

Are you obese?



How do I know I am fat?

Body Mass Index

Body Mass Index (BMI) is used to assess whether an adult's weight is desirable. The calculation of BMI is as follows:

$$\frac{\text{Weight (kg)}}{\text{Height (m)} \times \text{Height (m)}}$$

Ideal Body Weight Range (calculated from BMI for Asian adults)

Height (m)	Ideal Body Weight Range (kg)
1.45	38.8 – 48.1
1.5	41.6 – 51.5
1.55	44.4 – 55.0
1.6	47.4 – 58.6
1.65	50.4 – 62.3
1.7	53.5 – 66.2
1.75	56.7 – 70.1
1.8	59.9 – 74.2
1.85	63.3 – 78.4
1.9	66.8 – 82.7



Obese:

BMI 25 or above



Overweight:

BMI 23 - 24.9



Normal:

BMI 18.5 - 22.9



Underweight:

BMI below 18.5

Source: World Health Organization Western Pacific Region Office

Note: The above BMI classification is promulgated by the World Health Organization (Western Pacific Region Office) for reference by Asian adults and is not applicable to children under the age of 18 or pregnant women.

Central Obesity

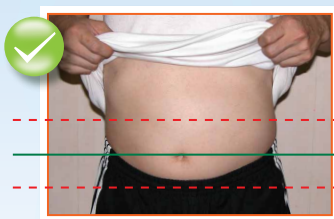
While BMI is commonly used as a measure of obesity, it does not reflect the distribution of fat in the body. Central obesity, which means excess accumulation of abdominal fat, is also a risk factor for many chronic diseases.

For Asian adults, if a waist circumference is equivalent to or over the following limits, it is considered as central obesity, which is associated with metabolic and cardiovascular risk.

Sex	Waist Circumference (cm)	Waist Circumference (inch)
Male	90	~36
Female	80	~32

How to measure your waist circumference?

1. Remove items that placed around abdominal area.
2. Breathe out normally, wrap a measuring tape around the waist.
3. Measure halfway between your lowest rib and the top of your hipbone, roughly in the line with your belly button.
4. Make sure the tape is snug, without compressing the skin.



Lower border of the rib cage

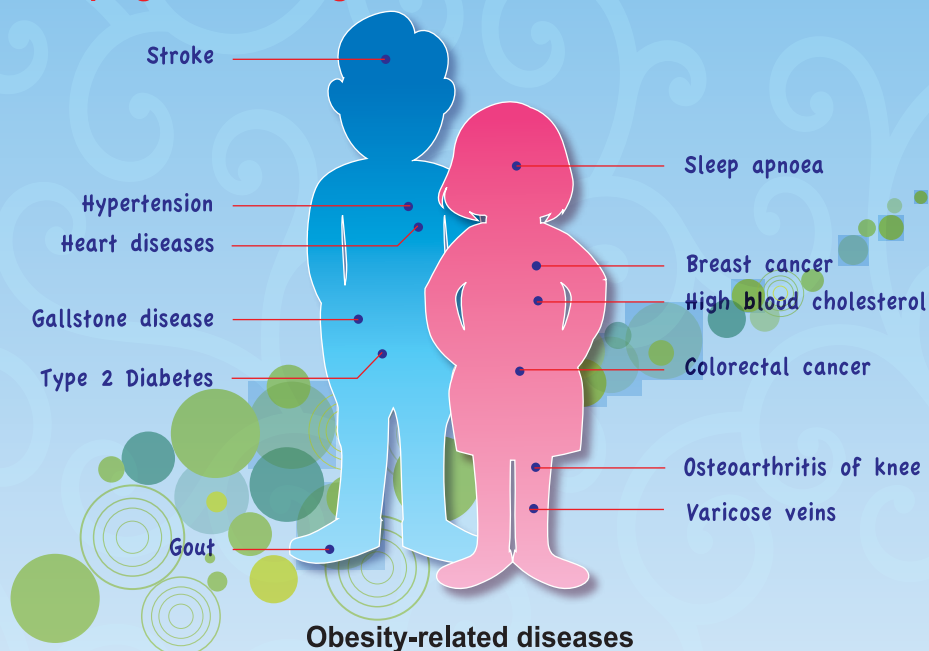
Measuring tape position

Top of the hipbone



Obesity and health problems

If you are overweight or obese, you have a higher risk of developing the following diseases:



Factors leading to obesity

We obtain energy from food for supporting our metabolic functions and physical activities. If we take in more energy from diet than we consume, the excess will be stored in the body as fat. In the long run, this leads to overweight or even obesity.

Common causes of overweight/obesity include:

1. Unhealthy dietary habit

Increased portion sizes, excessive intake of high-fat food and inadequate fruit and vegetables consumption will likely lead to weight gain.

2. Inadequate physical activity

Sedentary lifestyles lower our daily physical activity level thus leading to accumulation of fat in the body.

3. Age

The metabolic rate and physical activity level of an adult decrease gradually in older ages, so they are prone to be overweight or obese.

Tips for maintaining desirable body weight

1. Having a balanced diet

To adopt good dietary habits, we should pay attention when purchasing, handling and eating. For example:

- Purchase a wide variety of nutritious foods;
- Avoid high-fat ingredients for cooking (e.g. replace whole milk with low-fat/skimmed milk, replace pork belly with lean meat and remove skin from poultry meat);
- Eat less processed foods with high-fat content (e.g. luncheon meat, sausage);
- Avoid high-sugar or high-fat food and drinks, including deep-fried food (e.g. deep-fried pork chop, deep-fried chicken wings or French fries), junk food (e.g. candy, chocolates, sugary drinks or potato chips) and dessert (e.g. ice-cream, mango pudding);
- Adopt low-fat cooking methods (e.g. steaming, boiling, baking, poaching and stir-frying with less oil); and
- Have the three main meals regularly with appropriate amount. Eat most grains, more vegetables and fruit, and moderate amount of meat, fish, egg and alternatives. One can also consider having moderate amount of healthy snacks (e.g. fruit, hard boiled egg) between main meals.

2. Regular Physical Activity

Adults are recommended to do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week for better health. Patients with chronic health problems and elders who have been inactive should first consult a doctor before embarking on physical activity harder than usual. Your weight could only be effectively controlled by maintaining a healthy eating habit and active life.



What is a safe and effective weight control programme?

A safe and effective weight control programme is recommended to include the following:

- A balanced diet with food in the right amounts;
- Regular physical activity;
- Weight loss at a safe and healthy speed (a weight reduction of about 0.5-1 kilogram or about 1-2 pounds per week);
- An appropriate arrangement in daily life and diet according to individual needs (e.g. age, body condition and sex);
- A comprehensive plan and goals; and
- Regular assessment and evaluation by professionals (e.g. dietitians, health care professionals)

Some people may attempt to lose weight in an inappropriate manner and this could result not only in failure but also in undesirable health outcomes. Therefore, one should be very careful when following any weight loss regime, and consult professionals, e.g. doctor or dietitian, if in doubt.

Weight Forum

Q : Most of my friends think that they have to lose weight. What standard should I adopt to judge whether my body weight is normal?

- My feeling towards my own appearance
- Opinions of my family and friends
- Ratio of height and weight

A : We should not judge whether a person is obese or not by subjective perception. The World Health Organization recommends Asian adult to calculate his/her BMI by his/her height and weight and take reference with the standard of Asian adults to assess whether the weight falls within the normal range from the medical point of view (Please refer to the Ideal Body Weight Range).

Q : Is obesity related to congenital factors? Will persons who are born to be fat easily put on weight even after drinking water?

A : Although genetic factor is one of the many factors that cause obesity, behavioural and personal factors, such as unhealthy dietary habit and sedentary lifestyle, are the major causes of obesity for most obese persons. Most importantly, we can control our own eating habit and lifestyle, so persons who are born to have the “fat gene” could also have a normal weight as they grow up.

Q : Which of the following food items easily cause obesity if they are excessively consumed?

- Grains
- Meat, fish, egg and alternatives
- Milk and alternatives
- Fruits

A : All these food items provide energy to the body. Although the food items have varying energy contents, excessive consumption will result in intake of excessive energy and lead to weight gain.

Q : Can I keep fit by having healthy grains, fruit and vegetables only?

A : Although grains, fruit and vegetables contain less fat in general, you have to note whether excessive fat or oil is added in the food manufacturing or cooking process (e.g. deep-frying, braising in heavy sauce) which makes the food unhealthy. You are advised to use low-fat cooking methods (e.g. poaching in water / soup, steaming or stir-frying with less oil) without excessive fat, salt, or sugar added. Please refer to the following table for examples of low-fat and high-fat food items.

Category	Low-fat food items	High-fat food items
Grains	Rice, whole-wheat bread, rice vermicelli, macaroni, steamed plain rice rolls, steamed bun, noodles in soup, oatmeal	Fried noodles/rice, deep-fried bun, deep-fried dough, instant noodles, E-fu noodles, bread with filling, croissant, cake, pizza, pan-fried rice rolls, sandwich biscuit
Vegetables	Gourds and leafy vegetables in soup, poached or stir-fry with less oil	Vegetables salad (with salad dressing), oily vegetables, deep-fried vegetables (e.g. deep-fried onion rings and tempura)
Fruits	Fresh fruit and fruit platter	Fruit salad (with salad dressing), fruit desserts with full-cream dairy products and coconut milk (e.g. sago dessert with coconut milk and mango pudding)

Q : What are the high-risk health problems for an overweight or obese person?

- Certain types of cancers (such as breast cancer and colorectal cancer)
- Stroke, heart diseases
- Diabetes, hypertension and hyperlipidemia (including high cholesterol)
- Sleep apnoea
- Knee osteoarthritis and varicose veins
- Gallstone

A : All of the above are closely associated with obesity. Weight control is important not only for improving the body shape and appearance, but also for preventing various chronic diseases.

Q : What dietary improvements can I make to control my weight?

- Drink water instead of sugary drinks (e.g. fruit juice with added sugar and soft drinks);
- Have regular meals in right amounts;
- Avoid high-fat food, fried noodles or fried rice; and
- Eat more fresh fruit and vegetables

A : The above four good dietary practices can help to reduce energy intake and they are practicable in daily life. Taking sugary drink as an example, one can (330ml) of soft drink contains about 135 kcal; if you drink water instead of one can of soft drink every day, you can avoid absorbing 49,300 kcal in a year. The excessive energy will be stored as fat in our body if not used, resulting in a body weight gain of 6kg. Weight control involves behavioural changes on a long-term basis by maintaining the practice of healthy eating.

Q : Are there any simple, convenient, efficient and effective physical activities that can be finished in a short time?

A : First of all, you should seize opportunities to increase physical activities in your daily life, e.g. increase the frequency of walking, and helping with housework. You may take the stairs or walk up the escalators rather than using the lift, you may do walking exercise in your lunch break, you may park your car further away than usual and walk when going back home, or you may do some muscle strengthening exercises to replace the time spend on watching TV at night. Jogging and aerobics are simple, convenient and beneficial activities. Persons with chronic diseases and elders who are not exercising on a regular basis should consult a doctor before starting new exercise programme.

Q : Can the so-called “express slimming treatment/products” available in the market speed up the slimming process? What is the desirable pace for weight loss?

A : Just like building up other healthy habits, you should control your weight gradually. It would be safe to reduce 0.5-1 kg (i.e. 1-2 pounds) of weight per week. Products or treatment claiming to speed up the slimming process (e.g. certain medicines or “slimming” recipes with a very low calorie diet) may severely impair your health, so don't try them. Please consult the health care professionals if necessary. **Remember that there is no shortcut to weight loss. Adopting good dietary habit and leading healthy lifestyle is the long-term and lasting method for weight control and promotion of good health.**



Centre for Health Protection Website
www.chp.gov.hk



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Health Education Infoline of the Department of Health
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