# Glossary

**adequate intake (AI)** the average daily nutrient intake level based on observed or experimentally-determined approximations or estimates of nutrient intake by a group (or groups) of apparently healthy people that are assumed to be adequate. Used when an RDI cannot be determined.

**estimated average requirement (EAR)** a daily nutrient level estimated to meet the requirements of half the healthy individuals in a particular life stage and gender group (used to estimate the prevalence of inadequate intakes within a group).

**recommended dietary intake (RDI)** the average daily dietary intake level that is sufficient to meet the nutrient requirements of nearly all (97–98%) healthy individuals in a particular life stage and gender group.

## Appendix 1—Data sources

#### 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), 2004-05

The 2004–05 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 25,900 people. The 2004–05 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 (Marks et al. 2001). These data provide valuable trend data in the interim years between the more detailed dietary surveys. Data on breastfeeding were also collected in the 2004–05 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 and median 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.

# Appendix 2—Adjusting the National Nutrition Survey data

The NNS nutrient intake data from the 24-hour recall were adjusted using the formula in ABS (1998:123).

Individual adjusted value = group mean + (individual value – group mean) x (S<sub>b</sub>/S<sub>obs</sub>) Where:

 $S_b$  is the between-person standard deviation estimated from the replicate sample (Day 2 sample) and  $S_{obs}$  is the observed standard deviation for Day 1 intakes for the age groups.

 $S_b$  was calculated using the age groups 2–8 years and 9–18 years, as ABS (1998:123) notes that collapsed age groups were used because some cells had insufficient sample for the final age groups.

Means within each group were calculated using the total weighted Day 1 sample.

Note that pregnant and breastfeeding respondents were excluded.

# **Appendix 3—Additional tables**

#### Table A1: Average daily cereal intakes, 1995

Measure	2–3 years	4–7 years	8–11 years	12–15 years	16–18 years		
	Males (g/person/day)						
Average intake of cereals and cereal products	136.1	168.1	208.1	250.0	269.9		
Average intake of cereal-based products and dishes	68.1	111.3	154.5	159.2	199.8		
	Females (g/person/day)						
Average intake of cereals and cereal products	132.0	140.4	175.7	175.7	194.6		
Average intake of cereal-based products and dishes	67.7	83.4	116.2	120.7	134.9		

Notes

1. Data from the 1995 NNS, from a single 24-hour recall.

2. '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. 2001).

3. It is not possible to directly compare intakes in grams (as published) with AGHE recommendations due to the variety of food types and composite foods in the above categories.

Source: ABS & DHAC 1999.

Measure	2–3 years	4–7 years	8–11 years	12–15 years	16–18 years		
	Males (g/person/day)						
Muscle meat	11.3	19.2	26.8	48.4	51.5		
Poultry	9.0	9.0	12.1	17.7	37.8		
Organ meats and offal, products and dishes	_	**0.1	**0.1	**0.6	_		
Sausages, frankfurts and saveloys	*8.3	8.6	16.4	15.1	*8.5		
Processed meats	*6.8	*2.9	*6.2	*4.7	*6.9		
Mixed dishes (beef/veal)	*17.3	20.9	23.4	35.0	55.2		
Mixed dishes (lamb/pork/bacon/ham)	_	*3.4	*13.6	*5.5	*4.0		
Mixed dishes (poultry/game)	*8.9	17.3	17.9	17.6	*27.7		
Fish and seafood products and dishes	*6.9	10.6	14.5	19.5	13.8		
Legumes and pulse products and dishes	*7.1	*8.9	*5.3	*13.6	*16.2		
Seed and nut products and dishes	*1.9	*3.3	*2.9	*3.1	*1.4		
Egg products and dishes	*5.9	7.1	9.9	11.4	14.9		
	Females (g/person/day)						
Muscle meat	8.8	12.58	23.6	29.4	32.3		
Poultry	6.8	12.2	9.6	18.6	23.8		
Organ meats and offal, products and dishes	_	_	_	_	_		
Sausages, frankfurts and saveloys	*8.1	10.5	8.8	10.4	*8.2		
Processed meats	*3.5	*3.7	*2.3	*2.3	*3.2		
Mixed dishes (beef/veal)	*21.0	29.8	24.4	31.5	37.8		
Mixed dishes (lamb/pork/bacon/ham)	_	*2.8	*7.5	_	*5.3		
Mixed dishes (poultry/game)	*6.9	8.5	21.8	16.5	*17.9		
Fish and seafood products and dishes	*6.5	13.6	12.8	16.4	17.8		
Legumes and pulse products and dishes	*6.7	*5.6	*2.8	*6.7	*9.0		
Seed and nut products and dishes	*2.8	*3.5	*3.9	*2.3	*3.8		
Egg products and dishes	*7.4	7.9	9.0	6.4	8.4		

#### Table A2: Average daily intakes of lean meat, fish, poultry and alternatives, 1995

\* Relative standard error 25–50%.

\*\* Relative standard error >50%.

Notes

1. Data from the 1995 NNS, from a single 24-hour recall.

2. It is not possible to directly compare intakes in grams (as published) with AGHE recommendations due to the variety of food types and composite foods in the above categories.

Source: ABS & DHAC 1999.

Measure	2–3 years	4–7 years	8–11 years	12–15 years	16–18 years		
	Males (g/person/day)						
Dairy milk	504.9	308.7	311.1	349.9	403.5		
Yoghurt	*18.1	13.0	11.5	10.2	*16.9		
Cream	*0.2	*0.1	*0.7	*1.7	*0.9		
Cheese	10.9	12.2	12.2	16.9	20.4		
Frozen milk products	17.8	36.7	51.6	68.4	57.0		
Other dishes where milk or a milk product is the major component	*25.8	*23.2	*11.7	*13.9	11.7		
Milk substitutes	**19.7	*4.2	*4.8	_	_		
Flavoured milks	*9.3	*19.5	*23.3	*38.0	*38.3		
	Females (g/person/day)						
Dairy milk	369.1	245.0	254.0	233.4	167.8		
Yoghurt	*19.0	15.4	12.3	*20.5	*19.2		
Cream	*0.9	*0.8	*1.2	*0.9	*3.4		
Cheese	10.7	9.8	12.7	11.9	17.0		
Frozen milk products	*15.9	27.7	44.2	48.6	26.4		
Other dishes where milk or a milk product is the major component	*23.3	*21.6	*15.7	*8.9	*4.1		
Milk substitutes	**13.0	*3.1	*3.8	*0.4	_		
Flavoured milks	*15.2	*19.7	*15.6	*12.1	*39.6		

#### Table A3: Average daily intakes of milks, yoghurt, cheese and alternatives, 1995

\* Relative standard error 25–50%.

\*\* Relative standard error >50%

Notes

1. Data from the 1995 NNS, from a single 24-hour recall.

2. It is not possible to directly compare intakes in grams (as published) with AGHE recommendations due to the variety of food types and composite foods in the above categories.

Source: ABS & DHAC 1999.

## References

ABS (Australian Bureau of Statistics) 1998. National Nutrition Survey: nutrient intakes and physical measurements, Australia. ABS cat. no. 4805.0. Canberra: ABS.

ABS & DHAC (Commonwealth Department of Health and Aged Care) 1999. National Nutrition Survey: foods eaten, Australia 1995. ABS cat. no. 4804.0. Canberra: ABS.

ABS 2003. Breastfeeding in Australia, electronic delivery. ABS cat. no. 4810.0.55.001. Canberra: ABS.

AIHW (Australian Institute of Health and Welfare) 2006. Towards national indicators for food and nutrition: an AIHW view. Cat. no. PHE 70. Canberra: AIHW.

AIHW 2005a. 2004 National Drug Strategy Household Survey: detailed findings. Cat. no. PHE 66. Canberra: AIHW (Drug statistics series no. 16).

AIHW 2005b. A picture of Australia's children. Cat. no. PHE58. Canberra: AIHW.

AIHW 2004. Heart, stroke and vascular diseases: Australian facts 2004. Cat. no. CVD 27. Canberra: AIHW.

AIHW: Mathers C, Vos T & Stevenson C 1999. The burden of disease and injury in Australia. Cat. no. PHE 17. Canberra: AIHW.

Cobiac L, Record S, Leppard P, Syrette J & Flight I 2003. Sugars in the Australian diet: results from the 1995 National Nutrition Survey. Australian Journal of Nutrition and Dietetics 60(3):152–73.

Cook T, Rutishauser IHE & Allsopp R 2001. The bridging study – comparing results from the 1983, 1985 and 1995 Australian national nutrition surveys. Canberra: Commonwealth of Australia.

DoHA (Department of Health and Ageing) 2004a. Active kids are healthy kids. Australia's physical activity recommendations for 5–12 year olds. Canberra: Commonwealth of Australia.

DoHA 2004b. Get out and get active. Australia's physical activity recommendations for 12–18 year olds. Canberra: Commonwealth of Australia.

English RM & Bennett SA 1990. Iron status of Australian children. Medical Journal of Australia 152:582–6.

Hu FB, Rimm EB, Stampfer MJ, Ascherio A, Spiegelman D & Willett WC 2000. Prospective study of major dietary patterns and risk of coronary heart disease in men. American Journal of Clinical Nutrition 72(4):912–21.

Jacobs DR & Steffen LM 2003. Nutrients, foods and dietary patterns as exposures in research: a framework for food synergy. American Journal of Clinical Nutrition 78(3):508S–13S.

Krebs NF, Jacobson MS, Baker RD, Greer FR, Heyman MB, Jaksic T & Lifshitz F 2003. Prevention of pediatric overweight and obesity. Pediatrics 112(2):424–30.

Magarey A, Daniels LA & Smith A 2001. Fruit and vegetable intakes of Australians aged 2–18 years: an evaluation of the 1995 National Nutrition Survey data. Australian and New Zealand Journal of Public Health 25(2):155–61.

Marks GC, Webb K, Rutishauser IHE & Riley M 2001. Monitoring food habits in the Australian population using short questions. Canberra: Commonwealth Department of Health and Aged Care.

McLennan W & Podger A 1998. National Nutrition Survey user's guide, 1995. Canberra: Australian Bureau of Statistics and Commonwealth Department of Health and Family Services.

NHMRC (National Health and Medical Research Council) 2006. Nutrient reference values for Australia and New Zealand, including recommended dietary intakes. Canberra: Commonwealth of Australia.

NHMRC 2003. Food for health. Dietary guidelines for children and adolescents in Australia. Canberra: Commonwealth of Australia.

NHMRC 1991. Recommended dietary intakes for use in Australia. Canberra: Commonwealth of Australia.

NHPAC (National Health Priority Action Council) 2005. National Chronic Disease Strategy. Canberra: Commonwealth of Australia.

OzFoodNet Working Group 2004. Foodborne disease investigation across Australia: annual report of the OzFoodNet network, 2003. Communicable Diseases Intelligence 28(3):359-89. Viewed 10 May 2005, <http://www.health.gov.au/internet/wcms/Publishing.nsf/ Content/cda-2004-cdi2803h.htm>.

OzFoodNet Working Group 2005. Reported foodborne illness and gastroenteritis in Australia: annual report of the OzFoodNet network, 2004. Communicable Diseases Intelligence 29:164-90. Viewed 15 November 2005, <http://www.health.gov.au/internet/ wcms/publishing.nsf/Content/cda-cdi2902-pdf-cnt.htm/\$FILE/cdi2902f.pdf>.

Rutishauser IHE 2000. Getting it right: how to use the data from the 1995 National Nutrition Survey. Canberra: Commonwealth of Australia.

Schoeller DA 2002. Validation of habitual energy intake. Public Health Nutrition 5(6A):883-8.

Smith A, Kellett E & Schmerlaib Y 1998. Australian guide to healthy eating. Canberra: Department of Health and Family Services.

WHO 2002. The optimal duration of exclusive breastfeeding: report of an expert consultation, Geneva, Switzerland 28-30 March 2001. World Health Organization. Viewed 31 May 2005, <http://www.who.int/child-adolescent-

health/New\_Publications/NUTRITION/WHO\_CAH\_01\_24.pdf>.