



OBESITY IN AUSTRALIAN CHILDREN

CONSEQUENCES OF CHILDHOOD OBESITY

Overweight and obesity in childhood and adolescence is associated with a wide variety of serious complications and health problems, and increases the risk of premature illness and death later in life. The incidence of these complications and diseases is increasing in the younger age groups, and include:

- Psychosocial problems,
- High blood pressure,
- High cholesterol,
- Type 2 diabetes,
- Asthma,
- Sleep apnoea.^{1,2,3}

The most common consequences of obesity in childhood and adolescence are psychological. Examples of poorer psychosocial functioning include poor self-esteem, negative self-image, social difficulties, anxiety, sadness, loneliness, and depression.

Children and adolescents who are overweight or obese are more likely to develop the following long-term complications.

Table 1. Health consequences of childhood obesity.

High prevalence	Intermediate prevalence	Low prevalence
Psychosocial problems	Fatty liver	Orthopaedic complications
Inappropriately fast growth and development	Abnormal glucose tolerance / metabolism	Sleep apnoea
Persistence into adulthood		Polycystic ovary syndrome
Abnormal lipid / body fat profile		Gall bladder inflammation
		High blood pressure
		Type 2 diabetes

Source: Adapted from WHO, 2000.⁴

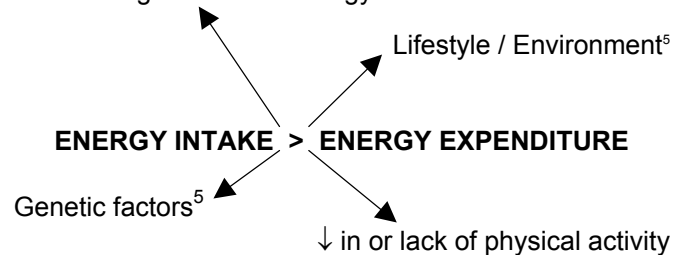
The most significant long-term consequence of childhood obesity is its persistence into adulthood, with serious consequences for health.^{5,6} An obese child is more likely to be obese as an adult if:

1. The child is obese in adolescence.
2. The child has severe obesity.
3. There is parental obesity.

CAUSES OF CHILDHOOD OBESITY

Weight gain and obesity develops when energy intake (from food and drink) exceeds energy expenditure (from physical activity and other metabolic processes) over a prolonged period of time. This may be due to the following factors:

Unhealthy eating patterns: ↑ in the consumption of foods high in fat and energy and low in nutrients⁵



Rare causes of obesity include hormonal problems, genetic defects, and drug-related problems.⁷

PREVENTION OF CHILDHOOD OBESITY

The prevention of weight gain offers the most effective means of controlling obesity among children and reducing the risk of complications associated with obesity.^{3,5} Prevention aims to:

- Promote positive lifestyle changes,
- Lessen the affect of obesity promoting environments,
- Address issues such as healthy eating, exercise and social support,
- Ensure the long term health and well being of our children,
- Prevent obesity in adulthood,
- Prevent further increases in the prevalence of obesity.^{3,6,7}

Parents play an important role in ensuring that their children are eating sensibly and getting enough exercise. Keeping children healthy and active can be achieved through a balanced diet and regular physical activity, as outlined in the table below.

Table 2. Examples of potential targets for preventing obesity in children and adolescents.

↓ ENERGY INTAKE
Encourage children to eat a balanced diet, incorporating foods that are nutritious and good for them, in reasonable amounts: - Breads and cereals, - Fruit and vegetables, - Milk and milk products, - Meat or meat alternatives.
Encourage children to eat a healthy breakfast.
Provide a healthy school lunch.
Use low fat cooking / food preparation methods.
Plan to eat home-cooked meals together as a family.
Decrease portion sizes of food.
Plan for healthy, low-fat foods and snacks.
Save sweet and fatty treats for special occasions.
Introduce lower energy foods, such as low-fat dairy.
Attempt to increase fruit, vegetables and other fibre-rich foods.
Discourage eating while watching television.
Increase water intake and decrease intake of soft drinks and other sugary beverages.
↑ ENERGY EXPENDITURE
Support children to be active everyday in as many ways as they can, through play, transport, sport, recreation and planned activity.
Decrease sedentary behaviour, such as television watching time, and replace with more outdoor recreation or other active alternatives.
Encourage after-school and weekend activities.
Look for active things to do together as a family.
Incorporate physical activities into family outings.
Consider alternatives to driving, such as walking or bike riding.
Model active behaviour by being active parents.

Together with parents and families, health professionals, schools, food companies, the community, and local governments also have an important role in providing opportunities for children to be healthy and active, and in dealing with the obesity epidemic.

MANAGEMENT OF CHILDHOOD OBESITY

The approach in managing obesity in childhood is highly individualised. Dietary and exercise management with the aim of reducing energy intake and increasing energy expenditure, can lead to long-term successful treatment for childhood obesity.^{1,8}

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