
Obesity

Summary

- Overweight and obesity are preventable.
 - To prevent them, we need to choose healthier, lower-energy foods and be more physically active.
 - Rates of overweight and obesity are rising. This has a major impact on health, quality of life and healthcare costs.
 - Everyone can and should seek changes to their lifestyle to help them stay a healthy weight.
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Obesity increases the risk of many diseases. Fat accumulates in our bodies when the energy (kilojoules) we consume from food and drink is greater than the energy we use in activities and at rest. Consuming even slightly more energy than you use, over long periods of time, can cause you to become overweight or obese.

Obesity and non-communicable diseases such as heart disease, cancer and diabetes are now the world's biggest killers. They cause an estimated 41 million deaths each year – that's 71% of all deaths globally.

In Australia, the number of people who are overweight or obese has continued to rise over time.

Year	Percentage of the Australian population that is overweight or obese
1995	56.3
2007–08	61.2
2011–12	62.8
2017–18	67.0

The latest National Health Survey shows that men are more likely to be overweight or obese than women (74.5 % compared with 59.7% respectively).

Men and women living in regional and remote areas of Australia are more likely to be overweight or obese than men and women living in major cities.

The number of Australian children who are overweight or obese has also continued to increase since 1995. In 2017–18, 24.9% of Australian children were overweight or obese.

Body mass index

Overweight and obesity are defined by the World Health Organization using the **body mass index (BMI)**. BMI is a measure of body size. It is used to indicate the level of risk for disease (morbidity) and death (mortality) at the population level.

BMI is calculated by dividing your weight in kilograms by your height in metres squared. For example, a person who is 165 cm tall and weighs 64 kg would have a BMI of 24 kg/m². People with a BMI of 25 kg/m² or more are classified as overweight. People with a BMI of 30 kg/m² or greater are classified as obese.

BMI calculations used for adults are not a suitable measure of weight for children or adolescents.

To calculate a child's BMI, you can use the **body mass index calculator for children and teenagers**. However,

BMI charts should be used only as a guide to indicate when to make small lifestyle changes, and when to seek further guidance from a doctor or a dietitian.

If you have concerns about your child's weight, it's best to consult with a dietitian or doctor for personalised advice. A dietitian or your doctor can assess your child's weight using a special BMI chart, together with weight and height growth charts.

The distribution of fat is important when assessing overweight and obesity, and the associated disease risk. Increased abdominal obesity is related to a higher risk of cardiovascular disease, type 2 diabetes and cancer. Abdominal obesity is measured using waist circumference.

To identify disease risk in adults, it's better to combine BMI with waist circumference. A waist circumference above 94 cm in men and above 80 cm in women is regarded as overweight and an indicator of serious chronic disease risk. A waist circumference above 102 cm in men and 88 cm in women is regarded as obesity.

Increased risk of chronic disease

Obesity increases the risk of many chronic and potentially lethal diseases.

Generally speaking, the more body fat you're carrying, the higher your health risk. However, the amount of weight gained throughout your adult years also contributes to the risk. For example, a middle-aged person who weighs 10 kg more than they did in their early 20s has an increased risk of high blood pressure, stroke, diabetes and coronary heart disease.

Some of the many chronic conditions and diseases associated with obesity include:

- insulin resistance
- high blood pressure
- atherosclerosis
- cardiovascular disease
- stroke
- some cancers including breast, endometrial and colon cancer
- type 2 diabetes (non-insulin dependent diabetes mellitus)
- gall bladder disease
- polycystic ovarian syndrome
- musculoskeletal problems such as osteoarthritis and back pain
- gout
- cataracts
- stress incontinence
- sleep apnoea.

Causes of obesity

A range of factors can cause obesity. Factors in childhood and adolescence are particularly influential. A high proportion of obese children and adolescents grow up to be obese adults.

Factors known to increase the risk of obesity include:

- eating more kilojoules than you use – you will accumulate fat in your body if you consume more energy (kilojoules) than you use. Learn about **balancing energy in and energy out**, and **healthy eating**
- modern living – most modern conveniences, such as cars, computers, televisions and home appliances, reduce the need to be physically active
- sitting – studies have shown that even people who are physically active but spend large amounts of time sitting down (for example, watching TV, working at a computer or driving) have a higher risk of obesity than people who do not sit for long periods of time. Read about **the dangers of sitting**

- socioeconomic factors – people with lower levels of education and lower incomes are more likely to be overweight or obese
- changes in the food supply – energy-dense, nutrient-poor foods and drinks are readily available, intensely marketed and affordable. Portion sizes of these foods and drinks have also increased. Read about **food to have sometimes**
- inactivity – for most of us, physical activity is no longer a natural part of our daily schedule (for example, we drive instead of walk). Obese people tend to live sedentary lifestyles. Read about the **importance of physical activity**, and **how to get active when you are busy**
- genes – researchers have found that genetics play a small part in regulating body weight. Parental overweight or obesity is associated with increased risk of child overweight or obesity
- birth factors – studies suggest that people are more likely to become obese later in life if they experienced:
 - poor nutrition in utero
 - maternal smoking
 - low birth weight
 - high birth weight (especially above 4 kg)
 - formula feeding rather than breastfeeding.

Financial costs of obesity

In 2011–12, obesity is estimated to have cost the Australian economy \$8.6 billion:

- \$3.8 billion due to direct costs on the health system (paid by Australian taxpayers)
- \$4.8 billion in indirect health costs such as work absenteeism and production lost to premature death.

These figures do not take into account quality of life impacts on individuals, or any out-of-pocket expenses associated with obesity.

Where to get help

- Your **GP (doctor)**
- **Dietitians Association of Australia** Tel. **1800 812 942**

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