

# Obesity: Causes and consequences glossary

**Abdominal fat** – fat that is around the middle of the body distributed between the thorax and pelvis

**Adipocytes** – fat cells

**Adipose tissue** - fat tissue in the body

**Apnoea** - The temporary stopping of breathing during sleep, often resulting in daytime sleepiness

**Basal Metabolic Rate** - the minimum amount of energy that your body requires to do the basic functions for staying alive, such as breathing, breaking down food, and keeping your heart and brain and other organs working

**Behavioural Risk Factor Surveillance System** – a telephone health survey system, which operates from the Center for Disease Control and Prevention in the US

**Biological** – to do with life or living organism

**Body mass index (BMI)** - a measure of body weight relative to height. BMI is calculated using your weight in kilograms (kg) divided by your height in meters squared. The index is often used to determine if a person is underweight, at a normal weight, overweight, or obese. For adults, a BMI of 18.5 to 24.9 is considered healthy. A person with a BMI of 25 to 29.9 is considered overweight, and a person with a BMI of 30 or more is considered obese

**Calorie** - a unit of energy in food. The word calorie is ordinarily used instead of the more precise, scientific term kilocalorie. A kilocalorie represents the amount of energy required to raise the temperature of a litre of water 1o centigrade at sea level. Carbohydrates, fats, protein, and alcohol in the foods and drinks we eat provide food energy or "calories." Carbohydrates and proteins provide 4 calories per gram, fat has 9 calories per gram, and alcohol has 7 calories per gram

**Carbohydrate** - a major source of energy in the diet. Simple carbohydrates are sugars and complex carbohydrates include both starches and fibre. Carbohydrates have 4 calories per gram

**Cardiovascular** - relating to the circulation of blood i.e. the heart and blood vessels. Cardiovascular diseases affect the heart and blood vessels and include arteriosclerosis, coronary artery disease, heart valve disease, arrhythmia, heart failure, hypertension, orthostatic hypotension, shock, endocarditis, diseases of the aorta and its branches, disorders of the peripheral vascular system, and congenital heart disease

**Center for Disease Control and Prevention** – a national public health institute of the United States which focusses on activities designed to improve the health of US citizens

**Cholesterol** - fat chemical (lipid) that is made in the cells in your body. Some cholesterol is needed to stay healthy but too much can lead to fat blocking the blood vessels

**Comorbidities** – one or more additional disease or disorder occurring together with the primary disease

**Diabetes** - a condition that causes too much sugar (glucose) to circulate in the blood. It happens when the body stops making a hormone called insulin (type 1 diabetes) or when insulin stops working (type 2 diabetes)

**Digestive** – relating to the breaking down of food so that the necessary parts can be absorbed or eliminated

**Dizygotic** – non-identical twin

**Dyslipidaemia** – a condition in which there are abnormally high amounts of fatty substances (lipids or lipoproteins) in the blood, which is often a result of obesity

**Energy expenditure** - the amount of energy, measured in calories, that a person uses. Calories are used by people to breathe, circulate blood, digest food, and be physically active

**Food Standards Agency** – a UK government department responsible for food safety and food hygiene

**Gallstones** - small stones, usually made of cholesterol, that form in the gallbladder. In most cases they do not cause any symptoms and do not need to be treated

**Genes** - the basic biological units of heredity, genes are the parts of your cells that contain instructions for how your body works. Genes are found on the 23 pairs of chromosomes in your normal cells, each of which has thousands of genes. You get one set of chromosomes, and all of the genes that are on them, from each of your parents

**Genetic** – relates to something inherited from our genes, that is the collection of chemical information passed on from our parents

**Heart attack (myocardial infarction)** - the death of the heart muscle due to loss of blood supply caused due to blockage in one or more of the coronary arteries supplying the heart

**Hypertension** - high blood pressure greater than or equal to 140/90 mmHg With high blood pressure, the heart works harder, and your chances of a stroke, heart attack, and kidney problems are greater. Uncontrolled high blood pressure may lead to blindness, heart attacks, heart failure, kidney disease, and stroke

**Hypersomnolence** – excessive daytime sleepiness

**Immunopharmacotherapy** – the use of treatments formed from antibodies or other similar biological molecules

**Insulin** - a hormone made by the pancreas that helps move glucose (sugar) from the blood to muscles and other tissues. Insulin controls blood sugar levels

**Leptin** - a hormone produced by fatty tissue which is believed to regulate fat storage in the body

**Lipoprotein** - Proteins in the blood that carry fats and fat-like substances such as cholesterol

**Metabolic Syndrome** - a group of medical conditions that increases a person's risk of developing diabetes and coronary heart disease and increases their chances of dying due to the heart disease. Metabolic Syndrome is also called 'Insulin Resistance Syndrome'

**Monozygotic** – an identical twin

**National Bureau of Economic Research** - a private, nonprofit, nonpartisan research organization dedicated to promoting a greater understanding of how the economy works, which is based in the USA

**Neuroscience** – the study of how the brain and the associated nerve system works

**NHS** - the National Health Service that provides free health care for the population of the UK

**Nurses' Health Study** - the largest and longest running investigations of factors that influence women's health. Started in 1976 the information provided by the 238,000 dedicated nurse-participants has led to many new insights on health and disease

**Protein** - one of the three nutrients that provides calories to the body. Protein is an essential nutrient that helps build many parts of the body, including muscle, bone, skin, and blood. Protein provides 4 calories per gram and is found in foods like meat, fish, poultry, eggs, dairy products, beans, nuts, and tofu

**Risk factor** - something that increases a person's chances of developing a disease. For example, cigarette smoking is a risk factor for lung cancer, and obesity is a risk factor for heart disease

**Rudd Center for Food Policy and Obesity** - a non-profit research and public policy organization devoted to improving the world's diet, preventing obesity, and reducing weight stigma, which operated from the University of Connecticut

**Steatosis** – fatty liver, i.e. the collection of fat inside the liver cells

**Stroke** - a sudden loss of brain function when the blood supply to a part of your brain is cut off. It can be caused by a blockage or rupture of a blood vessel to the brain. Stroke damages the brain and can cause symptoms like weakness or numbness on one side of the body or affect the ability to speak

**The World Health Organisation** - the directing and coordinating authority for health within the United Nations system

**Thermic Effect** - the amount of energy expenditure above the resting metabolic rate due to the processing of food for use and storage

**Thermodynamics** – the science that deals with the relationship between heat and other forms of energy. The first law of thermodynamics states that within an isolated system energy cannot be created or destroyed

**Waist circumference** - measurement around the waist. Fat around the waist increases the risk of obesity-related health problems. Women with a waist measurement of more than 35 inches or men with a waist measurement of more than 40 inches have a higher risk of developing obesity-related health problems, such as diabetes, high blood pressure, and heart disease

**Yo-yo Dieting** – the phenomenon of fluctuating between low calorie intake and weight loss and then subsequent weight gain