

Obesity and overweight

What are Overweight and Obesity?

Overweight and obesity are defined as abnormal or excessive fat accumulation that may impair health. Body Mass Index (BMI) is used to determine the level obesity and overweight in a person. It is a simple index of weight-for-height through dividing the square of their height in meters (kg/m^2).

According to World Health Organisation (WHO), BMI is separately defined for adults and children. For adults being overweight is having a BMI greater than or equal to 25 and being obese is a BMI greater than or equal to 30.

BMI provides the most useful population-level measure of overweight and obesity as it is the same for both sexes and for all ages of adults. However, it should be considered a rough guide because it may not correspond to the same degree of fatness in different individuals.

For children, age needs to be considered when defining overweight and obesity.

Children under 5 years of age

- overweight is weight-for-height greater than 2 standard deviations above WHO Child Growth Standards median; and obesity is weight-for-height greater than 3 standard deviations above the WHO Child Growth Standards median.

Children aged between 5–19 years

- overweight is BMI-for-age greater than 1 standard deviation above the WHO Growth Reference median; and obesity is greater than 2 standard deviations above the WHO Growth Reference median.

What causes Obesity and Overweight?

People gain weight when they eat more calories than they burn through activity. This imbalance is the greatest contributor to weight gain.

- ✓ genetics
- ✓ energy-dense foods that are high in fat,
- ✓ physical inactivity
- ✓ person's environment e.g. due to the increasingly sedentary nature of many forms of work, changing modes of transportation, and increasing urbanization,
- ✓ other health conditions such as underactive thyroid and polycystic ovary syndrome,
- ✓ certain medicines also may cause weight gain, including some corticosteroids, antidepressants, and seizure medicines
- ✓ stress, emotional factors, and poor sleep

What are common health consequences of overweight and obesity?

Raised BMI is a major risk factor for non-communicable diseases such as:

- Cardiovascular diseases (mainly heart disease and stroke), which were the leading cause of death in 2012
- Muscular skeletal disorders (especially osteoarthritis – a highly disabling degenerative disease of the joints)
- Some cancers (including endometrial, breast, ovarian, prostate, liver, gallbladder, kidney, and colon)
- High blood pressure (Hypertension)
- High LDL cholesterol, low HDL cholesterol, or high levels of triglycerides (Dyslipidemia)
- Type 2 diabetes
- Coronary heart disease
- Stroke
- Gallbladder disease
- Osteoarthritis (a breakdown of cartilage and bone within a joint)
- Sleep apnea and breathing problems
- Some cancers (endometrial, breast, colon, kidney, gallbladder, and liver)
- Low quality of life
- Mental illness such as clinical depression, anxiety, and other mental disorders
- Body pain and difficulty with physical functioning

Childhood obesity is associated with a higher chance of obesity, premature death and disability in adulthood. In addition to increased future risks, obese children experience breathing difficulties, increased risk of fractures, hypertension, early markers of cardiovascular disease, insulin resistance and psychological effects.

How can overweight and obesity be reduced?

Overweight and obesity, as well as their related non communicable diseases, are largely preventable. Supportive environments and communities are fundamental in shaping people's choices, by making the choice of healthier foods and regular physical activity the easiest choice (the choice that is the most accessible, available and affordable), and therefore preventing overweight and obesity.

At the individual level, people can:

- limit energy intake from total fats and sugars;
- increase consumption of fruit and vegetables, as well as legumes, whole grains and nuts; and
- engage in regular physical activity (60 minutes a day for children and 150 minutes spread through the week for adults).
- limit alcohol intake

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