# Appendix 1—data sources

### National data sources

### Apparent consumption of foodstuffs and nutrients

Apparent consumption data are a measure of the food supply available for human consumption after allowing for other uses and losses. These data are not a direct measure of food intake. Apparent consumption is estimated through calculating total production and imports (including commercial production, estimated home production, imports and opening stocks) and subtracting exports, usage for processed foods, non-food use, wastage and closing stocks. As a result, the data are for 'food available for consumption' which is not the same as food consumed. Because the calculated values are averages of per capita availability of the food supply for the population as a whole, they give no information on the food consumption of individuals or groups of individuals within the population. However, they are useful for highlighting trends and changes in food availability.

The most recent Australian apparent consumption data (other than for alcohol) is for 1998–99 (foodstuffs) and 1997–98 (nutrients). For further details, see *Apparent Consumption of Foodstuffs* 1997–98 and 1998–99 (ABS 2000) and *Apparent Consumption of Nutrients* (AIHW: Field et al. 2003). The average of the 3 years ended 1998–99 (1997–98 for nutrients) were calculated using published per capita data — for previous decades, the average of the last 3 years has been published by the ABS.

Data in Australian and international publications are usually shown as kilograms per capita per year; for this report, grams per capita per day were derived by multiplying these data by 1,000 and dividing by 365 (or 366, in the case of a leap year). Conversion factors for pounds and gallons were used as appropriate for data from the USA.

Apparent consumption data are also compiled for Australia by the FAO (as 'food balance sheet' data) using their own methodology and are available on the FAO website (FAO 2005a).

#### Australian Diabetes, Obesity and Lifestyle (AusDiab) Study, 1999–2000

The AusDiab study, conducted by the International Diabetes Institute, was designed to provide estimates of the prevalence of diagnosed and undiagnosed diabetes and self-reported chronic conditions such as heart disease and high blood pressure. It also provided national measurements of blood pressure, blood lipids, blood glucose, body fat, height and weight, and waist and hip circumference, as well as self-reported information on diet, smoking, alcohol consumption, physical activity, and general health and wellbeing. The study collected information in urban and non-urban areas in all states and the Northern Territory and sampled more than 20,000

people aged 25 years and above, of whom more than 11,000 underwent a physical examination.

In relation to nutrition, the AusDiab study collected information on body mass and knowledge of dietary requirements. A food frequency questionnaire was also administered, but was not analysed for this report.

### National Drug Strategy Household Survey (NDSHS), 2004

The NDSHS includes data on Australians aged 12 years and older. The 2004 survey was the eighth survey in a series that began in 1985. Respondents were asked about their knowledge of drugs, attitudes towards drugs, drug consumption histories and related behaviours.

Data on alcohol use (people aged 14 years and over) were used for this report.

### National Health Survey (NHS), 2001

The 2001 NHS, one in a series of surveys conducted by the ABS, was designed to obtain national information on the health status of Australians, their use of health services and facilities, and health-related aspects of their lifestyle. The survey collected information from a sample of 26,900 people from February to November 2001.

The 2001 NHS included short questions on usual fruit and vegetable consumption. These data provide a valid estimate of different intakes (e.g. among those who reported two to three serves compared with those who reported four or more serves) but are not indicative of the average daily quantity of fruit and vegetables consumed. For example, it has been seen that the average intake of vegetables was less than 300 g per day (where a serve is equal to 75 g) among those who reported usually consuming four or more serves per day (Marks et al. 2001b). The short questions, however, provide valuable trend data in the interim years between the more detailed dietary surveys.

Data on breastfeeding were also collected in the 2001 NHS. This data collection relates to current (rather than retrospective) breastfeeding practices for children aged 3 years or less, which is recommended by WHO (2002).

#### National Nutrition Survey (NNS), 1995

The NNS, conducted by the ABS and the Commonwealth Department of Health, was the first nationally representative Australian survey of food and nutrient intake, dietary habits and body measurements. The survey collected information from a subsample of respondents from the 1995 NHS, approximately 13,800 people from urban and rural areas of Australia. The NNS was conducted over a 13-month period from February 1995 to March 1996 (McLennan & Podger 1998).

The NNS included a detailed 24-hour dietary recall (which provided a valid estimate of mean population food and nutrient intakes), questions on food habits and attitudes, and a food frequency questionnaire. In addition, blood pressure (of those

aged 16 years and over), height, weight, and waist and hip circumferences were measured by trained interviewers.

### National Physical Activity Survey (NPAS), 2000

The 2000 NPAS was conducted to assess physical activity patterns and knowledge of the benefits of physical activity among adult Australians after the Olympics in Sydney (September 2000). The survey collected information from a national sample of 3,590 people aged 18–75 years during November and December 2000. This survey followed on from the 1997 Active Australia Baseline Survey and 1999 National Physical Activity Survey.

#### National Heart Foundation Risk Factor Prevalence Survey (RFPS), 1989

The Risk Factor Prevalence surveys (1980, 1983 and 1989), a series of surveys conducted by the National Heart Foundation of Australia, were designed to obtain national information on biomedical and behavioural risk factors in Australia and to monitor trends over time. The 1989 study collected a range of information, including data on iron status, from a sample of around 9,000 adults living in capital cities of Australia between May/June and December of the survey year.

#### **OzFoodNet**

The Australian Government Department of Health and Ageing established the OzFoodNet network in 2000 to collaborate nationally in investigating foodborne disease. OzFoodNet conducts studies on the burden of illness and coordinates national investigations into outbreaks of foodborne disease.

OzFoodNet reports quarterly on investigations of gastroenteritis outbreaks and clusters of disease potentially related to food. Annual reports have been produced and published in *Communicable Diseases Intelligence* since 2001 – most recently for 2004 (OzFoodNet Working Group 2005). Data are reported from all Australian jurisdictions.

### International data sources

#### All countries

#### The Surveillance of Risk Factors report (SuRF 2)

Compiled by the World Health Organization, WHO Global Infobase: SuRF Country Profiles (WHO 2005) present available prevalence data on non-communicable disease risk factors at the country level for a number of member states of the WHO.

Country profiles are available from:

<a href="http://www.who.int/ncd\_surveillance/infobase/web//surf2/country\_list.html">http://www.who.int/ncd\_surveillance/infobase/web//surf2/country\_list.html</a> (viewed 13 July 2005).

#### Food and Agriculture Organization (FAO) food balance sheets

Compiled by the FAO for a wide range of countries and country groups, the FAO food balance sheets (FAO 2005a) present data on food supply and utilisation, by year.

Data are available from:

<a href="http://faostat.fao.org/faostat/form?collection=FBS&Domain=FBS&servlet=1&hasbulk=0&version=ext&language=EN>"> (viewed 13 July 2005).</a>

#### **New Zealand**

Table A1.1: National data sources – New Zealand

National data sources	Most recent	Details
National Health Survey (Ministry of Health 2004)	2002–04	Cross-sectional, regular national health survey (household); physical measurements
<a href="http://www.moh.govt.nz/moh.nsf/0/3D15E13BFE80307">http://www.moh.govt.nz/moh.nsf/0/3D15E13BFE80307</a>		(nousenola), physical measurements
3CC256EEB0073CFE6/\$File/aportraitofhealth.pdf>		People aged 15 years and over
Information on the survey is also available via the WHO NCD Infobase.		
National Nutrition Survey (Ministry of Health 1999)	1997	Cross-sectional, one-time national survey
<a href="http://www.moh.govt.nz/moh.nsf/0/8f1dbeb1e0e1c70c4">http://www.moh.govt.nz/moh.nsf/0/8f1dbeb1e0e1c70c4</a> c2567d80009b770/\$FILE/nns.pdf>		(household); physical measurements, 24-hour recall
Information on the survey is also available via the WHO NCD Infobase.		People aged 15 years and over

Table A1.1 (continued): National data sources – New Zealand

National data sources	Most recent	Details
Annual outbreak summary	2003	These reports summarise the results of outbreak
(Public Health Surveillance 2004)		surveillance coordinated by the Institute of Environmental Science and Research Ltd (ESR)
<a href="http://www.surv.esr.cri.nz/surveillance/annual_outbreak.p">http://www.surv.esr.cri.nz/surveillance/annual_outbreak.p</a>		under contract with the Ministry of Health (MoH).
hp?we_objectID=297>		See also, Microbiological Risk Profiles (NZFSA 2005): summary of severity, incidence, common vehicles for foodborne pathogens.
		Available at: <a href="http://www.nzfsa.govt.nz/science-technology/risk-profiles/index.htm">http://www.nzfsa.govt.nz/science-technology/risk-profiles/index.htm</a>
Breastfeeding Data—Plunket Operational National Database (Royal New Zealand Plunket Society 2004)  Free data available at:	2003–04	Data now purchased by the Ministry of Health from the Plunket Society (Ministry of Health 2003)
<a href="http://www.plunket.org.nz/Other_Information_Page.htm">http://www.plunket.org.nz/Other_Information_Page.htm</a>		e.g. statistics from <i>Breastfeeding: A guide for action</i> 2002 at: <a href="http://www.moh.govt.nz/moh.nsf/0/b2c10ff5e96">http://www.moh.govt.nz/moh.nsf/0/b2c10ff5e96</a> 0e1edcc256dc10077c608?OpenDocument>

### Canada

Table A1.2: National data sources—Canada

National data sources	Most recent	Details
Canadian Community Health Survey (Statistics Canada 2005a)	2003	Regular national health survey (household), self-administered questionnaire
<a href="http://www.statcan.ca/english/concepts/health/index.htm">http://www.statcan.ca/english/concepts/health/index.htm</a>		People aged 12 years and over
Information on the survey is also available via the WHO NCD Infobase		
Canadian Community Health Survey Cycle 2.2— Nutrition Focus Survey (Statistics Canada 2005b)	2004	Regular national health survey (household), physical measurements
Data/publications at: <http: cgi-<br="" www.statcan.ca="">bin/downpub/listpub.cgi?catno=82-620-MIE&gt;</http:>		People aged 12 years and over
Canadian Addiction Survey (Health Canada 2005)	2004	National telephone survey (household)
Detailed report (2005) available at: <a href="http://www.ccsa.ca/pdf/ccsa-004028-2005.pdf">http://www.ccsa.ca/pdf/ccsa-004028-2005.pdf</a>		People aged 15 years and over
Apparent consumption data (Statistics Canada 2005c)	2004	Per capita consumption of major food groups
<a href="http://www40.statcan.ca/l01/cst01/famil102a.htm">http://www40.statcan.ca/l01/cst01/famil102a.htm</a>		These data represent food available for consumption and not actual quantities of food consumed since they do not allow for losses such as waste and/or spoilage in stores, households, private institutions or restaurants.
National Population Health Survey (food insecurity supplement questionnaire) (Rainville & Brink 2001)	1998–99	Longitudinal survey on current state of health and health care needs (same respondents have been
Questionnaires at: <a href="http://www.statcan.ca/english/concepts/nphs/nphs1.htm">http://www.statcan.ca/english/concepts/nphs/nphs1.htm</a>		interviewed every two years for the last 10 years)  Data for adults (18 years and over) presented in
Published findings at: <a href="http://dsp-psd.pwgsc.gc.ca/Collection/MP32-29-01-2E.pdf">http://dsp-psd.pwgsc.gc.ca/Collection/MP32-29-01-2E.pdf</a>		this report

### **France**

Table A1.3: National data sources – France

National data sources	Most recent	Details
French national dietary survey (Volatier & Verger 1999)	1993–94	Regular national health survey, self-administered questionnaire (household)
Information on the survey is also available via the WHO NCD Infobase.		Adults aged 18 years and over
Physical Activity Levels and Body Weight in a Nationally Representative Sample in the European	1997	National, both urban and rural populations, France
<i>Union</i> (Vaz de Almeida et al. 1999)		People aged 15 years and over
Data are also available from WHO (2005).		

### Japan

Table A1.4: National data sources – Japan

National data sources	Most recent	Details
National Nutrition Survey (Statistics Bureau 2005)	2002	Cross-sectional, annual national health survey (household); physical measurements
Published in <i>Japan Statistical Yearbook</i> , Table 21-1: <a href="http://www.stat.go.jp/english/data/nenkan/1431-21.htm">http://www.stat.go.jp/english/data/nenkan/1431-21.htm</a>		Adults aged 20 years and over
Data are also available from WHO (2005)		
Supply and demand of food (food balance sheet) (Statistics Bureau 2005)	2002	Supplies of net food per capita, 1985–2002
Published in <i>Japan Statistical Yearbook</i> , Table 7-60: <a href="http://www.stat.go.jp/english/data/nenkan/1431-07.htm">http://www.stat.go.jp/english/data/nenkan/1431-07.htm</a>		

### **United Kingdom**

Table A1.5: National data sources – United Kingdom

National data sources	Most recent	Details
The National Diet and Nutrition Survey (National Statistics 2004a)	2000–01	Cross-sectional, regular national health survey (household): physical measurements; 7-day dietary
Products available from: <a href="http://www.statistics.gov.uk/StatBase/Product.asp?vlnk">http://www.statistics.gov.uk/StatBase/Product.asp?vlnk</a>		records; 7-day physical activity records; 24-hour urine collection
=9761>		Adults aged 19–64 years
Data are also available from WHO (2005)		
Expenditure and Food Survey (National Statistics 2004b)	2002–03	Estimates of average consumption, expenditure and energy and nutrient intakes from food and drink
Report at: <a href="http://statistics.defra.gov.uk/esg/publications/efs/2003/f">http://statistics.defra.gov.uk/esg/publications/efs/2003/f</a>		(eaten in household and out). Current estimates do not include free food (may be in future reports).
amilyfood.pdf>		Participants aged 7 years and over complete a diary.
		For the purposes of this report, this will be considered with apparent consumption data, as data refer to food purchased, rather than that actually consumed by respondents.

Table A1.5 (continued): National data sources—United Kingdom

National data sources	Most recent	Details
Infant Feeding Survey (Hamlyn et al. 2002)  Report at: <a href="http://www.dh.gov.uk/assetRoot/04/05/97/63/04059763">http://www.dh.gov.uk/assetRoot/04/05/97/63/04059763</a> .  pdf>	2000	Based on national sample of births, questionnaires sent out when babies aged 4–10 weeks, 4–5 months, and 8–9 months.
Foodborne disease strategy (Advisory Committee on the Microbiological Safety of Food 2004)	2003	Information paper ACM/719: FSA Foodborne Disease Strategy. Trends in Foodborne Disease: Figures.
<a href="http://www.food.gov.uk/multimedia/pdfs/acm719.pdf#page=3">http://www.food.gov.uk/multimedia/pdfs/acm719.pdf#page=3</a>		

### **United States of America**

Table A1.6: National data sources – United States of America

National data sources	Most recent	Details
National Health and Nutrition Examination Survey (NHANES) (National Center for Health Statistics 2005)	2001–02	Cross-sectional, regular national household survey: physical measurements, biochemical measures
Data files at:		Adults aged 20 years and over
<a href="http://www.cdc.gov/nchs/about/major/nhanes/nhanes01">http://www.cdc.gov/nchs/about/major/nhanes/nhanes01</a> -02.htm>		(Published data presented where possible; otherwise available survey data highlighted—
Published data are available from WHO (2005) and other sources cited.		available free on the Internet)
Behavioural Risk Factor Surveillance System (National Center for Chronic Disease Prevention and Health Promotion 2005)	2003	Cross-sectional, continuous telephone health survey (household)
<a href="http://apps.nccd.cdc.gov/brfss/">http://apps.nccd.cdc.gov/brfss/&gt;</a>		Adults aged 20 years and over
Data are also available from WHO (2005).		
National Health Interview Survey (Lethbridge-Çejku & Vickerie 2005)	2003	Cross-sectional continuous household survey; personal interview
		Information collected from people 17 years and over (information also requested regarding children)
Foodborne Disease Outbreak Surveillance System (Foodborne Outbreak Response and Surveillance Unit 2005)	2003	Foodborne disease outbreaks reported to the Center for Disease Control and Prevention (CDC) by state epidemiologists using the Electronic Foodborne
Report at: <a href="http://www.cdc.gov/foodborneoutbreaks/us_outb/fbo20">http://www.cdc.gov/foodborneoutbreaks/us_outb/fbo20</a> 03/summary03.htm>		Outbreak Reporting System through (EFORS)
Current Population Survey—Food Security Supplement	2004	Annual household survey
(Nord et al. 2005)		Information collected on household as a whole
Report at: <a href="http://www.ers.usda.gov/Briefing/FoodSecurity/trends/">http://www.ers.usda.gov/Briefing/FoodSecurity/trends/</a>		
National Survey of Family Growth	1995	Personal interview survey
(National Center for Health Statistics 2004)		Women aged 15–44 years
Food and nutrient availability data (Economic Research Service 2005)	2003	ERS annually calculates the amounts of several hundred foods available for human consumption in
<a href="http://www.ers.usda.gov/data/foodconsumption/FoodAvailIndex.htm">http://www.ers.usda.gov/data/foodconsumption/FoodAvailIndex.htm</a>		the United States; also called 'food supply' or 'food disappearance' data.

# Appendix 2—international data

In this section, the published measures referred to in the report for Australia, New Zealand, Canada, France, Japan, the UK and the USA are presented with data. Care should be taken in comparing these data, as there may be differences in the way the indicators are structured—for example, in collection methods, age of respondents, combinations or groupings of foods, or portion sizes. It should also be noted that numbers have been rounded to the nearest integer. For information about data sources, see Appendix 1.

## Vegetables, legumes and fruits

Table A2.1: Apparent consumption of fruit and vegetables

Australia, 1998–99         g/capita/day           Fruit and fruit products <sup>(a)</sup> 370           Vegetables <sup>(b)</sup> 444           Source: ABS (2000).	Existing measures (by country)	Apparent consumption
Vegetables (IIII)       444         Source: ABS (2000).       365         Canada, 2001       365         Total fruit       365         Total vegetables, including potatoes       489         Source: Statistics Canada (2005c).	Australia, 1998–99	g/capita/day
Source: ABS (2000).         Canada, 2001         Total fruit       365         Total vegetables, including potatoes       489         Source: Statistics Canada (2005c).       115         Japan, 2002       115         Fruit       115         Vegetables       265         Sweet potatoes       12         Irish potatoes       42         Source: Statistics Bureau (2005), Table 7-60.       42         United States, 2003       342         Total fruit       342         Total vegetables (including pulses)       518         Source: Economic Research Service (2005a).       47         United Kingdom, 2002–03       47         Household apparent consumption of fruit       172	Fruit and fruit products <sup>(a)</sup>	370
Canada, 2001         Total fruit       365         Total vegetables, including potatoes       489         Source: Statistics Canada (2005c).	Vegetables <sup>(b)</sup>	444
Total fruit 365 Total vegetables, including potatoes 489 Source: Statistics Canada (2005c).  Japan, 2002 Fruit 115 Vegetables 265 Sweet potatoes 12 Irish potatoes 42 Source: Statistics Bureau (2005), Table 7-60.  United States, 2003 Total fruit 342 Total vegetables (including pulses) 518 Source: Economic Research Service (2005a).  United Kingdom, 2002–03 Household apparent consumption of fruit 172	Source: ABS (2000).	
Total vegetables, including potatoes  Source: Statistics Canada (2005c).  Japan, 2002  Fruit 115 Vegetables 265 Sweet potatoes 12 Irish potatoes 12 Irish potatoes 42 Source: Statistics Bureau (2005), Table 7-60.  United States, 2003 Total fruit 342 Total vegetables (including pulses) 518 Source: Economic Research Service (2005a).  United Kingdom, 2002–03 Household apparent consumption of fruit 172	Canada, 2001	
Source: Statistics Canada (2005c).  Japan, 2002  Fruit 115  Vegetables 265  Sweet potatoes 12  Irish potatoes 42  Source: Statistics Bureau (2005), Table 7-60.  United States, 2003  Total fruit 342  Total vegetables (including pulses) 518  Source: Economic Research Service (2005a).  United Kingdom, 2002–03  Household apparent consumption of fruit 172	Total fruit	365
Fruit 115 Vegetables 265 Sweet potatoes 12 Irish potatoes 42 Source: Statistics Bureau (2005), Table 7-60.  United States, 2003 Total fruit 342 Total vegetables (including pulses) 518 Source: Economic Research Service (2005a).  United Kingdom, 2002–03 Household apparent consumption of fruit 172	Total vegetables, including potatoes	489
Fruit 115 Vegetables 265 Sweet potatoes 12 Irish potatoes 42 Source: Statistics Bureau (2005), Table 7-60.  United States, 2003 Total fruit 342 Total vegetables (including pulses) 518 Source: Economic Research Service (2005a).  United Kingdom, 2002–03 Household apparent consumption of fruit 172	Source: Statistics Canada (2005c).	
Vegetables265Sweet potatoes12Irish potatoes42Source: Statistics Bureau (2005), Table 7-60United States, 2003Total fruit342Total vegetables (including pulses)518Source: Economic Research Service (2005a)United Kingdom, 2002–03Household apparent consumption of fruit172	Japan, 2002	
Sweet potatoes 12 Irish potatoes 42 Source: Statistics Bureau (2005), Table 7-60.  United States, 2003 Total fruit 342 Total vegetables (including pulses) 518 Source: Economic Research Service (2005a).  United Kingdom, 2002–03 Household apparent consumption of fruit 172	Fruit	115
Irish potatoes 42  Source: Statistics Bureau (2005), Table 7-60.  United States, 2003  Total fruit 342  Total vegetables (including pulses) 518  Source: Economic Research Service (2005a).  United Kingdom, 2002–03  Household apparent consumption of fruit 172	Vegetables	265
Source: Statistics Bureau (2005), Table 7-60.  United States, 2003  Total fruit 342  Total vegetables (including pulses) 518  Source: Economic Research Service (2005a).  United Kingdom, 2002–03  Household apparent consumption of fruit 172	Sweet potatoes	12
United States, 2003  Total fruit 342  Total vegetables (including pulses) 518  Source: Economic Research Service (2005a).  United Kingdom, 2002–03  Household apparent consumption of fruit 172	Irish potatoes	42
Total fruit 342 Total vegetables (including pulses) 518 Source: Economic Research Service (2005a).  United Kingdom, 2002–03 Household apparent consumption of fruit 172	Source: Statistics Bureau (2005), Table 7-60.	
Total vegetables (including pulses) 518  Source: Economic Research Service (2005a).  United Kingdom, 2002–03  Household apparent consumption of fruit 172	United States, 2003	
Source: Economic Research Service (2005a).  United Kingdom, 2002–03  Household apparent consumption of fruit 172	Total fruit	342
United Kingdom, 2002–03  Household apparent consumption of fruit 172	Total vegetables (including pulses)	518
Household apparent consumption of fruit 172	Source: Economic Research Service (2005a).	
and the state of t	United Kingdom, 2002–03	
Household apparent consumption of vegetables (excluding potatoes) 157	Household apparent consumption of fruit	172
	Household apparent consumption of vegetables (excluding potatoes)	157
Source: UK Expenditure and Food Survey (National Statistics (2004b), Table 1.2).	Source: UK Expenditure and Food Survey (National Statistics (2004b), Table 1.2).	

<sup>(</sup>a) Includes jams, dried fruit and processed fruit.

<sup>(</sup>b) Includes processed vegetables and legumes.

Table A2.2: Average intakes of fruit and vegetables

Existing measures (by country)	Males	Females
Australia, 1995	g/pers	on/day
Average intake of fruit products and dishes among adults	141	146
Average intake of vegetable products and dishes among adults (including legumes and potatoes)	296	242
Average intake of fruit and vegetable juices and drinks	139.5	109.4
Source: National Nutrition Survey (ABS & DHAC 1999).		
Japan, 2002		
Average intake of fruit, all ages	110	137
Average intake of vegetables, all ages	277	264
Source: WHO (2005).		
Average intake of pulses among adults aged 20 years or more#		59
Source: National Nutrition Survey (Statistics Bureau 2005), Table 21-1.		
France, 1993–94		
Average intake of fruit among adults aged 18 years or more	189	184
Average intake of vegetables among adults aged 18 years or more	93	109
Source: Volatier and Verger (1999).		
United Kingdom, 2000–01		
Average intake of fruit (excluding fruit juice) <sup>(a)</sup>	87	103
Average intake of vegetables and vegetable dishes (excluding potatoes) <sup>(a)</sup>	137	132
Average daily number of portions of fruit consumed (including composite dishes) <sup>(b)(c)</sup>	1.3	1.4
Average daily number of portions of vegetables consumed (including composite dishes) $^{\text{(b)(d)}}$	1.4	1.4
Source: UK National Diet and Nutrition Survey (National Statistics (2004a), Tables 2.1 (vol. 5) and 2.15 (vol. 1)).		

<sup>#</sup> Data available for 'persons' only.

<sup>(</sup>a) Mean intakes for 7 day reporting period were divided by 7 to give g/day.

<sup>(</sup>b) Portion is defined as 80g.

<sup>(</sup>c) All fruit juice counted as one portion.

<sup>(</sup>d) All baked beans and other pulses counted as one portion.

Table A2.3: Usual consumption of fruit and vegetables

Existing measures (by country)	Males	Females
Australia, 2001	Pei	r cent
Proportion of people (19 years and over) usually consuming 2 or more serves of fruit per day <sup>(a)</sup>	27	34
Proportion of people (19 years and over) usually consuming 4 or more serves of vegetables per day <sup>(b)</sup>	47	58
Source: AIHW analysis of the 2001 National Health Survey, age standardised to the 2001 Australian population.		
New Zealand, 2002–03		
Proportion of people (15 years and over) usually consuming 2 or more serves of fruit per day <sup>(c)</sup>	44	64
Proportion of people (15 years and over) usually consuming 3 or more serves of vegetables per day <sup>(c)</sup>	65	72
Source: National Health Survey (Ministry of Health (2004), Tables 11 and 12).		
Canada, 2003		
Proportion of people (12 years and over) consuming fruit and vegetables less than 5 times per day <sup>(c)</sup>	61	49
Source: Canadian Community Health Survey (Statistics Canada 2005a).		
United Kingdom (England), 2003		
Proportion of adults (19–64 years) consuming 5 portions or more of fruit and vegetables per day <sup>(d)</sup>	22	26
Source: Health Survey for England (National Statistics 2003:76).		
United Kingdom, 2000–01		
Proportion of adults (19–64 years) consuming 5 or more portions of fruit and vegetables per day <sup>(e)</sup>	13	15
Source: The National Diet and Nutrition Survey (National Statistics (2004a), vol. 1:18).		
United States, 2003		
Proportion of adults (20 years and over) consuming less than 5 serves of fruit and vegetables per day <sup>(c)</sup>	82	72
Source: Behavioural Risk Factor Surveillance System (WHO 2005).		

- (a) One serve of fruit is 150 g. Based on self-reported data on average intakes.
- (b) One serve of vegetables is 75 g. Based on self-reported data on average intakes.
- (c) Based on self-reported data on average intakes.
- (d) Portion is defined as 80 g. Based on data from a 24-hour recall.
- (e) Portion is defined as 80 g. Based on data from a 7-day dietary record.

## Cereals

Table A2.4: Apparent consumption of cereals

Existing measures (by country)	Apparent consumption
Australia, 1998–99	g/capita/day
Wheaten flour	191
Breakfast foods	22
Table rice	20
Bread	146
Source: ABS 2000.	
Canada, 2004	
Cereal products (retail weight)	250
Source: Statistics Canada (2005c).	
Japan, 2002	
Rice	172
Wheat	87
Barley	1
Miscellaneous cereals	3
Source: Statistics Bureau (2005), Table 7-60.	
United Kingdom, 2002–03	
Household apparent consumption of total cereals including bread	238
Average household apparent consumption of fibre	14
Source: UK Expenditure and Food Survey (National Statistics (2004b), Tables 1.5, 1.3).	
United States, 2003	
Total flour and cereal products (including grains)	241
Source: Economic Research Service (2005a).	

Table A2.5: Average intakes of cereals

Existing measures (by country)	Males	Females
Australia, 1995	g/per	rson/day
Average intake of cereals and cereal products <sup>(a)</sup>	250	181
Average intake of cereal-based products and dishes <sup>(a)</sup>	154	100
Source: National Nutrition Survey (ABS & DHAC 1999).		
Japan, 2002		
Average intake of cereals <sup>#</sup>		461
Source: National Nutrition Survey (Statistics Bureau (2005), Table 21-1).		
United Kingdom, 2001–02		
Average intake of: <sup>(b)</sup>		
Pasta, rice and other miscellaneous cereals	84	62
Bread	122	81
Breakfast cereals	32	27
Source: National Diet and Nutrition Survey (National Statistics (2004a), Table 2.1 (vol. 5)).		

<sup>#</sup> Data available for 'persons' only.

Table A2.6: Usual consumption of cereals

Existing measures (by country)	Males	Females
Australia, 1995	Per cent	
Proportion meeting core food group targets (7 servings/day)	34	21
Source: National Nutrition Survey (NHMRC 2003:33).		
New Zealand, 1997		
Proportion meeting guideline of 6 or more servings per day	28	9
Proportion usually consuming:		
less than 4 servings of cereals per week	31	33
10 or more servings of cereals per week	18	13
less than 1 serving of bread per day	4	6
3–4 servings of bread per day	40	44
5 or more servings of bread per day	35	12
Source: National Nutrition Survey (Ministry of Health (1999), Table E2).		

<sup>(</sup>a) 'Cereals and cereal products' refers to basic cereals, such as rice, and cereal products, such as pasta or bread. 'Cereal-based products and dishes' refers to foods for which a cereal or product is the major component, such as cakes, fruit tarts or pizza (Cook et al. 2001b).

<sup>(</sup>b) Mean intakes for 7 day reporting period were divided by 7 to give g/day.

Table A2.7: Average intakes of fibre

Existing measures (by country)	Males	Females
Australia, 1995	g/person/day	
Average intake of fibre	26	20
Source: National Nutrition Survey (ABS 1998).		
New Zealand, 1997		
Average intake of fibre	24	18
Source: National Nutrition Survey (Ministry of Health (1999), Table A4).		
United Kingdom, 2002		
Average intake of non-starch polysaccharides (fibre)	15	13
Source: UK National Diet and Nutrition Survey (National Statistics (2004a), Table 3.14 (vol. 2)).		

## Meat, fish, poultry and/or alternatives

Table A2.8: Apparent consumption of meat, meat products and alternatives, and iron

Existing measures (by country)	Apparent consumption
Australia, 1998–99	g/capita/day
Total carcass meat	196
Bacon and ham	24
Poultry	84
Total seafood	30
Nuts (in shell)	
Peanuts	6
Tree nuts	13
Eggs (no. of eggs/capita/day)	0.4
Source: ABS 2000.	
Canada, 2004	
Red meat, carcass weight equivalent	168
Poultry, eviscerated weight equivalent	99
Fish, edible weight equivalent (2001—no data for 2004)	26
Pulses and nuts	27
Eggs (no. of eggs/capita/day)	0.5
Source: Statistics Canada (2005c).	
Japan, 2002	
Meat (g/capita/day)	78
Beef	18
Pork	31
Chicken	28
Fish and shellfish	102
Hen eggs	46
Source: Statistics Bureau (2005), Table 7-60.	

Table A2.8 (continued): Apparent consumption of meat, meat products and alternatives, and iron

Existing measures (by country)	Apparent consumption
United Kingdom, 2002–03	g/person/day
Carcass meat	33
Other meat and meat products	116
Total fish	22
Eggs (no. of eggs/capita/day)	0.2
Source: UK Expenditure and Food Survey (National Statistics (2004b), Tables 1.3, 1.5).	
United States, 2003	
Total red meat (boneless, trimmed equivalent)	139
Total poultry (boneless, trimmed equivalent)	88
Fish and shellfish (boneless, trimmed equivalent)	20
Nuts	
Peanuts (including peanut products)	8
Tree nuts (g/capita/day)	4
Eggs (no. of eggs/capita/day)	0.7
Source: Economic Research Service (2005a).	
Australia, 1997–98	mg/capita/day
Iron	14
Source: AIHW: Field et al. 2003.	
United States, 2000	
Iron	23
Source: Economic Research Service (2005a).	
United Kingdom, 2002–03	
Iron	11.9
Source: UK Expenditure and Food Survey (National Statistics (2004b), Tables 1.3, 1.5).	

Table A2.9: Average intakes of meat, meat products and alternatives

Existing measures (by country)	Males	Females
Australia, 1995	g/pe	rson/day
Average intake:		
Meat, poultry and game products and dishes	200	116
Fish and seafood products and dishes	29	23
Legumes and pulse products and dishes	12	7
Seed and nut products and dishes	5	4
Egg products and dishes	16	11
Source: National Nutrition Survey (ABS & DHAC 1999).		
Japan, 2002 *		
Average intake among adults#:		
Fish and shellfish		88
Meats		78
Eggs		37
Seeds and nuts		2
Pulses		59
Source: National Nutrition Survey (Statistics Bureau (2005), Table 21-1).		
United Kingdom, 2000–01		
Average intake:		
Meat, meat dishes and meat products <sup>(a)</sup>	200	124
Fish and fish dishes <sup>(a)</sup>	31	31
Eggs and Egg dishes <sup>(a)</sup>	22	16
Nuts <sup>(a)</sup>	2	2
Source: UK National Diet and Nutrition Survey (National Statistics (2004a), Table 2.1 (vol. 5)).		

<sup>#</sup> Data available for 'persons' only.

<sup>(</sup>a) Mean intakes for 7-day reporting period were divided by 7 to give g/day.

Table A2.10: Average intakes of iron and iron status

Existing measures (by country)	Males	Females
Australia, 1995		
Estimated average intake of iron for adults aged 19 years and over (mg/person/day)	16	12
Source: National Nutrition Survey (ABS 1998).		
Australia, 1989		
Proportion of adults with iron deficiency (aged 20–69 years) (per cent)	0.4	8
Source: National Risk Factor Prevalence Survey (Lester 1994).		
New Zealand, 1997		
Average iron intake (mg/person/day)	15	10
Proportion of people with inadequate iron intake (per cent) <sup>(a)</sup>	1	26
Proportion of people aged 15 years and over (per cent) with:		
Low iron stores <sup>(b)</sup>	0	6
Iron deficiency <sup>(b)</sup>	0	3
Iron deficiency anaemia <sup>(b)</sup>	0	2
Source: National Nutrition Survey (Ministry of Health (1999), Table A8.2, F3).		
Japan, 2002		
Average intake of iron among adults (mg/person/day) <sup>#</sup>		8
Source: National Nutrition Survey (Statistics Bureau (2005), Table 21-1).		
United Kingdom, 2000–01		
Average iron intake (mg/person/day)	14	12
Proportion of adults aged 19–64 with average iron intakes below the LRNI <sup>(c)</sup> (per cent)	1	24
Mean plasma iron (μmol/L)	17	16
Mean plasma iron per cent saturation	28	26
Source: The National Diet and Nutrition Survey (National Statistics (2004a), Tables 3.2 and 3.3 (vol. 3), 4.4 and 4.6 (vol. 4)).		
United States, 1999–2000		
Average iron intake, all ages (mg/person/day) <sup>(d)</sup>	17	13
Prevalence of iron deficiency (males 16–69, females 12–49) (per cent)	2	12
Source: NHANES (Wright et al. 2003; Looker et al. 2002) .		

<sup>#</sup> Data available for 'persons' only

<sup>(</sup>a) Calculated by probability analysis. It was assumed that all females 45 years and over were not menstruating.

<sup>(</sup>b) Note: Percentage of the population. Participants were only included in this calculation if they had a value for each of the following: ferritin, c-reactive protein, haemoglobin, and zinc protoporphyrins. Also their c-reactive protein was less than or equal to 8 mg/L.

<sup>(</sup>c) Lower Reference Nutrient Intakes.

<sup>(</sup>d) Excludes nursing infants and children.

# Milks, yoghurts, cheeses and/or alternatives

Table A2.11: Apparent consumption of milk and milk products, and calcium

Existing measures (by country)	Apparent consumption
Australia 1998–99	per capita/day
Fluid milk (ml)	281
Powdered milk (g) Full cream Skim	3 5
Condensed, concentrated and evaporated milk (g) Full cream Skim	1 3
Cheese (natural equivalent weight) (g)	29
Total (converted to milk solids fat and non-fat) (g)	64
Source: ABS 2000.	
Australia 1997–98	
Calcium (mg)	892
Source: AIHW: Field et al. 2003.	
Canada, 2004	
Fluid milk, retail weight (ml)	234
Cream, retail weight (ml)	23
Cheese, retail weight (g)	33
Other dairy products, retail weight (g)	74
Source: Statistics Canada (2005c).	
Japan, 2002	
Cow milk and dairy products (g)	254.5
Source: Statistics Bureau (2005), Table 7-60.	
United Kingdom, 2002–03	
Total milk and cream (ml)	284
Total cheese (g)	16
Calcium (mg)	993
Source: UK Expenditure and Food Survey (National Statistics (2004a), Tables 1.3, 1.	5).

Table A2.11 (continued): Apparent consumption of milk and milk products, and calcium

Existing measures (by country)	Apparent consumption
United States, 2003	per capita/day
Whole milk, total plain and flavoured (ml)	79
Lower fat and skim milk (ml)	145
Yoghurt (ml)	10
Cream (ml)	9
Specialty products (ml)	5
Cheese (g)	38
Cottage cheese (g)	3
Frozen dairy products (g)	33
Evaporated and condensed milk (g)	7
Dry dairy products (g)	5
Source: Economic Research Service (2005a).	
United States, 2000	
Calcium (mg)	960
Source: Economic Research Service (2005a).	

Table A2.12: Average intakes of milks, yoghurts, cheeses and alternatives

Existing measures (by country)	Males	Females
Australia, 1995	g/per	son/day
Average intake among adults of:		
Dairy milk	223.3	184.4
Yoghurt	11.0	16.5
Cream	3.2	2.6
Cheese	16.2	13.0
Frozen milk products	22.5	12.9
Other dishes where milk or a milk product is the major component	12.6	11.6
Milk substitutes	4.7	5.4
Flavoured milks	28.3	11.3
Source: National Nutrition Survey (ABS & DHAC 1999).		
Japan, 2002		
Average intake of milk among adults#		169
Source: National Nutrition Survey (Statistics Bureau (2005), Table 21-1).		
United Kingdom, 2000–01		
Average intake:		
Milk (whole, semi-skimmed, skimmed) <sup>(a)</sup>	217	192
Other milk and cream <sup>(a)</sup>	7	8
Cheese <sup>(a)</sup>	17	14
Yoghurt and fromage frais <sup>(a)</sup>	19	24
	F	er cent
Proportion of adults aged 19–64 years reporting 'do not have milk as a	45	56
drink'  Proportion of adults agod 10, 64 years reporting 'did not have any milk'	18	13
Proportion of adults aged 19–64 years reporting 'did not have any milk'		
Source: UK National Diet and Nutrition Survey (National Statistics (2004a), Tables 2.1 (vol. 5) and 2.2, 2.3 (vol. 1)).		

<sup>#</sup> Data available for 'persons' only.

<sup>(</sup>a) Mean intakes for 7-day reporting period were divided by 7 to give g/day.

Table A2.13: Average intakes of calcium

Existing measures (by country)	Males	Females
Australia, 1995	mg/p	person/day
Estimated average intake of calcium	946	749
Source: National Nutrition Survey (ABS 1998).		
New Zealand, 1997		
Average calcium intake	908	735
Proportion with inadequate daily calcium intake <sup>(a)</sup> (per cent)	14	25
Source: National Nutrition Survey (Ministry of Health (1999), Table A8.1).		
Japan, 2002		
Average intake of calcium <sup>#</sup>		546
Source: National Nutrition Survey (Statistics Bureau (2005), Table 21-1).		
United Kingdom, 2000–01		
Average calcium intake	1,016	809
Proportion of adults aged 19–64 with average calcium intakes below the LRNI <sup>(b)</sup> (per cent)	2	5
Source: The National Diet and Nutrition Survey (National Statistics (2004a), Table 3.12 (vol. 3)).		
United States, 1999–2000		
Average calcium intake	966	765
Source: NHANES, all ages <sup>(c)</sup> (Wright et al. 2003).		

<sup>#</sup> Data available for 'persons' only.

<sup>(</sup>a) Calculated by probability analysis.

<sup>(</sup>b) Lower Reference Nutrient Intakes.

<sup>(</sup>c) Excludes nursing infants and children.

## **Fluids**

Table A2.14: Average intakes of fluids

Existing measures (by country)	Males	Females
Australia, 1995	g/per	son/day
Average intake among adults:		
Total moisture <sup>(1)</sup>	3,426	2,817
Non-alcoholic beverages: <sup>(2)</sup>	2,052	1,917
Mineral waters and water <sup>(a)</sup>	855	849
Tea	345	452
Coffee and substitutes	475	379
Soft drinks, flavoured mineral waters and electrolyte drinks	236	126
Source: National Nutrition Survey (1) ABS 1998; (2) ABS & DHAC 1999.		
New Zealand, 1997	Pe	r cent
Per cent consuming 'regularly' (b)		
Water	74	85
Carbonated drinks	30	18
Fruit juice	27	25
Powdered drinks	23	18
Diet carbonated drinks	7	10
Cordial	7	4
Sports drinks	5	2
Fruit drinks	3	3
Tea	58	65
Coffee	64	58
Herbal tea	4	11
Source: National Nutrition Survey (Ministry of Health (1999), Table E6).		
Japan, 2002	g/ca	pita/day
Average intake of beverages among adults#		532
Source: National Nutrition Survey (Statistics Bureau (2005), Table 21-1).		

Table A2.14 (continued): Average intakes of fluids

Existing measures (by country)	Males	Females
United Kingdom, 2000–01	g/pe	erson/day
Average intakes of beverages:(c)		
Fruit juice	48	47
Soft drinks, not low calorie	154	100
Soft drinks, low calorie	85	101
Tea, coffee and water	977	991
Source: The National Diet and Nutrition Survey (National Statistics (2004a), Table 2.1 (vol. 5)).		

<sup>#</sup> Data available for 'persons' only

<sup>(</sup>a) Tap water, bottled water or plain mineral water.

<sup>(</sup>b) 'Regularly' includes all those who consume these beverages at least 3 times per week.

<sup>(</sup>c) Mean intakes for 7-day reporting period were divided by 7 to give g/day.

## Fat

Table A2.15: Fat intake

Existing measures (by country)	Males	Females
Australia, 2001		
Proportion consuming whole cow's milk (aged 12 and over)	56	42
Source: National Health Survey (ABS 2003a).		
Australia, 1995		
Average daily intake of fat for adults (g/person/day)	99	68
Average contribution of fat to energy intake (per cent total energy)	32	33
Average contribution of saturated fat to energy intake (per cent total energy)	13	13
Source: National Nutrition Survey (ABS 1998).		
New Zealand, 1997		
Average fat intake (g/person/day)	114	75
Average contribution of fat to energy intake (per cent total energy)	35	35
Average contribution of saturated fat to energy intake (per cent total energy)	15	15
Proportion usually choosing standard milk (per cent)	66	54
Proportion who remove chicken skin (per cent)		
Always	17	24
Often	18	25
Proportion who trim excess fat from pork, beef, mutton, hogget, or lamb (per cent)		
Always	32	45
Often	28	27
Source: National Nutrition Survey (Ministry of Health (1999), Tables A2.1, A2.2, A2.3, D7.2).		
France, 1993–94		
Average contribution of fat to energy intake (per cent total energy)	38	40
Average contribution of saturated fat to energy intake (per cent total energy)	15	16
Source: Volatier & Verger (1999).		
Japan, 2002		
Average intake of fats and oils among adults (g/person/day)#		11
Source: National Nutrition Survey (Statistics Bureau (2005), Table 21-1).		

Table A2.15 (continued): Fat intake

Existing measures (by country)	Males	Females
United Kingdom, 2000–01		
Average fat intake (g/person/day)	87	61
Average contribution of fat to energy intake (per cent total energy)	36	35
Average contribution of saturated fat to energy intake (per cent total energy)	13	13
Proportion choosing whole cow's milk (per cent):		
As a drink	18	12
On cereal/in puddings	22	19
Source: The National Diet and Nutrition Survey (National Statistics (2004a), Tables 5.1, 5.2, 5.4 (vol. 2), 2.2, 2.3 (vol. 1)).		
United States, 1999–2000		
Average fat intake (g/person/day) (Ervin et al. 2004)	91	67
Average contribution of fat to energy intake (per cent total energy) (Wright et al. 2003)	33	33
Average contribution of saturated fat to energy intake (per cent total energy) (Wright et al. 2003)	11	11
Source: NHANES, all ages. (a)		

<sup>#</sup> Data available for 'persons' only.

<sup>(</sup>a) Excludes nursing infants and children.

## Salt

Table A2.16: Salt intake and use

Existing measures (by country)	Males	Females
Australia, 2001		
Proportion of people who add salt to food after it is cooked (aged 12 and over) (per cent)		
Never/rarely	49	60
Sometimes	21	18
Usually	30	21
Source: National Health Survey (ABS 2003a).		
United Kingdom, 2000–01		
Average dietary sodium intake (mg/person/day) estimated from total urinary sodium <sup>(a)</sup>	4,310	3,186
Average salt intake (g/person/day) estimated from total urinary sodium	11	8
Source: The National Diet and Nutrition Survey (National Statistics (2004a), Tables 4.1, 4.2 (vol. 3)).		
United States, 1999–2000		
Average sodium intake (mg/person/day)	3,877	2,896
Source: NHANES, all ages <sup>(b)</sup> (Wright et al. 2003).		

<sup>(</sup>a) Converted from mmol/24 h to mg/day where 1 mmol is equal to 23 mg.

<sup>(</sup>b) Excludes nursing infants and children.

## **Alcohol**

Table A2.17: Apparent consumption of alcohol

Existing measures (by country)	Apparent consumption
Australia, 2003–04	g/capita/day
Apparent consumption of alcohol	21
Source: ABS 2005.	
New Zealand, 2004	
Apparent consumption of alcohol per person 15 years and over	25
Source: Statistics New Zealand 2005.	
France, 2003	
Annual average consumption of alcohol per person 15 years and over	38
Source: INSEE 2005.	
United Kingdom, 2002–03	
Average household consumption of alcohol	11
Source: UK Expenditure and Food Survey (National Statistics (2004b), Table 1.3).	
USA, 2002	
Apparent consumption of alcohol (ethanol) per person 14 years and over	23
Source: Lakins et al. (2004), Table 1.	

Note: Converted (where applicable) to g/capita/day from published figures.

Table A2.18: Alcohol intake and use

Existing measures (by country)	Males	Females
Australia, 1995	g/per	son/day
Average alcohol intake among adults	19	7
Average alcohol intake among adults who consumed alcohol on the survey day	44	30
Source: National Nutrition Survey (ABS 1998).		
New Zealand, 1997		
Average alcohol intake	20	8
Source: National Nutrition Survey (Ministry of Health (1999), Table A5).		
United Kingdom, 2000–01		
Average alcohol intake	22	9
Source: The National Diet and Nutrition Survey (National Statistics (2004a), Tables 4.1, 4.3 (vol. 2)).		

Table A2.18 (continued): Alcohol intake and use

Existing measures (by country)	Males	Females
Australia, 2004	Per	cent
Proportion consuming alcohol at risky and high-risk levels (short-term harm) (14 years and over):		
At least weekly	10	6
At least monthly	14	12
At least yearly	16	14
Proportion consuming alcohol at risky or high-risk levels (long-term harm)	10	10
Source: National Drug Strategy Household Survey (AIHW 2005a)		
New Zealand, 2002–03		
Proportion of adult drinkers with a potentially hazardous drinking pattern	25	10
Source: National Health Survey (Ministry of Health (2004), Tables 11, 12).		
Canada, 2003		
Heavy episodic/binge drinker (5 or more, 12 or more occasions per year) (12 years and over)	29	12
Source: Canadian Community Health Survey (Statistics Canada 2005a).		
Canada, 2004		
Prevalence of heavy drinking among past year drinkers <sup>(a)</sup>		
At least once per week	9	3
At least once per month	34	17
Percentage exceeding low-risk drinking guidelines among past-year drinkers	30	15
Source: Canadian Addiction Survey (Health Canada (2005), Tables 3.4, 3.5).		
Japan, 2002		
Heavy episodic/binge drinker (5 or more standard drinks per usual drinking occasion)	11	2
Source: WHO (2005) (adults aged 20+).		
United Kingdom, 2000–01		
Proportion of adults consuming at levels:		
Greater than the daily guidelines on at least 1 day during the 7-day reporting period <sup>(b)</sup>	60	44
Greater than the weekly guidelines over the 7-day reporting period <sup>(b)</sup>	36	22
Source: The National Diet and Nutrition Survey (National Statistics (2004a), Tables 4.1, 4.3 (vol. 2)).		
United States, 2004		
Median proportion of heavy drinkers and binge drinkers <sup>(c) #</sup>		
Heavy drinkers		6
Binge drinkers		16
Source: Behavioral Risk Factor Surveillance System (National Center for Chronic Disease Prevention and Health Promotion 2005).		

<sup>#</sup> Data available for 'persons' only.

<sup>(</sup>a) Heavy drinking is defined as five drinks or more on a single occasion for men, and four or more drinks on a single occasion for women.

<sup>(</sup>b) Current guidelines are a maximum daily amount of 4 units for men and 3 units for women. Weekly guidelines were set at a maximum number of 21 units of alcohol a week for men, and 14 units a week for women.

<sup>(</sup>c) Heavy drinking is defined as having more than two drinks per day (men) and more than one drink per day (women); binge drinking is defined as having five or more drinks on one occasion.

# **Sugars**

Table A2.19: Apparent consumption of sugar

Existing measures (by country)	Apparent consumption
Australia, 1998–99	g/capita/day
Cane sugar	103
Total sugar	119
Source: ABS (2000).	
Canada, 2001	
Sugars and syrups	99
Source: Statistics Canada (2005c).	
Japan, 2002	
Sugar	55
Source: Statistics Bureau (2005), Table 7-60.	
United States 2003	
Total caloric sweeteners, including honey	176
Source: Economic Research Service (2005a).	
United Kingdom, 2002–03	
Mean household apparent consumption of total sugar	136
Mean household apparent consumption of non-milk extrinsic sugars	92
Source: UK Expenditure and Food Survey (National Statistics (2004b), Table 1.3).	

Table A2.20: Average intakes of sugar

Existing measures (by country)	Males	Females
Australia, 1995	g/pe	erson/day
Average daily intake among adults of:		
Sugar, honey and syrups	16.8	9.1
Total sugar	133.5	97.0
Sugar as a proportion of total energy intake:	19.3	20.8
Added sugars	10.4	9.4
Natural sugars	8.9	11.4
Source: National Nutrition Survey (ABS & DHAC 1999; ABS 1998; Cobiac et al. 2003).		
New Zealand, 1997		
Average sugar intake:	139	105
Glucose	24	19
Lactose	16	14
Fructose	25	20
Maltose	5	3
Sucrose	69	49
Source: National Nutrition Survey (Ministry of Health (1999), Table A3.2).		
Japan, 2002		
Average intake of sugar and preserves among adults#		7
Source: National Nutrition Survey (Statistics Bureau (2005), Table 21-1).		
United Kingdom, 2000–01		
Average intake of sugars, preserves and sweet spreads	19	11
Average sugar intake		
Non-milk extrinsic sugars	79	51
Intrinsic and milk sugars	39	37
Source: UK National Diet and Nutrition Survey (National Statistics (2004a), Tables 3.8, 3.11 (vol. 2), 2.1 (vol.5)).		

<sup>#</sup> Data available for 'persons' only.

# Energy intake, physical activity, and overweight

Table A2.21: Average intakes of energy

Existing measures (by country)	Males	Females
Australia 1995	kJ/pe	rson/day
Average energy intake	11,050	7,481
Average ratio of energy intake to basal metabolic rate (ratio)	1.5	1.3
Source: National Nutrition Survey (ABS 1998).		
New Zealand, 1997		
Average energy intake	11,942	7,969
Source: National Nutrition Survey (Ministry of Health (1999), Table A1).		
France, 1993–94		
Average energy intake	10,000	7,200
Source: Volatier & Verger (1999).		
Japan, 2002		
Average energy intake <sup>#</sup>		8,075
Source: National Nutrition Survey (Statistics Bureau (2005), Table 21-1).		
United Kingdom, 2000–01		
Average energy intake	9,678	6,828
Source: UK National Diet and Nutrition Survey Adults (National Statistics (2004a), Table 2.3 (vol. 2)).		
United States, 1999–2000		
Average energy intake	10,355	7,669
Source: NHANES, all ages <sup>(a)</sup> (Wright et al. 2003).		

<sup>#</sup> Data available for 'persons' only.

<sup>(</sup>a) Excludes nursing infants and children.

Table A2.22: Physical activity

Existing measures (by country)	Males	Females
Australia, 2000	Pe	r cent
Proportion of adults (18–75 years) reporting insufficient physical activity <sup>(a)</sup>	54	55
Source: AIHW analysis of the 2000 National Physical Activity Survey.		
New Zealand, 2002-03		
Proportion sedentary (<30 mins physical activity in the last week)	11	15
Source: National Health Survey (Ministry of Health (2004), Tables 11, 12).		
Canada, 2003		
Proportion of people physically inactive in leisure time <sup>(b)</sup>	44	50
Source: Canadian Community Health Survey (Statistics Canada 2005a).		
France, 1993–94		
Proportion undertaking no exercise <sup>#</sup>		35
Source: (Vaz de Almeida et al. 1999).		
Japan, 2002		
Proportion undertaking physical activity (more than twice per week, 30 minutes or more per occasion, continued for more than 1 year)	32	28
Source: National Nutrition Survey (WHO 2005).		
United Kingdom, 2000–01		
Proportion self-reporting 'not at all physically active'	5	6
Proportion participating in 30 minutes or more physical activity of at least moderate intensity:		
None	21	20
One or two days a week	24	31
Three or four days a week	19	23
Five or more days a week	36	26
Source: National Diet and Nutrition Survey (National Statistics (2004a), Tables 5.1, 5.4 (vol. 4)).		
United States, 2003#		
Proportion of adults who do not undertake:#(c)		
Moderate physical activity (median per cent)		53
Vigorous physical activity (median per cent)		74
Source: Behavioral Risk Factor Surveillance System (National Center for Chronic Disease Prevention and Health Promotion 2005).		

- # Data available for 'persons' only.
- (a) 'Sufficient' physical activity is at least 150 minutes of activity accrued over at least five separate sessions in the previous week.
- (b) Respondents are classified as inactive based on an index of average daily physical activity over the past 3 months. For each leisure time physical activity engaged in by the respondent, an average daily energy expenditure is calculated by multiplying the number of times the activity was performed by the average duration of the activity by the energy cost (kilocalories per kilogram of body weight per hour) of the activity. The index is calculated as the sum of the average daily energy expenditures of all activities. Inactive = less than 1.5 kcal per day.
- (c) 'Moderate physical activity' is defined as 30+ minutes of moderate physical activity 5 or more days per week, or vigorous physical activity for 20+ minutes 3 or more days per week; 'vigorous physical activity' is defined as 20+ minutes of vigorous physical activity 3 or more days per week.

Table A2.23: Overweight and obesity

Existing measures (by country)	Males	Females
Australia, 1999–2000	Per	cent
Proportion of adults who are overweight or obese (BMI) <sup>(a)</sup>		
Overweight (total)	67	52
Overweight but not obese	48	30
Obese	19	22
Proportion of adults who are abdominally obese (waist circumference)		
Increased risk (total)	56	56
Increased risk <sup>(b)</sup>	28	22
Substantially increased risk	27	34
Source: AlHW analysis of the 1999–2000 Australian Diabetes, Obesity and Lifestyle (AusDiab) Study (measured height, weight and waist circumference).		
New Zealand, 2002–03		
Proportion overweight but not obese(25.0 < BMI <30.0)	42	28
Proportion obese (BMI >=30)	20	22
Proportion gaining 10 kg or more since turning 18 (NZ)	58	56
Proportion abdominally obese <sup>(c)</sup>	28	37
Source: National Health Survey (Ministry of Health (2004), Tables 11 and 12) (measured height, weight and waist circumference).		
New Zealand, 1997		
Proportion with excess waist-hip ratio (d)	48	36
Source: National Nutrition Survey (Ministry of Health (1999), Table F1) (measured waist and hip circumference).		
Canada, 2004		
Proportion overweight but not obese (25.0 <bmi <30.0)<="" td=""><td>42</td><td>30</td></bmi>	42	30
Proportion obese (BMI>= 30)	23	23
Source: Canadian Community Health Survey: Nutrition Focus (Statistics Canada 2005b) (measured height and weight).		
France, 1997 #		
Proportion overweight but not obese (25.0 <bmi <30.0)<="" td=""><td></td><td>23</td></bmi>		23
Proportion obese (BMI>= 30)		7
Source: (Vaz de Almeida et al. 1999) (self-reported height and weight).		

Table A2.23 (continued): Overweight and obesity

Existing measures (by country)	Males	Females
Japan, 2002	Per cent	
Proportion overweight (BMI >=25) <sup>(e)</sup>		
20–29	18	7
30–39	31	11
40–49	32	19
50–59	32	26
60–69	30	33
70+	26	31
Source: National Nutrition Survey (WHO 2005) (measured height and weight).		
United Kingdom 2000–01		
Proportion overweight but not obese (25.0 <bmi <30.0)<="" td=""><td>42</td><td>32</td></bmi>	42	32
Proportion obese (BMI >=30)	25	20
Proportion with waist circumference indicating a substantially increased risk of metabolic complications of obesity $^{\rm (c)}$	29	26
Source: National Diet and Nutrition Survey (National Statistics (2004a), vol. 4:17, 18) (measured height, weight and waist circumference).		
United States, 1999–2002		
Proportion obese (BMI >=30)	27	32
Source: NHANES 1999–2002 (WHO 2005) (age 20+) (measured height and weight).		
United States, 2003		
Proportion overweight but not obese (25.0 = <bmi <30.0)<="" td=""><td>44</td><td>28</td></bmi>	44	28
Proportion obese (BMI >=30)	23	23
Source: National Health Interview Survey (age 18+) (Lethbridge-Çejku & Vickerie (2005), Table 31) (self-reported height and weight).		

<sup>#</sup> Data available for 'persons' only.

 $<sup>\</sup>hbox{(a)} \qquad \text{Results are based on body mass index calculated from measured height and weight.}$ 

<sup>(</sup>b) But not substantially increased risk.

<sup>(</sup>c) Waist circumference greater than 102 cm for men and greater than 88 cm for women.

<sup>(</sup>d) Percentage with a W/H ratio >0.9 for men and >0.8 for women.

<sup>(</sup>e) Data available for age groups only.

# **Food safety**

Table A2.24: Foodborne illness

Existing measures (by country)	Number of outbreaks	
Australia, 2003		
Number of outbreaks by vehicle category		
Cakes	4	
Custard	1	
Dessert	1	
Dips	1	
Eggs	1	
Fish	10	
Mixed dish	5	
Mixed meat dish	6	
Oysters	4	
Pizza	4	
Pork	1	
Poultry	6	
Salad	1	
Sandwiches	3	
Seafood	6	
Suspected eggs	2	
Suspected poultry	2	
Suspected red meat	1	
Suspected water	1	
Vegetable dish	1	
Unknown	57	
Total	118	

Table A2.24 (continued): Foodborne illness

Existing measures (by country)	Number of outbreaks	
Australia (continued), 2003		
Number of outbreaks by setting category:		
Aged care	5	
Bakery	4	
Café	2	
Camp	1	
Commercial caterer	16	
Contaminated primary produce	7	
Grocery store/delicatessen	2	
Hospital	4	
Institution	2	
National franchised fast food	7	
Private residence <sup>(a)</sup>	14	
Restaurant	40	
Takeaway	8	
Other	1	
Unknown	5	
Total	118	
Source: OzFoodNet Working Group 2005.		
United States, 2003		
Number of food borne disease outbreaks by etiology:		
Bacterial	196	
Chemical	54	
Parasitic	3	
Viral	149	
Multiple etiologies	7	
Unknown etiologies	664	
Total	1073	
Source: Foodborne Outbreak Response and Surveillance Unit 2005 (detail on vehicles and locations available for each etiology).		

Table A2.24 (continued): Foodborne illness

Existing measures (by country)	Number of outbreaks
New Zealand, 2003	
Number of reported cases by vehicle:	
Beef	12
Chicken	63
Chicken burger	4
Chicken liver	8
Chicken OR untreated water	3
Chicken pie	4
Chicken pizza	5
Contaminated fruit	12
Dairy	5
Eggs	5
Falafel <sup>(b)</sup>	2
Fish, seafood, shellfish	47
Lamb	4
Mayonnaise	3
Meat <sup>(c)</sup>	43
Meat OR untreated water	2
Mixture <sup>(d)</sup>	77
Pork	19
Rice	13
Tahini	6
Unknown	288
Vegetables	8
Water	5
Number of reported cases by setting:	
Commercial food operators	582
Institutions	1381
Community groups	83
Workplace	63
Household	352
Other	461
Source: Public Health Surveillance (2004).	

Table A2.24 (continued): Foodborne illness

Existing measures (by country)	Number of laboratory reports
United Kingdom 2003	
Number of laboratory reports for:	
Campylobacter	49,309
Salmonella	16,354
Clostridium perfringens <sup>(e)</sup>	55
E. coli	876
Listeria monocytogenes	239
All pathogens being monitored	66,833
Source: Advisory Committee on the Microbiological Safety of Food (2004).	

- (a) Includes one outbreak where food prepared included food prepared by takeaway stores.
- (b) Served as a kebab—may have included imported tahini.
- (c) Infers a mixture of meat products, e.g. beef, lamb, pork, chicken.
- (d) Infers a mixture of products, e.g. egg, pork, lamb, chicken, vegetables.
- (e) England and Wales figures not available.

### **Breastfeeding**

Table A2.25: Breastfeeding

Existing measures (by country)	Infants
Australia, 2001	Per cent
Proportion of infants ever breastfed (aged 0–3 years)	87
Proportion of children receiving any breastmilk at:	
6 months	48
12 months	23
Proportion of infants fully breastfed:	
at 3 months	54
at 6 months	32
Source: National Health Survey (ABS 2003b).	
New Zealand, 2004	
Breastfeeding practices—infants aged 6 weeks <sup>(a)</sup>	
Exclusive	50
Full	18
Partial	14
Breastfeeding practices—infants aged 3 months <sup>(a)</sup>	
Exclusive	37
Full	18
Partial	15
Source: Royal New Zealand Plunket Society 2004.	
Canada 2003	
Breastfeeding practices, females aged 15 to 55 who had a baby in the previous 5 years <sup>(b)</sup>	
Initiated breastfeeding	85
Breastfed at least 4 months	48
Breastfed at least 4 months exclusively	38
Breastfed at least 6 months	39
Breastfed at least 6 months exclusively	19
Source: Canadian Community Health Survey (Statistics Canada, 2005a).	

Table A2.25 (continued): Breastfeeding

Existing measures (by country)	Infants
United Kingdom 2000	Per cent
Percentage who breastfed initially	69
Breastfeeding prevalence at:	
1 week	55
2 weeks	52
6 weeks	42
4 months	28
6 months	21
8 months	16
9 months	13
Percent exclusively breastfed at:	
3–6 weeks	29
6–8 weeks	25
8 weeks-3 months	20
3–5 months	16
5–7 months	10
7–9 months	7
9–10 months	7
10–12 months	4
Source: Feeding Survey (Hamlyn et al. (2002), Tables 2.1, 2.12, 2.24).	
United States 1993–94	
Per cent of babies breastfed	58
Per cent of babies breastfed for 3 months or more	56
Source: National Survey of Family Growth (National Center for Health Statistics (2004), Table 18).	

<sup>(</sup>a) New Zealand Ministry of Health definitions (Ministry of Health 2002):

Exclusive breastfeeding: The infant has never, to the mother's knowledge, had any water, formula or other liquid or solid food. Only breastmilk, from the breast or expressed, and prescribed medicines have been given from birth.

Full breastfeeding: The infant has taken breastmilk only, and no other liquids or solids except a minimal amount of water or prescribed medicines, in the past 48 hours. (This matches the WHO exclusive rate indicator.)

Partial breastfeeding: The infant has taken some breastmilk and some infant formula or other solid food in the past 48 hours.

(b) Analysis excludes non-response ('don't know', 'not stated' and 'refusal'). Exclusive breastfeeding refers to an infant receiving only breastmilk, without any additional liquid (even water) or solid food.

## **Food security**

Table A2.26: Food security

		Women
Australia, 2001	Per cent	
Proportion who ran out of food in the last 12 months and did not have money to buy more (adults 18 years and over)	5	6
Source: National Health Survey (ABS 2003a).		
New Zealand 1997 <sup>(a)</sup>		
The household can afford to eat properly		
Always	87	85
Sometimes	12	14
Because of lack of money, the household:		
Food runs out		
Often	1	2
Sometimes	10	14
Eat less		
Often	1	2
Sometimes	11	12
Variety of foods limited		
Often	4	6
Sometimes	21	23
Rely on others		
Often	1	2
Sometimes	5	7
Use grants/food banks		
Often	0	•
Sometimes	2	
The household:		
Stressed about lack of money for food		
Often	1	;
Sometimes	8	12
Stressed when no food for social occasions		
Often	1	2
Sometimes	8	13

Table A2.26 (continued): Food security

Existing measures (by country)	Men	Womer
Canada, 1998–99 <sup>#</sup>	Pe	r cent
Total proportion of people food insecure		9
Proportion of people food insecure—anxious that there would not be enough food to eat <sup>(b)</sup>		7
Proportion of people food insecure—compromised diet (not eating the quality or the variety of foods that they wanted) <sup>(b)</sup>		7
Proportion of people food insecure—food poor (not having enough food to eat) <sup>(b)</sup>		4
Source: Canada National Population Health Survey 1998-99 (Rainville & Brink (2001), Table 3.1).		
United States, 2004#		
Total proportion of households food insecure:	1	2
Without hunger		8
With hunger		4

<sup>#</sup> Data available for 'persons' only.

<sup>(</sup>a) Percentage of population response—other options ('never' and 'don't know') are not reported.

<sup>(</sup>b) Not mutually exclusive categories.

#### **Folate**

Table A2.27: Folate intake, status and use

Existing measures (by country)	Males	Females
Australia, 1995	μg/pe	erson/day
Average daily folate intake	307	233
Source: National Nutrition Survey (ABS 1998).		
New Zealand 1997		
Average folate intake	286	220
Source: National Nutrition Survey (Ministry of Health (1999), Tables A7.2, C1).		
United Kingdom 2000–01		
Average folate intake	359	292
Source: UK National Diet and Nutrition Survey (National Statistics (2004a), Tables 2.2, 2.27 (vol. 3), 2.6 (vol. 1), 4.14, 4.15 (vol. 4)).		
United States 1999–2000		
Average folate intake, all ages <sup>(a)</sup>	405	319
Source: NHANES (Wright et al. 2003).		
Australia, 2001	Per	cent
Proportion of women of child-bearing age (18–49 years) intentionally using:		
Folate-fortified foods	*	7
Folate-fortified drinks		2
vitamin/mineral supplements for folate		7
Source: National Health Survey (ABS 2003a).		
New Zealand 1997		
Proportion taking folic acid supplements <sup>(b)</sup>	0	1
Proportion with inadequate folate intake (%)	1	13
Source: National Nutrition Survey (Ministry of Health (1999), Tables A7.2 and C1).		
United Kingdom 2000–01		
Proportion taking folic acid supplements (%)		
Prescribed folic acid	n.a.	2
Non-prescribed folic acid only	0	6
Proportion of adults with average folate intakes below the LRNI <sup>(c)</sup> (%)	0	2
Source: UK National Diet and Nutrition Survey (National Statistics (2004a), Tables 2.2, 2.27 (vol. 3), 2.6 (vol. 1), 4.14, 4.15 (vol. 4)).		

Table A2.27 (continued): Folate intake, status and use

Existing measures (by country)	Males	Females
United Kingdom 2000–01	nmol/L	
Average red cell folate (nmol/L)	694	685
Average serum folate (nmol/L)	21	22
Source: UK National Diet and Nutrition Survey (National Statistics (2004a), Tables 2.2, 2.27 (vol. 3), 2.6 (vol. 1), 4.14, 4.15 (vol. 4)).		
United States 1999–2000	n	g/ml
Mean serum folate (women aged 15–44 years)	n.a.	16
Mean red blood cell folate (women aged 15–44 years)	n.a.	315
Source: NHANES (National Centre for Health Statistics 2000).		

<sup>\*</sup> Men not surveyed.

- n.a. not available.
- (a) Excludes nursing infants and children.
- (b) Does not include multivitamin supplements.
- (c) Lower Reference Nutrient Intakes.

Table A2.28: Apparent consumption of folate

Existing measures (by country)	Apparent consumption
Australia, 1997–98	μg/capita/day
Folate	320
Source: AlHW: Field et al (2003).	
United Kingdom, 2002–03	
Folate <sup>(a)</sup>	288
Source: UK Expenditure and Food Survey (National Statistics (2004a), Table 5.1).	
United States, 2000	
Folate (DFE)	907
Source: Economic Research Service (2005a).	

<sup>(</sup>a) contributions from pharmaceutical sources not included.

# **Glossary**

- **anaemia** A reduced level of haemoglobin, the protein that carries oxygen in the red blood cells. It has many causes, including bleeding (loss of red blood cells), low production of red blood cells, and processes that damage them. It can cause paleness, tiredness and even breathlessness.
- **apparent consumption** A measure of the food supply available for human consumption after allowing for other uses and losses (see Appendix 1 for further detail).
- **basal metabolic rate (BMR)** Represents the amount of energy expended at rest over a 24-hour period by an individual. The energy intake to BMR ratio provides an indication of whether the reported energy intake for one day is consistent with the energy intake required for a person to live a normal (not bed-bound) lifestyle.
- **blood cholesterol** Fatty substance produced by the liver and carried by the blood to supply the rest of the body. Its natural function is to supply material for cell walls and for steroid hormones, but if levels in the blood become too high, this can lead to atherosclerosis and heart disease.
- **blood pressure** The force exerted by blood against the walls of the arteries. The force is created by the pumping action of the heart, at contraction (systolic) and at relaxation (diastolic).
- **body mass index (BMI)** The most commonly used method of assessing whether a person is healthy weight, underweight, overweight or obese. It is calculated by dividing the person's weight (in kilograms) by their height (in metres) squared, i.e.  $kg \div m^2$ .
- **cancer** A range of diseases where some of the body's cells begin to multiply out of control, can invade and damage the area around them, and can also spread to other parts of the body to cause further damage.
- **cardiovascular disease** Any disease of the heart (cardio) or blood vessels (vascular). Includes heart attack, angina, stroke and peripheral disease. Also known as circulatory disease.

**cholesterol** See *blood cholesterol*.

**dental caries** Tooth decay.

- diabetes (diabetes mellitus) A chronic condition in which the body makes too little of the hormone insulin, or cannot use it properly. This raises the blood level of the body's major energy source, the sugar glucose, and causes other widespread disturbance of the body's energy processes. The three main types of diabetes are Type 1 diabetes, Type 2 diabetes and gestational diabetes.
- **epidemic** An outbreak of a disease or its occurrence at a level that is clearly higher than previously existed.

- **HDL cholesterol** Cholesterol packaged in high-density lipoprotein particles. The HDLs are good acceptors of membrane-free cholesterol and transport it back from tissues to the liver (compare with *LDL cholesterol*).
- **health** Term relating to whether the body (which includes the mind) is in a good or bad state. With good health the state of the body and mind are such that a person feels and functions well and can continue to do so for as long as possible.
- **immuno-compromised** Having an immune system that has been impaired by disease or treatment.
- **indicator** A key statistic chosen to describe (indicate) a situation concisely, help assess progress and performance, and act as a guide to decision making. It may have an indirect meaning as well as a direct one; for example, Australia's overall death rate is a direct measure of mortality but is often used as a major indicator of population health.
- **insulin** A hormone produced in the pancreas that helps glucose to enter body cells for energy metabolism.
- **LDL cholesterol** Cholesterol packaged in low-density lipoprotein particles. LDLs carry cholesterol to the various tissues for use (compare with *HDL cholesterol*).
- **median** The midpoint of a list of observations ranked from the smallest to the largest.
- **neural tube defects** Defects such as spina bifida and anencephalus that have arisen in the neural tube, the part of the embryo that develops into the brain and spinal cord.
- **obesity** Marked degree of overweight, defined as *body mass index* 30 and over. See also *overweight*.
- **osteoporosis** Thinning and weakening of the bone substance, with a resulting risk of fracture.
- **overweight** Defined as *body mass index* 25 and over. See also *obesity*.
- **Population-adjusted RDI** A population-weighted RDI. This allows for assessment of the adequacy of the food supply in relation to the needs of the population.
- **prevalence** The number or proportion (of cases, instances, etc.) present in a population at a given time.
- **prevention (of disease)** Action to reduce or eliminate the onset, causes complications or recurrence of disease.
- public health Term variously referring to the level of health in the population, to actions that improve that level or to related study. Activities that aim to benefit a population tend to emphasise prevention, protection and health promotion as distinct from treatment tailored to individuals with symptoms. Examples include provision of a clean water supply and good sewerage, conduct of anti-smoking education campaigns, and screening for diseases such as cancer of the breast and cervix.

- **recommended dietary intake (RDI)** the levels of intake adequate to meet the known nutritional needs of practically all healthy people. RDIs exceed the actual requirements of practically all healthy persons and are not synonymous with requirements.
- **risk factor** Any factor which represents a greater risk of a health disorder or other unwanted condition or event. Some risk factors are regarded as causes of disease; others are not necessarily so.
- saturated fats Fats, most often of animal origin, that are solid at room temperature and whose fatty acid chains cannot incorporate additional hydrogen atoms. In excess, they tend to raise *blood cholesterol*.
- **statistical significance** An indication from a statistical test that an observed difference or association may be significant or 'real' because it is unlikely to be due just to chance. A statistical result is usually said to be 'significant' if it would occur by chance only once in twenty times or less often.
- **underweight** Defined as *body mass index* less than 18.5.

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