	not applicable
—	nil or rounded to zero

APPENDIX 1

POPULATION ESTIMATES USED TO CALCULATE MEANS AND PERCENTAGES

Estimated Residential population(a), Australia, 1995

	AGE GROUP (YEARS).....									
	2-3	4-7	8-11	12-15	16-18	19-24	25-44	45-64	65 and over	Total 19 years and over
Males	265 414	530 647	529 201	524 138	389 479	866 651	2 795 003	1 900 669	939 293	6 501 616
Females	252 127	503 697	503 481	495 758	368 469	832 697	2 797 187	1 852 311	1 221 445	6 703 640
Persons	517 536	1 034 614	1 032 682	1 019 896	757 948	1 699 348	5 592 190	3 752 980	2 160 738	13 205 256

(a) These estimates correspond to the population benchmarks for the National Nutrition Survey and were derived from the third quarter population estimates for 1995.

APPENDIX 2

Foods and beverages reported in the 24-hour recall can be categorised to varying levels of detail. This classification was based on those used in the 1983 National dietary survey of adults, with modifications done in consultation with experts. This publication has used the broadest level of the classification system, the major food groups, and a collapsed version of the major food groups (see the table on the following page). More detailed food groupings are available.

Some issues associated with the food classification system are:

- In most cases the category non-alcoholic beverages includes plain drinking water. However, the category does not include plain drinking water when food groups are cross-classified against information such as location or eating occasion (which is not available for plain drinking water, without any additions).
- Most food groups include mixed dishes and, therefore, foods from other categories. For example, dishes such as pizza with a meat, vegetable and cheese topping have been coded as cereal-based products and dishes. In these cases, a judgement was made about which food was the major ingredient.
- There are some beverages which are not classified as non-alcoholic or alcoholic beverages, because they logically belong with another food group. These beverages are: milk and soy drink (classified as milk and milk products); liquid meal replacements and oral supplements (classified as special dietary foods); and infant fruit juices (classified as infant formulae and foods).

The major food groups are similar to those used in the 1983 National dietary survey of adults and the 1985 National dietary survey of school children (aged 10-15 years). However, there are differences in the classification systems between the surveys.

<i>Broad (aggregated) food group</i>	<i>Major food group</i>	<i>Examples</i>
Cereals and cereal-based products	Cereals and cereal products	Bread, English muffins, rice, pasta, breakfast cereals
	Cereal-based products and dishes	Biscuits, cakes, pies, fried rice, pizza, vol au vents, quiche, gnocchi, lasagne, commercial hamburgers, croissants, pancakes
Fruit products and dishes	Fruit products and dishes	Fresh fruit, canned fruit, dried fruit, banana fritters
Vegetables and legumes	Vegetable products and dishes	Fresh vegetables, hot potato chips, sun dried tomatoes, coleslaw, canned mushrooms, vegetable curry
	Legumes and pulse products and dishes	Kidney beans, lentils, hummus, baked beans, tofu, vegetarian sausages
Milk products and dishes	Milk products and dishes	Milk, yoghurt, cream, cheese, icecream, custard, soy milks, milk-shakes
Meat, poultry and game products and dishes	Meat, poultry and game products and dishes	Beef patty, rabbit, offal, ham, lamb casserole, chicken stir-fry
Fish and seafood products and dishes	Fish and seafood products and dishes	Fish, prawns, canned tuna, fish with pasta, paella with seafood
Egg products and dishes	Egg products and dishes	Eggs, omelette with cheese, spinach souffle
Snack foods, sugar, confectionery	Snack foods	Potato crisps, pretzels, popcorn
	Sugar products and dishes	Icing, sugar, chocolate topping, maple syrup, jam, jelly, meringue, sorbet
	Confectionery	Chocolate, muesli bar, fruit leather, fudge, boiled lollies
Other foods	Seed and nut products and dishes	Sesame seeds, cashew nuts, peanut butter, coconut cream
	Fats and oils	Butter, margarine, oils, copha
	Soup	Canned soup, homemade soup, dried soup mix
	Savoury sauces and condiments	Gravy, satay sauce, cream and bacon pasta sauce, pickles, olives, mayonnaise, salad dressing, stuffing
	Infant formulae and foods	Infant formula, infant cereals, infant fruits, infant dinner, infant dessert, infant juice
	Special dietary foods	Liquid and powder meal replacements, oral supplements, sports supplements (excluding electrolyte drinks)
	Miscellaneous	Dry beverage powder, yeast, artificial sweeteners, spices, stock cube, gelatine
Non-alcoholic beverages	Non-alcoholic beverages	Tea, cappuccino, soft drinks, fruit juice, water, electrolyte drinks
Alcoholic beverages	Alcoholic beverages	Beer, wine, spirits, liqueurs, cocktails, mixed drinks, alcoholic cider, de-alcoholised sparkling wine, sparkling grape juice

APPENDIX 3

RECOMMENDED DIETARY INTAKES for use in Australia

		AGE GROUP (YEARS)									
unit		2-3	4-7	8-11	12-15	16-18	19-64	65 and over	19-54	55 and over	
Males											
Vitamin A (retinol equivalents)	(mcg)	300.0	350.0	500.0	725.0	750.0	750.0	750.0	..	..
Vitamin C	(mg)	30.0	30.0	30.0	30.0	40.0	40.0	40.0	..	..
Thiamin	(mg)	0.5	0.7	0.9	1.2	1.2	1.1	0.9	..	..
Riboflavin	(mg)	0.8	1.1	1.4	1.8	1.9	1.7	1.3	..	..
Niacin (niacin equivalents)	(mg)	10.0	12.0	15.0	20.0	21.0	19.0	16.0	..	..
Folate	(mcg)	100.0	100.0	150.0	200.0	200.0	200.0	200.0	..	..
Protein	(g)	14-18	18-24	27-38	42-60	64-70	55.0	55.0	..	..
Calcium	(mg)	700.0	800.0	800.0	1 200.0	1 000.0	800.0	800.0	..	..
Phosphorus	(mg)	500.0	700.0	800.0	1 200.0	1 100.0	1 000.0	1 000.0	..	..
Magnesium	(mg)	80.0	110.0	180.0	260.0	320.0	320.0	320.0	..	..
Iron	(mg)	6-8	6-8	6-8	10-13	10-13	7.0	7.0	..	..
Zinc	(mg)	4.5	6.0	9.0	12.0	12.0	12.0	12.0	..	..
Potassium	(mg)	980-2730	1560-3900	1950-5460	1950-5460	1950-5460	1950-5460	1950-5460	..	..
Females											
Vitamin A (retinol equivalents)	(mcg)	300.0	350.0	500.0	725.0	750.0	..	..	750.0	750.0
Vitamin C	(mg)	30.0	30.0	30.0	30.0	30.0	..	..	30.0	30.0
Thiamin	(mg)	0.5	0.7	0.8	1.0	0.9	..	..	0.8	0.7
Riboflavin	(mg)	0.8	1.1	1.3	1.6	1.4	..	..	1.2	1.0
Niacin (niacin equivalents)	(mcg)	10.0	12.0	15.0	18.0	16.0	..	..	13.0	11.0
Folate	(mcg)	100.0	100.0	150.0	200.0	200.0	..	..	200.0	200.0
Protein	(g)	14-18	18-24	27-39	44-55	57.0	..	..	45.0	45.0
Calcium	(mg)	700.0	800.0	900.0	1 000.0	800.0	..	..	800.0	1 000.0
Phosphorus	(mg)	500.0	700.0	800.0	1 200.0	1 100.0	..	..	1 000.0	1 000.0
Magnesium	(mg)	80.0	110.0	160.0	240.0	270.0	..	..	270.0	270.0
Iron	(mg)	6-8	6-8	6-8	10-13	10-13	..	..	12-16	5-7
Zinc	(mg)	4.5	6.0	9.0	12.0	12.0	..	..	12.0	12.0
Potassium	(mg)	980-2730	1560-3900	1950-5460	1950-5460	1950-5460	..	..	1950-5460	1950-5460

Source: NHMRC 1991

TECHNICAL NOTES

ESTIMATION PROCEDURE

Estimates from the survey are derived using a procedure which combines information collected in the course of the survey (in responses to the survey, and concerning propensity of selected sample units to respond), with independently available information concerning the underlying populations. As a result, survey estimates of population conform to the published population estimates at the Australian age-sex level and at State and Territory by part of State level.

RELIABILITY OF THE ESTIMATES

Since the estimates in this publication are based on information obtained from occupants of a sample of dwellings they are subject to sampling variability; that is they may differ from the figures that would have been produced if all dwellings had been included in the survey. One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied by chance because only a sample of dwellings was included. There are about two chances in three that a sample estimate will differ by less than one SE from the figure that would have been obtained if all dwellings had been included, and about 19 chances in 20 that the difference will be less than two SEs. Another measure of the likely difference is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate.

Space does not allow for the separate indication of the SEs of all estimates in this publication. A table of SEs and RSEs for estimates of numbers of persons is given in table T1. These figures will not give a precise measure of the SE for a particular estimate but will provide an indication of its magnitude. An example of the calculation and use of SEs follows.

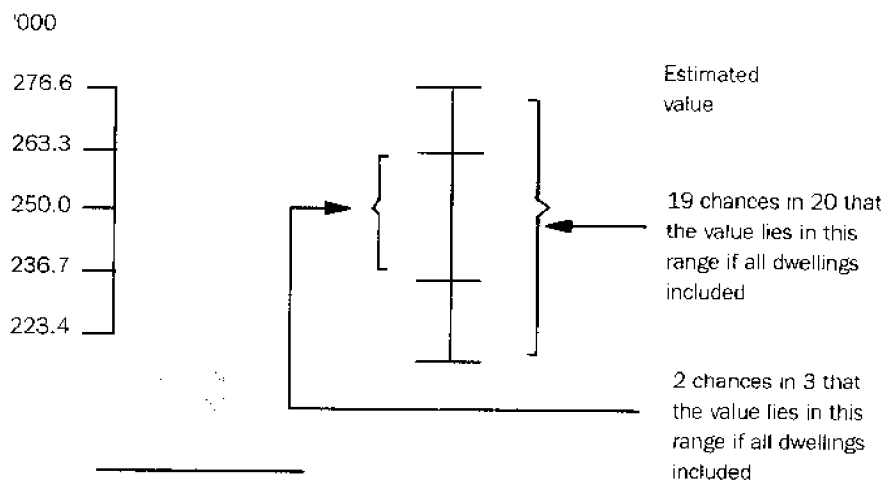
CALCULATION OF STANDARD ERRORS

If an estimate is 250,000, then the SE is calculated as follows:

- The size of the estimate lies between 200,000 and 300,000. The corresponding SEs for these two numbers in T1 are 12,000 and 14,600.
- The SE for 250,000 is calculated by interpolation using the following formula:
$$\text{SE} = \text{lower SE} + ((\text{size of estimate} - \text{lower size}) / (\text{upper size} - \text{lower size})) * (\text{upper SE} - \text{lower SE})$$
$$= 12,000 + ((250,000 - 200,000) / (300,000 - 200,000)) * (14,600 - 12,000)$$
$$= 13,300$$

Therefore, there are about two chances in three that the value that would have been produced if all dwellings had been included in the survey will fall in the range of 236,700 to 263,300 and about 19 chances in 20 that the value will fall within the range 223,400 to 276,600. This example is illustrated in the following diagram.

CALCULATION OF STANDARD ERRORS CONTINUED



As can be seen from the SE table (see T1), the smaller the estimate the higher the RSE. Very small estimates are thus subject to such high SEs (relative to the size of the estimate) as to detract seriously from their value for most reasonable uses. In the tables in this publication, estimates less than the lowest levels shown in the SE table have not been published. Although figures for these small components can, in some cases, be derived by subtraction, they should not be regarded as reliable.

STANDARD ERRORS OF RATES AND PERCENTAGES

Proportions and percentages formed from the ratio of two estimates are also subject to sampling errors. The size of the error depends on the accuracy of both the numerator and the denominator. A formula to approximate the RSE of a proportion is given below:

$$RSE (x/y) = \sqrt{ [RSE(x)]^2 + [RSE(y)]^2 }$$

Referring to Table 11, 13.1% of males aged 19 years and over reported being on a fat-modified diet to lower blood cholesterol. Using Appendix 1, it can be calculated that the numerator is approximately 851,700 and the denominator is 6,501,616. From T1, the SE of 6,501,616 is approximately 55,510, so the RSE is 0.9%. The SE of 851,700 is approximately 23,353, so the RSE is 2.7%. Applying the above formula, the RSE is $\sqrt{ (2.7)^2 + (0.9)^2 }$ or 2.5%, giving a SE for the proportion (13.1%) of 0.3 percentage points. Therefore, there are about two chances in three that the percentage of men aged 19 years and over on a fat-modified diet to lower blood cholesterol is between 12.8% and 13.4% and 19 chances in 20 that the proportion is within the range 12.5% and 13.7%.

The SE of an estimated percentage or rate computed by using sample data for both numerator and denominator depends the size of each of these. However, the RSE of the estimated percentage or rate will generally be lower than the RSE of the estimate of the numerator.

Approximate SEs of rates or percentages may be derived by first obtaining the number of persons corresponding to the numerator of the rate or percentage and then applying this figure to the estimated rate or percentage.

STANDARD ERRORS OF RATES AND PERCENTAGES *CONTINUED*

Published figures may also be used to estimate the difference between survey estimates (of numbers or percentages). Such a figure is itself an estimate and is subject to sampling error. The sampling error of the difference between two estimates depends on their SEs and the relationship (correlation) between them.

An approximate SE of the difference between two estimates (x-y) may be calculated by the following formula:

$$SE(x-y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

While this formula will only be exact for differences between separate and uncorrelated characteristics or sub-populations it is likely to be of interest in this publication. The imprecision due to sampling variability, which is measured by the SE, should not be confused with inaccuracies that may occur because of imperfections in reporting by interviewers and respondents and errors made in coding and processing of data. Inaccuracies of this kind are referred to as the non-sampling error, and they may occur in any enumeration, whether it be in a full count or only a sample.

STANDARD ERRORS OF NON-PERSON ESTIMATES

The above discussion relates to person estimates (i.e. the number or percentage of people with particular characteristics). However, a substantial amount of information from the survey is available as non-person estimates. Non-person estimates include means, medians and percentages based on counts other than the number of people (e.g. percentage of energy from different food groups).

RSEs for non-person estimates were calculated and used to asterisk estimates with high RSEs. Such estimates should be used with caution. The actual SE values for non-person estimates have not been released in this publication.

T1 STANDARD ERRORS AND RELATIVE STANDARD ERRORS FOR PERSON ESTIMATES(a)

Size of estimate	STATES AND TERRITORIES.....									AUST.....
	NSW	Vic.	Qld.	SA	WA	Tas.	NT	ACT	SE	RSE (b)
1 500	(c)2 180	(c)1840	(c)1 740	(c)1 210	(c)1 220	(d)710	(c)1 130	(d)660	(c)870	57.9
2 000	(c)2 420	(c)2040	(c)1 910	(c)1 330	(c)1 350	(d)770	(c)1 340	(d)740	(c)1 030	51.4
2 500	(c)2 650	(c)2200	(c)2 050	(c)1 450	(c)1 450	(d)850	(c)1 500	(d)800	(d)1 150	46.9
3 000	(c)2 800	(c)2350	(c)2 200	(c)1 550	(c)1 550	(d)900	(c)1 700	(d)850	(d)1 300	43.4
3 500	(c)3 000	(c)2500	(c)2 300	(d)1 600	(d)1 650	(d)950	(c)1 850	(d)900	(d)1 400	40.6
4 000	(c)3 150	(c)2650	(c)2 400	(d)1 700	(d)1 700	950	(d)2 000	950	(d)1 550	38.4
5 000	(c)3 400	(c)2850	(c)2 600	(d)1 800	(d)1 850	1 050	(d)2 250	1 050	(d)1 750	34.8
7 000	(c)3 850	(d)3250	(d)2 900	(d)2 050	(d)2 100	1 150	(d)2 750	1 150	(d)2 100	30.0
10 000	(d)4 400	(d)3700	(c)3 300	2 350	2 400	1 350	(d)3 300	1 350	(d)2 550	25.6
15 000	(d)5 150	(d)4300	(d)3 800	2 700	2 800	1 550	(d)4 100	1 550	3 200	21.3
20 000	(d)5 750	4 750	4 200	3 050	3 100	1 750	4 800	1 750	3 750	18.6
30 000	6 700	5 550	4 900	3 550	3 600	2 050	5 900	2 000	4 600	15.4
40 000	7 450	6 150	5 450	4 000	4 050	2 300	6 800	2 250	5 350	13.4
50 000	8 150	6 700	5 900	4 350	4 400	2 500	7 600	2 450	6 000	12.0
100 000	10 600	8 700	7 650	5 750	5 800	3 350	10 550	3 150	8 550	8.6
150 000	12 400	10 150	8 950	6 850	6 800	4 000	12 700	3 650	10 450	7.1
200 000	13 850	11 350	10 000	7 750	7 650	4 550	14 450	4 100	12 000	6.0
300 000	16 200	13 250	11 750	9 250	9 050	5 500	17 300	4 750	14 600	4.9
500 000	19 700	16 100	14 400	11 600	11 200	7 050	21 450	5 750	18 500	3.7
1 000 000	25 800	21 050	19 100	15 900	15 100	9 950	28 400	7 450	25 400	2.5
2 000 000	33 850	27 550	25 500	22 050	20 450	14 300	37 000	9 650	34 400	1.7
5 000 000	48 600	39 450	37 750	34 550	30 800	23 600	51 250	13 650	50 600	1.0
10 000 000	63 950	51 950	51 200	49 050	42 400	35 100	64 450	17 750	66 950	0.7

(a) The SEs and RSEs shown relate to person estimates for those items collected for the main survey sample.

(b) Shows the SE for Australia as a percentage of the estimate.

(c) SEs with an RSE of 50% or more. These are considered unreliable for most purposes.

(d) SEs with an RSE of 25% to 50% of the estimate.

GLOSSARY

- Adults** For the purposes of this publication, adults have been defined as people aged 19 years and over at the time of the NNS interview.
- Adolescents** For the purposes of this publication, adolescents have been defined as people aged 12 to 18 years, at the time of the NNS interview.
- Body Mass Index** Body Mass Index (BMI) is body weight in kilograms divided by the square of height in metres. Height and weight were measured by the interviewers. The groups used are those recommended by the World Health Organisation (1995).

	Body mass index
.....
Underweight	Less than 18.5
Acceptable weight (a)	18.5 to less than 20 20 to less than 25
Overweight	25 to less than 30
Obese	30 and greater
.....

(a) The acceptable weight range has been split to enable comparison with NHMRC categories.

The measuring scales used only measured weights up to 140 kilograms. People over this weight have been classified as obese.

- Breakfast** Breakfast is the meal generally eaten in the morning after waking. However, daily routines including sleep may vary and therefore breakfast was determined by participants. There were two measures of breakfast consumption collected in the survey.

The first measure was collected by the interviewer in the 24-hour recall. It was based on eating occasion specified by the respondent for each food and beverage consumed (see table 15).

A second measure was collected as part of eating habits and this indicates how many days per week something is usually eaten for breakfast (see table 17). An occasion was not counted as breakfast for this item if a respondent volunteered that their breakfast included beverages only.

- Carbohydrates** Carbohydrates usually provide the major part of energy in human diets. Data for total carbohydrate includes starch, sugars and related substances (sugar alcohols and oligosaccharides). Sugar alcohols and oligosaccharides are included in total carbohydrates but not in starch or sugars. Therefore total carbohydrate does not equal the sum of sugars and starch.

Children	For the purposes of this publication, children have been defined as people aged 2 to 11 years at the time of the NNS interview.
Eating occasion	Each food or beverage reported in the 24-hour recall is assigned to an eating occasion. This information is not available for plain drinking water. Participants selected the name of the eating occasion from a list provided by the interviewer. The list contained the following options: <ul style="list-style-type: none"> ▪ breakfast; ▪ brunch; ▪ food and/or beverage break; ▪ lunch; ▪ dinner, tea; ▪ supper; and ▪ other. <p>In this publication, these have been collapsed into: breakfast; brunch and lunch; dinner; and other.</p>
Energy	Energy provides the 'fuel' for metabolism, growth, movement and other processes. Energy intakes from the survey are reported in kilojoules (kJ). One calorie is equivalent to approximately 4.186 kJ.
Fat	Fat provides a large part of energy in the human diet, is the carrier for fat-soluble vitamins and is the source of essential fatty acids. The three fatty acid subtotals given in tables (saturated, monounsaturated and polyunsaturated fats) do not add up to total fat because total fat includes a contribution from the non fatty acid components.
Food groups	Foods and beverages reported in the 24-hour recall can be categorised to varying levels of detail (see Appendix 2 for more detail).
Intake day	This is the day of the week that participants consumed the foods and beverages that they reported in their 24-hour recall. Weekday has been defined as Monday–Friday and the weekend as Saturday and Sunday.
No money to buy more food	People who, in the last 12 months, had run out of food and could not afford to buy more.
Number of times eat per day	Usual number of separate eating occasions, including snacks, over an entire day. This excludes occasions where beverages only are consumed.
Part of State	Capital city is the capital city statistical division for each State or Territory. Rest of the state is the remaining areas in each State or Territory.

Percentage contribution to energy The share of energy from protein, fats (monounsaturated, saturated and polyunsaturated), carbohydrates (starch and sugars) and alcohol. The energy from each of these nutrients was estimated by multiplying each gram of protein, fats, carbohydrates and alcohol by a conversion factor to determine the kilojoules (kJ) of energy generated. These conversion factors are set out below.

Energy from protein	Protein * 17
Energy from fats	Fat * 37
Energy from carbohydrates	Starch*17 + Sugars*16
Energy from alcohol	Alcohol *29

The sum of energy values from protein, fats, carbohydrates and alcohol is not exactly equal to total energy. This is partly due to rounding and, in some cases, to other energy yielding components in the food or beverage. The sum of the energy from saturated, monounsaturated and polyunsaturated fats is not equal to the energy from total fats.

Plain drinking water Tap water or any uncarbonated bottled water, with nothing added, not even lemon. Only amount and how much came from home was collected. Plain drinking water has been included in most tables that report on food or nutrient intake in this publication. It is excluded from tables 12 and 15 because these tables include information about eating occasion and where consumed which was not collected for plain drinking water. Plain drinking water has been classified as a non-alcoholic beverage in tables on food intake. For nutrient intake tables, plain drinking water has only been added to moisture, although it is acknowledged that plain drinking water can also contains some minerals.

Where foods/beverages consumed Foods and beverages that were consumed at home include both home prepared meals and takeaway foods brought home to eat. Foods and beverages consumed away from home are further classified into:

- Brought from home — This can include pre-prepared or takeaway foods as well as home prepared foods and beverages.
- Not brought from home — It is assumed that most of these are pre-prepared foods (e.g. takeaway foods, restaurant meals, foods from vending machines).

This information is not available for plain drinking water.

LIST OF REFERENCES

- Australia and New Zealand Food Authority 1989, *Composition of Foods Australia*, AGPS, Canberra.
- Australian Bureau of Statistics 1997a, *Apparent Consumption of Foodstuffs, Australia*, Cat. no. 4306.0, ABS, Canberra.
- Australian Bureau of Statistics (forthcoming)a, *National Nutrition Survey: Users' Guide, 1995*, Cat. no. 4805.0, ABS, Canberra.
- Better Health Commission 1986, *Looking forward to better health: Volume 2*, AGPS, Canberra.
- Commonwealth Department of Health, Housing and Community Services 1992, *Food and nutrition policy*, AGPS, Canberra.
- Ministry of Agriculture, Fisheries and Food 1992, McCance and Widdowson's *The composition of foods*, 5th revised edition and supplements, Royal Society of Chemistry/MAFF, Cambridge.
- National Health and Medical Research Council 1991, *Recommended Dietary Intakes for use in Australia*, AGPS, Canberra.
- National Health and Medical Research Council 1991, *Dietary guidelines for Australians*, AGPS, Canberra.
- National Health and Medical Research Council 1995, *Dietary guidelines for children and adolescents*, AGPS, Canberra.
- WHO Expert Committee on Physical Status: the Use and Interpretation of Anthropometry 1995, *Physical status: the use and interpretation of anthropometry: report of a WHO expert committee*, WHO technical report series 854.



We've got the answers ... we just can't fit them all into this publication!

Is there more information you would like about what's in this particular publication or other National Nutrition Survey topics?

The good news is that the information is available. In fact, we have volumes of detailed information that cannot be placed into the publications but which can be provided on request.

Data from the National Nutrition Survey — a customised approach

The National Nutrition Survey offers an extensive range of information on the population characteristics, food and nutrient intake, physical measurements and dietary habits reported by Australians. This information can be cross-tabulated against data collected in the National Health Survey, which covers the population characteristics, health status, health-related actions, private health insurance and health-related aspects of lifestyle reported by Australians.

We can supply you with your requested information in a variety of formats to best suit your needs:

- printed tables
- spreadsheets in a range of formats
- via E-mail
- floppy disk

The ABS's forthcoming publication *National Nutrition Survey: Users' Guide, 1995* (Cat. no. 4801.0) contains a listing of output data items and other material designed to assist users in making best use of the survey results.

Telephone the Health Section about any inquiries you may have about information from the National Nutrition Survey on **1800 060 050**.

Other ABS information is also available

We can mix and match from our extensive ABS-wide data holdings to give a more comprehensive statistical picture for your policy, planning and research needs.

Contact one of our consultants to discuss your needs or to inquire about the complete range of ABS products and services. They will provide you with the best possible option to solve your data requests and a written quote, clearly setting out all the costs and time frames. Please see the back cover for your nearest contact details. The ABS internet site at <http://www.abs.gov.au> can also provide you with up-to-date statistical facts.

For more information . . .

The ABS publishes a wide range of statistics and other information on Australia's economic and social conditions. Details of what is available in various publications and other products can be found in the ABS Catalogue of Publications and Products available from all ABS Offices.

ABS Products and Services

Many standard products are available from ABS bookshops located in each State and Territory. In addition to these products, information tailored to the needs of clients can be obtained on a wide range of media by contacting your nearest ABS Office. The ABS also provides a Subscription Service for standard products and some tailored information services.

National Dial-a-Statistic Line

0055 86 400

Steadycom P/L: premium rate 25c/20 secs.

This number gives 24-hour access, 365 days a year, for a range of important economic statistics including the CPI.

Internet

<http://www.abs.gov.au>

A wide range of ABS information is available via the Internet, with basic statistics available for each State, Territory and Australia. We also have Key National Indicators, ABS product release details and other information of general interest.

Sales and Inquiries

client.services@abs.gov.au

National Mail Order Service
Subscription Service

(02) 6252 5249
1300 366 323

	Information Inquiries	Bookshop Sales
CANBERRA	(02) 6252 6627	(02) 6207 0326
SYDNEY	(02) 9268 4611	(02) 9268 4620
MELBOURNE	(03) 9615 7755	(03) 9615 7755
BRISBANE	(07) 3222 6351	(07) 3222 6350
PERTH	(08) 9360 5140	(08) 9360 5307
ADELAIDE	(08) 8237 7100	(08) 8237 7582
HOBART	(03) 6222 5800	(03) 6222 5800
DARWIN	(08) 8943 2111	(08) 8943 2111



Client Services, ABS, PO Box 10, Belconnen ACT 2616





2480200001959

ISBN 0 642 25793 0

Recommended retail price \$22.00
© Commonwealth of Australia 1997
Produced by the
Australian Bureau of Statistics