Australians of all ages generally have a poor diet—that is they do not eat enough of the 5 food groups and eat too many discretionary foods high in salt, fat and sugar. Inadequate fruit and vegetable consumption in particular is a risk factor for CVD, type 2 diabetes, CKD and overweight and obesity. This report provides an overview of Australia's consumption of fruit, vegetables and other selected nutrients.

Cat. no: PHE 249

Findings from this report:

- 9.1% of adults consumed sugar sweetened drinks daily in 2017-18
- Less than 1 in 10 adults met the recommendations for daily vegetable consumption in 2017-18
- 3 to 8 serves of discretionary foods were consumed by children per day in 2011–12
- 5 to 7 serves of discretionary foods were consumed by adults per day in 2011–12
Dietary guidelines

The food and beverages we eat and drink (our diet) play an important role in our overall health and wellbeing. Food provides energy, nutrients and other components that, if provided in insufficient or excess amounts can result in ill health. The conditions often affected by our diet include coronary heart disease, stroke, high blood pressure, atherosclerosis, some forms of cancer, type 2 diabetes, dental caries, gall bladder disease and nutritional anaemias.

For more information see Food & nutrition.

How is food associated with health?
Ill health generally cannot be attributed to any one food component alone. Diseases associated with diet are also associated with environmental, behavioural, biological, societal and genetic factors. The complex interplay between food and other risk factors and disease make it difficult to assess the contribution of diet to ill health.

In an optimal diet, the supply of required energy and nutrients is adequate for tissue maintenance, repair and growth. The proteins, carbohydrates, fats, vitamins and minerals required to maintain the human body in good health are met by eating a wide variety of nutritious foods.

In 2015, 7.3% of the total burden of disease in Australia was due to poor diet (1.6% to a diet low in whole grains and high fibre cereal, 1.4% to a diet low in fruits and 1.2% to a diet low in vegetables) (AIHW 2019) (see Burden of disease).

More information on diet, nutrition and health can be found at the Eat for Health website.

What should Australians eat?
The Australian Dietary Guidelines (NHMRC 2013), provide advice on healthy eating habits to promote overall health and wellbeing, reduce the risk of diet related disease and protect against chronic conditions. They recommend Australians eat a wide variety of nutritious foods from the five food groups every day. Essential nutrients for good health are found in varying amounts throughout many different food groups. Variety in a diet maximises the possibility of obtaining enough of these essential nutrients.

The Australian Dietary Guidelines recommend adults, adolescents and children:

- Enjoy a wide variety of nutritious foods from the 5 food groups every day:
  - plenty of vegetables, including different types and colours and legumes/beans
  - fruit
  - grain (cereal) foods, mostly wholegrain and/or high fibre varieties, such as breads, cereals, rice, pasta, noodles, polenta, couscous, oats, quinoa and barley
  - lean meats and alternatives and poultry, fish, eggs, tofu, nuts, seeds and legumes/beans
  - dairy, including milk, yoghurt, cheese and/or their alternatives, mostly reduced fat (reduced fat milks are not suitable for children under 2).
  - drink plenty of water.

Each Guideline is considered to be equally important in terms of public health outcomes, and the Guidelines differ according to age.

For more information on the dietary guidelines for different age groups, see the Australian Dietary Guidelines.

References

Poor diet in children

The five food groups

- **Vegetables**: children and adolescents did not meet the recommendations
- **Fruit**: children aged 2 to 8 did meet the recommendations, while those aged 9 to 18 did not
- **Grains**: only boys aged 4 to 11 and girls aged 9 to 11 met the recommendations
- **Lean meats and alternatives**: the majority of children did not meet the recommendations
- **Dairy products and alternatives**: Only children aged 2–3 met the recommendation for dairy consumption.

For the full results of children's nutrition, see **Nutrition across the life stages**.

Discretionary foods
Discretionary foods are foods that are not needed to meet nutrient requirements and generally tend to be high in kilojoules, saturated fat, added sugars, added salt and alcohol (NHMRC 2013). The Australian Dietary Guidelines recommend that discretionary foods should be consumed occasionally and in small amounts, and for most people 0 to 3 serves a day is suitable depending on age, height and activity level. An example of 1 serve of discretionary food is 2–3 sweet biscuits or 2 scoops of ice cream or 12 fried hot chips (NHMRC 2013). In 2011–12, the proportion of energy intake from discretionary foods increased with age for children. Discretionary foods accounted for:

- 29% of energy intake in boys aged 2–3 or and 32% in girls aged 2–3, (approximately 3 serves of discretionary foods per day)
- 41% of boys and girls energy intake at age 14–18 (approximately 6 to 8 serves of discretionary foods per day) (AIHW 2018).

For children intake of sodium is also well above the suggested adequate intake for all age groups. The Guidelines recommend to limit saturated fat intake and for all children, approximately 14% of energy intake was from saturated fat. For full results of children's nutrition, see **Nutrition across the life stages**.

Sugar sweetened drinks
The Australian Dietary Guidelines recommend to limit intakes of drinks high in added sugars, as they can provide excess kilojoules with little nutritional value and can increase the risk of excessive weight gain (NHMRC 2013). Based on the **ABS National Health Survey** in 2017–18:

- Three out of five (59%) children aged 2–17 did not consume sugar sweetened drinks.
- 7.1% of children aged 2–17 consumed sugar sweetened drinks daily.
- Daily consumption of sugar sweetened drinks generally increased as age increased, for both boys and girls—from 4% of 2–3 year olds up to 12% of 14–17 year olds.
- Boys were more likely to consume sugar sweetened drinks than girls (47% compared with 35%).
- Children were more likely to consume sugar sweetened drinks on 1–3 days a week (31%) compared with daily (7.1%).
- Children aged 2–17 years who are daily consumers of sugar sweetened drinks consume on average 2.4 cups per day (equivalent to 1.6 cans of soft drink or one 600mL bottle). The average intake for boys was almost twice as high as for girls (2.8 cups per day compared with 1.6 cups) (ABS 2018; Table S2).

References


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Poor diet in children

The five food groups


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References


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Poor diet in adults

The five food groups
The last comprehensive survey of diet in adults occurred in the Australian Health Survey (ABS 2014) using 24 hour dietary recall. On average in 2011–12, both men and women of all ages;

- **Vegetables**: did not meet the recommendations
- **Fruit**: did not meet the recommendations
- **Grains**: did not meet the recommendations, except women aged 71 and over who on average did meet the guidelines
- **Lean meats and alternatives**: did not meet the recommendations
- **Dairy products and alternatives**: did not meet the recommendations

For the full results of adult's nutrition, see [Nutrition across the life stages](#).

Fruit and vegetables
Based on self-reported data from the Australian Bureau of Statistics (ABS) 2017–18 National Health Survey (NHS), 1 in 2 people aged 18 and over (49%) did not eat the recommended 2 serves of fruit, while over 9 in 10 (92%) did not eat the recommended 5–6 serves of vegetables (ABS 2018).

The proportion of adults with inadequate vegetable intake was similar across age groups (Figure 1). Fruit intake was worse among young people: more than half (54%) of those aged 18–24 had inadequate fruit intake, compared to one-third (36%) of people aged 75 and over.

**Figure 1: Prevalence of inadequate fruit and vegetable intake for persons aged 18 and over, 2017–18**

![Chart showing prevalence of inadequate fruit and vegetable intake](image)

Source: ABS 2018; (see [Table S1](#) for footnotes).

**Trends in fruit and vegetable consumption**
Fruit and vegetable consumption is also able to be measured over time. Between 2007–08 and 2017–18, the proportion of the population not meeting the fruit and vegetable guidelines remained about the same, approximately 49–52% of people do not meet the fruit guidelines, and approximately 93–94% do not meet the vegetable guidelines (Figure 2).

**Figure 2: Trend in the prevalence of inadequate fruit and vegetable intake for persons aged 18 and over, 2007–08 to 2017–18**

![Chart showing trend in fruit and vegetable intake](image)
Note: Rates are aged-standardised to the 2001 Australian standard population.

Source: ABS 2018; AIHW analysis of ABS 2019; (see Table S1 for footnotes).

**Population groups**

In 2017–18, Australians aged 18 or over in the lowest socioeconomic areas were less likely to meet the fruit and vegetable guidelines than those in the highest socioeconomic group, although the differences were not large.

- For fruit, 46% did not eat enough in the highest socioeconomic areas compared with 53% in the lowest.
- For vegetables 92% did not eat enough in the highest socioeconomic areas compared with 94% in the lowest (ABS 2019; Table S1).

In 2017–18, people living in *Outer regional and remote* areas were more likely to have inadequate fruit consumption than those living in *Major cities* (53% compared with 48%). There was no difference by remoteness area for inadequate vegetable consumption. (ABS 2019; Table S1).

**Discretionary foods**

Discretionary foods are foods that are not needed to meet nutrient requirements and generally tend to be high in kilojoules, saturated fat, added sugars, added salt and alcohol (NHMRC 2013). The Australian Dietary Guidelines recommend that discretionary foods should be consumed occasionally and in small amounts, and for most people 0 to 3 serves a day is suitable depending on age, height and activity level (See the *Eat for Health* website).

Among adults in 2011–12, the proportion of daily energy intake from discretionary foods ranged from 33% to 36%—between 5 to 7 serves per day on average. For men and women across all age groups, discretionary food intake was high and contributed a similar proportion towards daily energy intake (around one third of total energy intake) (AIHW 2018).

High intake of discretionary foods is at the expense of more nutritious foods from the 5 food groups and may contribute to Australians exceeding the recommended intakes of saturated fats, sugars and sodium.

For more information see *Nutrition across the life stages*.

**Sugar sweetened drinks**

The Australian Dietary Guidelines recommend to limit intakes of drinks high in added sugars, as they can provide excess kilojoules with little nutritional value and can increase the risk of excessive weight gain (NHMRC 2013). In 2017–18:

- 9.1% of adults aged 18 and over consumed sugar sweetened drinks daily.
- A greater proportion of men consumed sugar sweetened drinks daily than women—12% compared with 6.4%
- 18–24 year olds had the highest daily consumption —16% of men and 10% of women.
- Women were more likely than men to report not consuming any sugar sweetened drinks—72% compared with 56%
- Overall, sugar sweetened drinks consumption decreased as age increased (Figure 3).

**Figure 3: Prevalence of sugar sweetened drink consumption for persons aged 18 and over, 2017/18**
Note:
Sugar sweetened drinks includes soft drink, cordials, sports drinks or caffeinated energy drinks and may include soft drinks in ready to drink alcoholic beverages. Fruit juice, flavoured milk, ‘sugar free’ drinks or coffee/hot tea are excluded.
Source: ABS 2018; (see Table S3 for footnotes).

References

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Technical notes

About the ABS National Health Survey

This web report contains results from the Australian Bureau of Statistics (ABS) National Health Survey (NHS) 2017–18, collected between July 2017 to June 2018.

The 2017–18 NHS is the most recent in a series of Australia-wide health surveys conducted by the ABS. It was designed to collect a range of information about the health of Australians, including:

- prevalence of long-term health conditions
- health risk factors such as smoking, overweight and obesity, alcohol consumption and exercise
- use of health services such as consultations with health practitioners and actions people have recently taken for their health
- demographic and socioeconomic characteristics.

The 2017–18 NHS collected data on children and adults living in private dwellings but excluded persons living in non-private dwellings, very remote areas and discrete Aboriginal and Torres Strait Islander communities.

For further information, refer to the ABS National Health Survey: First Results, 2017–18.

Data quality statement

For more information about the ABS 2017–18 National Health Survey see:

4324.0.55.001 - Microdata: National Health Survey, 2017-18

Data

Poor diet supplementary data tables
Data tables: Poor diet
Download Data tables: Poor diet. Format: XLSX 179Kb XLSX 179Kb

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