

# 15 Diet and nutrition

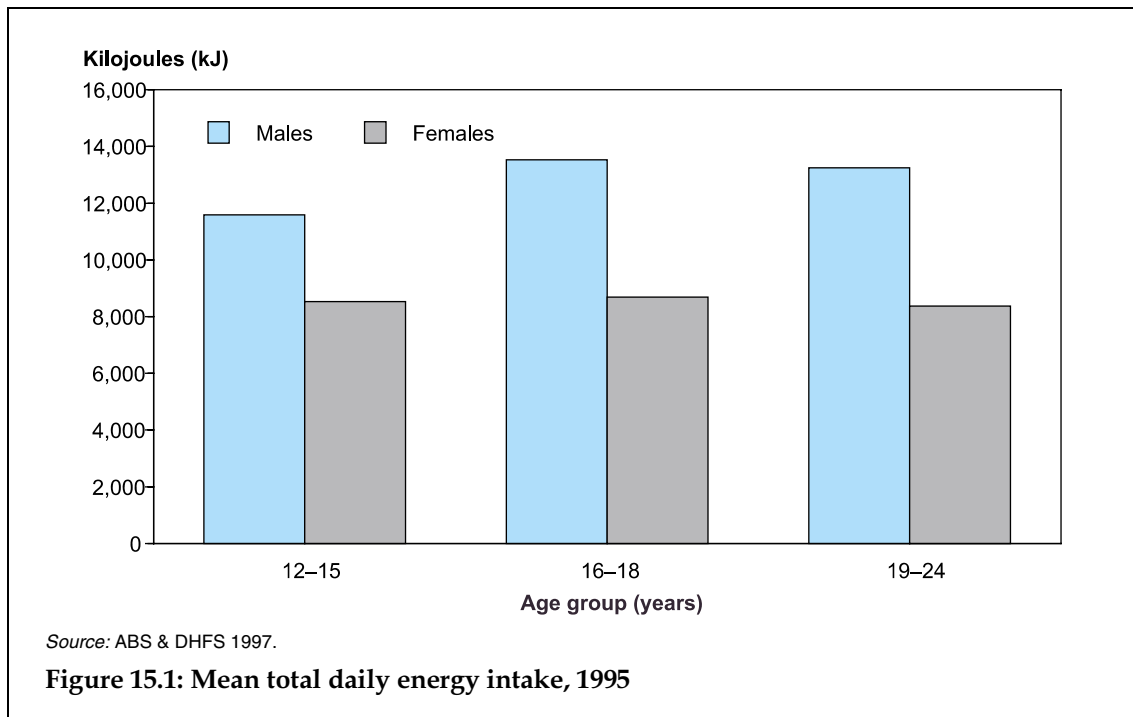
Appropriate nutrition is necessary for maintaining growth through adolescence and good health in the year following adolescence. Several health ill-effects have been linked to inappropriate or inadequate diet, including obesity, coronary heart disease, stroke, breast and digestive system cancers, non-insulin-dependent diabetes mellitus, gallstones, osteoporosis, malnutrition and dental conditions. (AIHW 1998b:142).

Adolescence is seen as a transitional stage for diet and eating patterns. The diets of young people often undergo substantial change as a result of body growth and development and as newly developed independence and diminished family influence gives young people more control over their eating habits. Young people are more likely to suffer from binge eating, restrained eating, fear of fatness and purging than the adult population (NHMRC 1995:30, 40).

This chapter presents information on the total energy intake of youth aged between 12 and 24 years, consumption from major food groups, nutrient contribution to energy intake, desired change in consumption patterns, and the percentage of youth aged 16–24 years who ran out of food and had no money to buy more. All data are obtained from the ABS National Nutrition Survey (ABS & DHFS 1997).

## Diet of Australian youth

Information on the food intake of Australian young people included in this section is drawn from the National Nutrition Survey conducted in 1995. In that survey, respondents were interviewed by nutritionists and asked to recall details of all food and beverages consumed during the day before the interview (midnight to midnight). The nutrient composition was determined from the details supplied.



- The mean total energy intake of young males was consistently higher than that of young females. This, of course, reflects higher mean height and weight for males compared with females (see Chapter 16).
- The energy intake for females aged between 12 and 24 years was relatively constant across the three age groups shown, at just over 8,000 kJ.
- Within this age group, energy intake for males peaked at 16-18 years (at almost 14,000kJ) before experiencing a small decline at the older ages.

## Diet and nutrition

**Table 15.1: Consumption from major food groups, 1995 (per cent)**

Major food groups	Male age group (years)			Female age group (years)		
	12–15	16–18	19–24	12–15	16–18	19–24
Cereals and cereal-based products						
Cereals and cereal products	98.1	93.9	91.4	95.1	93.0	90.2
Cereal-based products and dishes	73.6	64.7	71.3	70.0	71.2	62.0
Fruit products and dishes	49.9	39.9	31.9	58.0	41.1	41.4
Vegetables and legumes						
Vegetable products and dishes	78.8	83.1	84.7	85.9	85.8	86.5
Legume and pulse products and dishes	7.1	5.8	5.6	5.8	8.3	8.2
Milk products and dishes	92.8	94.2	89.1	90.8	87.3	90.1
Meat, poultry and game products and dishes	78.8	80.9	84.1	80.2	74.5	74.0
Fish and seafood products and dishes	12.8	8.8	16.0	11.2	16.7	15.8
Egg products and dishes	12.3	18.1	15.7	8.7	8.5	12.8
Snack foods, sugar and confectionery						
Snack foods	28.7	24.4	18.9	38.4	24.1	17.7
Sugar products and dishes	58.1	56.8	60.5	53.2	44.9	59.4
Confectionery	46.7	37.2	26.8	51.3	39.9	32.4
Other foods						
Seed and nut products and dishes	10.9	7.7	10.3	8.3	9.8	10.8
Fats and oils	76.5	65.7	72.9	73.2	66.9	63.7
Soup	5.7	3.6	6.4	5.8	4.5	10.8
Savoury sauces and condiments	56.9	61.8	61.6	52.8	63.0	51.7
Beverages						
Non-alcoholic beverages <sup>(a)</sup>	99.6	99.7	99.8	100.0	100.0	99.7
Alcoholic beverages <sup>(b)</sup>	0.5	16.0	28.8	1.3	12.0	17.6
<b>Total<sup>(c)</sup></b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Includes plain drinking water.

(b) Includes all alcoholic beverages containing alcohol (eg. whisky, 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.

Source: ABS & DHFS 1997.

- Nearly all young people reported eating some sort of cereals or cereal products in 1995. However, as was the trend with children (AIHW 1998a:157), the proportion of young people eating these products declined with age.
- Consumption of fruit was highest in the younger ages, and higher among females. Although half of males and nearly 60% of females aged 12–15 years consumed fruit products and dishes, this decreased to less than one-third of males and about 40% of females aged 19–24 years.
- In contrast to the decline of consumption of fruit with age, the proportion of young people consuming vegetable products and dishes increased to some extent with age. Although 20% of males aged 12–15 years were not eating vegetables, this declined to 15% at ages 19–24. Throughout this age range, the proportion of females eating vegetables remained almost constant.
- Consumption trends of meat, poultry and similar foods differed between males and females. Whereas consumption of meat increased with age for males, the opposite trend was reported by young females. At ages 19–24, only 15% of males did not eat meat, compared with 25% of females.

- The proportion of young people reporting consumption of alcohol increased with age and thus was highest amongst those aged 19 to 24 years. Consumption of alcohol by males was higher for ages 16–24 compared with females.
- For both male and females, the consumption of snack foods and confectionery declined with age.

**Table 15.2: Mean contribution to energy intake, 1995 (per cent)**

Type of nutrients	Males age group (years)			Female age group (years)		
	12–15	16–18	19–24	12–15	16–18	19–24
Protein	15.1	15.4	16.6	14.9	16.1	16.1
Total fat	33.5	32.9	32.9	33.1	32.1	32.8
Saturated fat	14.6	13.7	13.3	13.9	13.5	13.1
Monounsaturated fat	11.9	11.9	12.1	11.8	11.4	11.7
Polyunsaturated fat	4.5	4.5	4.7	4.7	4.4	5.1
Carbohydrate	50.9	49.6	46.9	51.1	50.1	48.4
Total sugar	24.7	24.5	21.5	25.6	24.0	22.7
Total starch	26.2	25.2	25.5	25.5	26.1	25.8
Alcohol <sup>(a)</sup>	—	1.6	3.1	0.2	0.9	2.0
<b>Total energy<sup>(b)</sup></b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Mean energy (kJ)</b>	<b>11,589.4</b>	<b>13,525.5</b>	<b>13,275.5</b>	<b>8,533.6</b>	<b>8,690.4</b>	<b>8,369.6</b>

(a) Represents pure alcohol.

(b) Components do not add to total, see published source for details.

Source: ABS & DHFS 1997.

- The NHMRC recommended targets for fat intake for youth are the same as for the general population of healthy adults (NHMRC 1995:74). It is suggested that energy intake as fat be limited to approximately 30% of total energy intake, with no more than 10% from saturated fat.
- Around one-third of youth total energy intake was reported to come from fats. Both males and females recorded a total energy intake from total fat approximately 3 percentage points higher than that recommended by the NHMRC. The per cent contribution of saturated fat was also over 3 percentage points higher than the recommended level. However, these figures were similar to those of the population aged 19 and over (ABS 1997:24).
- Around half of total energy intake was from carbohydrates. The majority of the remainder was from protein, with a small amount from alcohol. These proportions were relatively constant both across age groups, and for males and females.

## Desired change in consumption

The National Health and Medical Research Council (NHMRC 1995) dietary guidelines emphasise the importance of eating relatively large amounts of breads and cereals, and fruit and vegetables. In Table 15.1 however, it can be seen that the proportion of young people consuming these foods decreased with age. Also, Table 15.2 shows that the mean contribution of fat to total energy intake exceeded the NHMRC guidelines. Table 15.3 below explores young people's desire for change in consumption of these food groups.

**Table 15.3: Desired change in consumption patterns, 16–24 year olds, 1995 (per cent)**

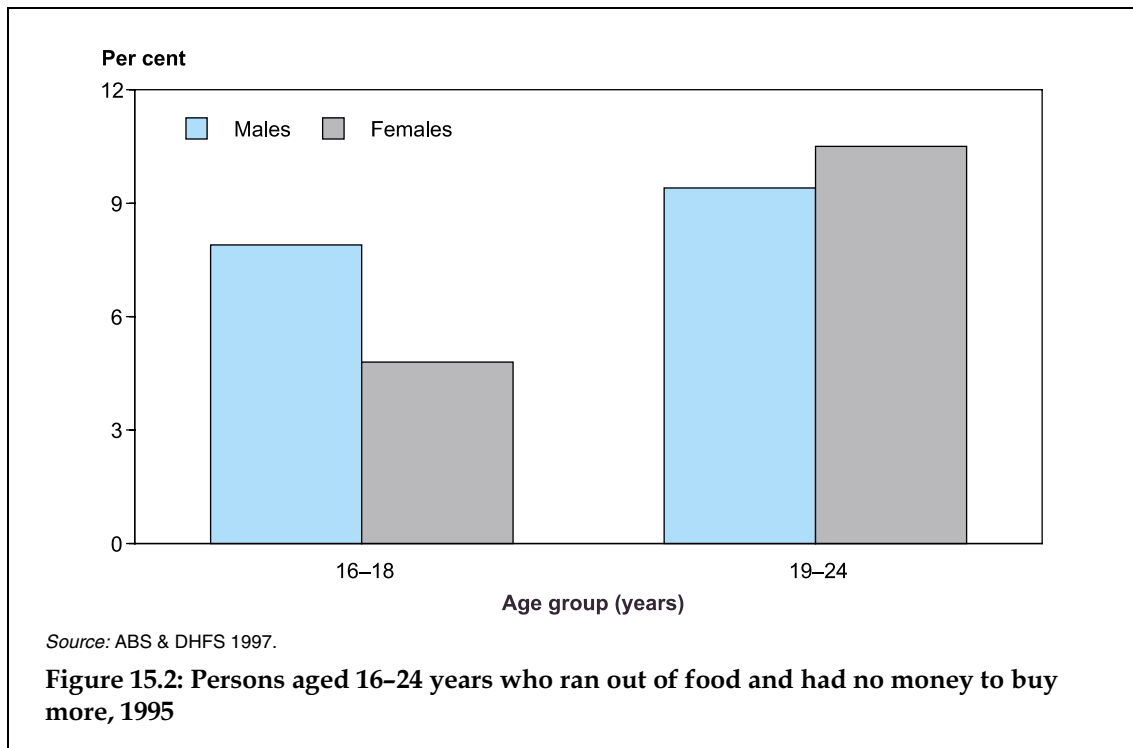
	Males		Females	
	16–18	19–24	16–18	19–24
Desire to consume less fat	24.8	33.3	45.8	45.2
Desire to consume more bread and cereals	9.1	15.0	8.6	14.3
Desire to consume more fruit and vegetables	30.5	45.3	39.9	45.0

Source: ABS & DHFS 1997.

- Around 45% of females aged 16–24 years desired to consume less fat, compared with about one-quarter of males aged 16–18 years and one third of males aged 19–24 years.
- The desire to consume more bread/cereals and fruit/vegetables increased with age. Whereas, only 9% of persons aged 16–18 years desired to consume more bread and cereals, the proportion increased to around 15% of persons aged 19–24 years.
- Approximately 45% of males and females aged 19–24 years desired to consume more fruit and vegetables.

## Food supply

As part of the National Nutrition Survey, respondents were asked whether they had run out of food and had no money to buy more at any time within the last 12 months. In the post-secondary school period, young people are more likely to have financial independence. Food shortages were more likely to be reported by persons aged 19–24 years.



- Almost 10% of persons aged 19–24 years ran out of food and had no money to buy more, at some time during the 12-month period. There was a slightly higher proportion of females in this age group in need of food than males.
- Males aged 16–18 years were more likely than females in the same age group to run out of food and not have the funds to buy more.

## References

Australian Bureau of Statistics (ABS) & Commonwealth Department of Health and Family Services (DHFS) 1997. National Nutrition Survey 1995: selected highlights. ABS Cat. No. 4802.0. Canberra: ABS and DHFS.

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