

# Glossary

<b>Weight control</b>	Weight control is widely defined as approaches to maintain body weight, including both <i>prevention of weight gain</i> and <i>weight loss</i> .
<b>Body mass index</b>	Body mass index (BMI) is a measure of body mass relative to height, calculated as weight (kg) divided by height squared ( $m^2$ ).
<b>Healthy weight</b>	A healthy weight level for adults is defined as a body mass index within the range 18.5 to 24.9 $kg/m^2$ (WHO Expert Committee, 1995).
<b>Overweight</b>	A body mass index within the range 25.0–29.9 $kg/m^2$ (WHO Expert Committee, 1995).
<b>Obesity</b>	An increase in body weight beyond the limits of skeletal and physical requirements, as a result of excessive accumulation of fat in the body. A person is defined as obese if he or she has a body mass index of 30.0 $kg/m^2$ or over (WHO Expert Committee, 1995).
<b>Energy</b>	Energy is measured in kilojoules and usually expressed as the quantity consumed or expended in a 24-hour period. Energy was previously expressed as calories (1 cal = 4.2 J).
<b>Energy balance</b>	Energy balance corresponds to the equivalence between the energy consumed in diet and the energy expended to maintain basal metabolism, physiological functions of the body and physical activities. This is operationally defined as stable body composition.
<b>Basal metabolic rate</b>	The amount of energy (in kilojoules per 24 hours) required to maintain the essential body functions in absolute resting and fasting conditions.
<b>Fat-free body mass</b>	The portion of body weight that is not adipose tissue, consisting primarily of muscle, bone and water.
<b>Physical activity</b>	Any bodily movement that is produced by contraction of skeletal muscle and that increases energy expenditure above resting levels.
<b>Maximal oxygen consumption</b>	The highest rate of oxygen consumed during exercise. It is usually expressed as multiples of resting oxygen consumption, in MET (see below).
<b>Maximal heart rate</b>	The highest heart rate achieved during maximal exercise. An estimate can be obtained using the formula 220 minus age.
<b>Metabolic equivalent (MET)</b>	Represents the metabolic rate associated with seated rest and is set at 3.5 millilitres of oxygen consumed per kilogram body mass per minute.
<b>Physical activity</b>	Physical inactivity or sedentary behaviour is a state in which body movement is minimal and energy expenditure approximates resting metabolic rate.
<b>Physical fitness</b>	A set of attributes that people have or achieve that relates to the ability to perform physical activity.

<b>Intensity of physical activity</b>	<p>The energy cost of the level of physical activity that is performed. This has been defined in three ways:</p> <ul style="list-style-type: none"><li>• Absolute intensity pertains to the rate of oxygen consumption (or energy expenditure) associated with participation in activity. This can be defined as oxygen consumed during the activity, and is often expressed as multiples of METs.</li><li>• Relative intensity compares the oxygen consumption associated with an activity relative to an individual's maximal oxygen consumption. An activity entailing a given oxygen consumption will have a higher relative intensity for persons with lower maximal consumption. For example, the relative intensity would be higher among older adults compared with younger adults because of the decline in maximal oxygen consumption associated with age.</li><li>• Subjective intensity is based on an individual's perception of physiological cues such as increased breathing, heart rate and sweating, each of which can increase with increasing metabolic demands of physical activity.</li></ul>
<b>Light physical activity</b>	<p>Activity of an intensity of about 25–44% relative to a person's maximal oxygen consumption or 30–49% of maximal heart rate. Examples include walking at a normal pace for a woman aged 30 years but, because of his lower maximal oxygen consumption, walking slowly for a man aged 65 years (US Department of Health and Human Services, 1996).</p>
<b>Moderate physical activity</b>	<p>Activity of an intensity of about 45–59% relative to a person's maximal oxygen consumption or 50–69% of maximal heart rate. Examples include carrying and stacking wood for a man aged 25 years, but fast walking for a woman aged 45 years (DHHS, 1996).</p>
<b>Vigorous physical activity</b>	<p>Activity of an intensity of at least 60% relative to a person's maximal oxygen consumption or 70% of maximal heart rate. Examples include jogging for a woman aged 35 years, but brisk walking for a man aged 65 years (US Department of Health and Human Services, 1996).</p>
<b>Meal feeding</b>	<p>A laboratory animal's 24-hour allotment of food, divided into two or more portions. Each portion is provided to the animal at a specified time during a 24 hour period.</p>
<b>Cyclic feeding</b>	<p>An experimental design in which animals are provided a limited amount of diet for a specified time, usually days or weeks, followed by a period during which the animals are given access to food <i>ad libitum</i>. This pattern of feeding may be repeated. This feeding regimen has also been referred to as energy cycling or patterned calorie restriction.</p>
<b>Diet restriction</b>	<p>Feeding experimental animals with less of the control diet and therefore reducing all constituents of the diet. These diets are sometimes supplemented with some of the micronutrients that the investigator does not want to reduce. Such diets can be semi-purified or cereal-based. It is not possible to supplement all minor constituents in a cereal-based diet because they are not defined.</p>
<b>Food restriction</b>	<p>Identical to diet restriction (see above).</p>
<b>Energy restriction</b>	<p>A dietary protocol in which energy intake is selectively reduced while protein and all micro-constituents (including micronutrients) are fed at the same level in the control and energy-restricted groups. Energy restriction is generally accomplished by selectively removing carbohydrate and/or fat, and is often referred to as calorie restriction.</p>