



OBESITY IN AUSTRALIAN ADULTS: CAUSES, PREVENTION & MANAGEMENT

CAUSES OF OBESITY

A wide range of environmental, social, physiological and behavioural factors influence energy balance (that is, the balance between energy intake and energy expenditure). The underlying cause of overweight and obesity is positive energy balance. This occurs when an individual's energy intake from food and drink exceeds the energy they expend from physical activity and other metabolic processes, over a prolonged period of time.^{1,2} This can be achieved by an increase in energy intake, a decrease in energy expenditure, or a combination of the two.

A changing social and physical environment that promotes a sedentary lifestyle and the over-consumption of food, particularly high-fat and energy-dense foods, is largely responsible for this energy imbalance and the current obesity epidemic.^{3,4}

In addition to a high-fat, high-energy diet and a lack of physical activity, there are a number of other factors which may give rise to weight gain, and therefore increase the likelihood of obesity in individuals.¹ These include:

- Age,
- Gender,
- Body weight,
- Food preference,
- Medications,
- Hereditary factors / genetics,
- Ethnicity,
- Socio-economic factors / status,
- Psychological factors.

As indicated above, there are socio-economic, demographic and cultural factors associated with weight. Overweight and obesity are more common in lower socio-economic groups, in rural and remote populations, in certain ethnic groups, and in Aboriginal and Torres Strait Islander people.^{2,5}

PREVENTION OF OBESITY

Obesity is a disease that is largely preventable through lifestyle changes. Prevention of overweight and obesity should involve the development and maintenance of lifelong healthy eating and physical activity patterns, to achieve weight control. Healthy lifestyles, combining balanced, low fat and low energy diets, with increased levels of physical activity and reductions in sedentary behaviour, should be promoted.^{1,4,6}

The prevention of overweight and obesity aims to:

- Promote a healthy lifestyle through diet and physical activity,¹
- Prevent further weight gain in individuals,⁷
- Help lower high blood cholesterol, blood pressure and blood sugar levels,⁸
- Reduce the risk of health and long-term complications associated with obesity,¹
- Prevent further increases in the prevalence of overweight, obesity and obesity-related diseases,^{6,7}
- Improve the quality and quantity of life.¹

To avoid weight gain, energy expenditure should exceed energy intake over a period of time. This can be achieved by combining regular physical activity with a healthy, well balanced diet.

DIET

Table 1. Healthy eating suggestions.

Variety	- Include a wide variety of foods in your diet in moderate amounts.
Energy	- Decrease the intake of foods high in energy to reduce the energy density of the diet.
Fats and Protein	- Reduce the amount of fat in your diet. - Eat a diet low in saturated (or bad) fat. - Choose low or reduced-fat dairy. - Select lean meats and try to limit fatty meats. - Eat fish regularly. - Limit take-away foods. - Limit high fat, unhealthy snack foods.
Carbohydrate	- Increase the amount of carbohydrate in your diet. - Choose mainly plant-based (or unrefined) foods, such as bread cereals, wholegrains, rice, pasta, vegetables, fruits and legumes. - Increase intake of fruit and vegetables.
Meals	- Eat a nutritious breakfast, lunch and dinner. - Do not 'skip' meals. - Avoid snacking regularly between meals. - Ensure snacks are healthy and do not contribute to excess energy intake. - Use healthy cooking methods. - Get familiar with recommended portion sizes, and consider them when eating. - Decrease portion sizes, especially of fast foods and takeaway foods.
Beverages	- Drink water rather than juice or soft drinks. - Restrict alcohol intake; drink alcohol in moderation.
Shopping	- Choose foods that are low in fat, salt and sugar. - Read food labels when you go shopping, to get familiar with products and to assist food choice.

PHYSICAL ACTIVITY

Modern lifestyles make it very easy for individuals to be inactive. This is damaging to health and a major factor contributing to the increasing incidence of obesity.

The benefits of regular physical activity towards positive health outcomes have been supported in a large number of studies. The greatest improvements in health are achieved when sedentary behaviour becomes active behaviour.⁹

People who enjoy regular physical activity tend to feel more energetic, manage their weight better, and feel more confident, happy and relaxed. Regular exercise is thought to have protective effects against:

- Heart Disease,¹⁰
- Type 2 diabetes,¹¹
- High blood pressure,¹²
- Obesity,¹³
- Osteoporosis,¹⁴
- Anxiety and depression,¹⁵
- Breast and colon cancer.¹⁶

Some suggestions for increasing physical activity levels include:

- Set yourself small, realistic goals for your activity.
- Increase daily physical activity.
- Be active every day in as many ways as you can.
- Think of movement as an opportunity, not an inconvenience.
- Develop an exercise routine.
- Put together at least 30 minutes of moderate-intensity physical activity on most, preferably all, days.
- Enjoy some regular, vigorous activity for extra health and fitness.
- Participate in sports and active leisure activities.
- Choose activities you enjoy.
- Vary the type of activity you do.
- Be active with friends or a partner.
- Decrease inactive leisure.
- Increase incidental activity.
- Leave the car at home and walk whenever possible.
- Minimise the time you spend in front of a television, computer, or other ways of not being active.

Communities, medical professions, governments, food and sport industries, employers, media, local authorities, and the health sector, also play an important role in the prevention of overweight and obesity, with the ability to influence and promote nutrition and physical activity. Together they have the potential to modify the environment so that it is less prone to weight gain.

MANAGEMENT OF OBESITY

The management of individuals who are obese should combine a primary goal of long-term weight maintenance with appropriate treatment. There are a number of methods available in the treatment of obesity. However it is important to match individuals to specific weight management strategies and treatments, as individualisation of treatment is key to achieving positive long-term results.^{1,7}

Obesity management is based on the following four key strategies:

- Prevention of weight gain,
- Promotion of weight loss,
- Promotion of weight maintenance,
- Management of obesity-related problems.¹⁷

To achieve weight loss and management, lifelong sustainable changes in diet, physical activity, healthy lifestyle and behaviour are necessary. Weight loss in overweight and obese individuals improves physical, metabolic and hormonal complications. It can also improve depression, anxiety, psychosocial functioning, mood and quality of life.³

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