



Overweight children

The Pacific Islands have some of the highest rates of adult overweight and of adult obesity in the world. Recently, concerns are being raised about the spread of this epidemic to children and youth. Large babies and children are often considered to be "plump and healthy looking", so is this growing epidemic a cause for concern? In this factsheet we look at why there is a need for immediate action to deal with this problem.



Being overweight during adolescence carries the greatest risk of being overweight in adulthood. Infants who gain weight rapidly in their first year of life are more likely to become overweight adolescents, and to become overweight adults.

Normal-weight children may still become overweight later, as not all overweight adults were overweight as children.

(Overweight means being too heavy for your height – above certain cut-offs. Obesity is a type of overweight and carries greater health risks than just being overweight. Additional information on the dangers of obesity and overweight can be found in Factsheet number 10.)

Why worry about overweight children?

The dangers of adult overweight and obesity are clear and proven; however, whether there is a link between overweight children and overweight or obese adults has only relatively recently been investigated.

Is an overweight child more likely to become an overweight adult?

Overwhelmingly the evidence says "yes" – most overweight children will become overweight adults.

- ✦ The more overweight a child, the higher the risk of becoming an overweight/obese adult.

What are the dangers of overweight in adulthood?

The dangers include much greater risks of diabetes, gout, heart disease and stroke, as well as mobility, bone and joint problems.

Are there risks associated with being overweight as a child?

Yes. The evidence shows that overweight children have an increased risk of developing:

- ✦ asthma
- ✦ high blood pressure
- ✦ mobility, bone and joint problems
- ✦ sleep apnoea (breathing difficulties during sleep).

Children who are overweight are also more likely to experience social problems such as teasing from other children and are unable to join in games and sports. They are often reluctant to participate in activities and become withdrawn.

Defining overweight children

While there are widely accepted Body Mass Index (BMI) standards for adults – which use height and weight – there is no globally accepted system in use for children. WHO recommends that standard international (NCHS/WHO) weight-for-height charts are used. Up to the age of 10 years, overweight is identified by weight for height greater than two standard deviations from the reference median value. For children over the age of 10 years, being above the 85th percentile on the weight-for-height chart is classified as overweight. Alternatively specific BMI cut-offs (from WHO) can be used from the age of nine years.

In adults, it is possible to use one set of BMI cut-offs to identify obesity/overweight. However, it is not possible to use one set of BMI cut-offs with children because their bodies change so much during growth. There have been a number of attempts by researchers to develop tables of potential BMI cut-offs that are both sex and age specific for children. The more recent ones are considered by many to be of similar if not greater accuracy than growth charts. They are designed to identify overweight, and cannot be used to identify underweight.

It is important to remember that both of these methods are designed to classify overweight at a population rather than an individual level. There may, therefore, be some children who are misclassified by either method. The aim of any classification is to identify children who are at risk for poor health, and the presence of other risk factors, such as family history or low physical activity level, should also be considered. For either individual or population use, the system used to identify overweight children should be consistent at a national level.



What are the causes of childhood overweight?

Overweight in both children and adults is due to:

- ✦ an energy imbalance – more energy (from food and drinks) is taken in than is used (for activity, growth and body functions),
- ✦ an individual's genetics will affect their use of energy (calories)

in the body; however, without the presence of an imbalance of energy, they cannot become overweight.

While the cause of overweight is clear, the reasons children take in too much energy (calories) and do not get enough physical activity are complex and very individual. Overweight children are commonly found to

- ✦ lack involvement in sports and exercise,
- ✦ have poor eating habits with frequent snacking, and,
- ✦ be sedentary – for example, they often watch too much television.

There are also many environmental influences involved. For example:

- ✦ high fat/sugar foods and drinks are advertised everywhere,
- ✦ sport and play facilities are inadequate,
- ✦ walking to school is unsafe, and
- ✦ healthy food options are not available in school meals and nearby stores.





SPC Factsheet no. **10**

Overweight and Obesity

A growing problem in the Pacific
 Obesity and overweight are growing problems throughout the world, and particularly in the Pacific. In ten Pacific Island countries and territories, at least 50 per cent of the population are either overweight or obese.

What is the difference between obesity and overweight?
 Obesity is much more likely to cause serious health problems than being overweight.

The most common way of seeing if someone has a healthy weight is using the "Body Mass Index" (BMI). This uses height and weight to give a score.

You can use a special chart to assess if someone is of a healthy weight. These charts can be ordered from SPC, see address below. This allows you to use pounds or kg and metres or feet and inches, to find out what someone's BMI is. The chart also shows whether or not a person is classed as obese or overweight.

Note: Outside the Pacific region, different BMI standards are used. (BMI between 25 and 30 is overweight and over 30 is obese.) The Pacific standards take into account the more muscular build found among the people in the Pacific.

To calculate BMI if you don't have a chart:
 You need the person's height in metres (e.g. 1.6 m) and their weight in kg (e.g. 75.5 kg).
 $BMI = \text{weight} \div (\text{height} \times \text{height})$
 $= 75.5 \div (1.6 \times 1.6)$
 $= 29.5$ So this person is overweight, but not obese.

Another way to see if someone is overweight or not is by measuring their waist circumference. You can measure around the waist (narrowest part of waist or across the navel) with a tape measure or marked piece of string. It is recommended that waist measurement is less than 94 cm (37 inches) for men, and less than 80 cm (32 inches) for women.

What are the risks from overweight and obesity?
 When someone is overweight or obese, they may have symptoms including: feeling uncomfortable, getting tired quickly, shortness of breath, back-ache, and aching legs and hip joints.

There are also long-term risks, which are serious. Being obese is associated with increased risks of hypertension (high blood pressure), cardiovascular disease (heart disease) and diabetes.

In the Pacific we use the following values

BMI between 27 and 32 = overweight

BMI over 32 = obese

Preventing and dealing with childhood overweight

Being overweight during childhood is of real concern and individual behaviour and environmental factors need to be targeted in the prevention and treatment of overweight in childhood.

Promoting healthy eating behaviours in children

Healthy eating habits need to be encouraged in all children as unhealthy habits that start in childhood are often difficult to change in later life. Children who have been identified as being overweight may need special support. It is important not to "label" overweight children as this can cause social problems for them.

Individual support

A child that has been identified as being overweight should be given advice on eating a balanced diet and on being physically active. Overweight children should generally not be advised to lose weight, but to maintain their current weight until they "grow into it". During child-

hood, children grow rapidly, so care must be taken not to restrict this growth. If an overweight child loses weight, their diet should be reviewed in order to increase their energy intake slightly to prevent this weight loss. For example, a child of 10 years who weighs 45 kg and is 1.3 m tall would be considered to be obese (using centile cut-offs or BMI cut-offs). However, if that child manages to stay the same weight for the next two years and grows to be 1.5 m, they would then be re-classified as normal weight.

Supportive environments

Supportive environments can be created by ensuring that the community and the school promote healthy diets and physical activity. For example, school shops and meals should offer healthy, balanced meals and snacks, and the school should incorporate physical activity into the curriculum.

(For more information on adult overweight see Factsheet number 10 – Overweight and obesity.)