



DIABETES – TERMS TO KNOW

The following list of definitions for commonly-used medical terms related to diabetes that are found in the fact sheets.

Acanthosis nigricans is a skin condition, which leads to dark markings found typically around the neck, underarms or groin area. It is most often associated with obesity and may occur at any age.

Blood glucose is the main sugar found in the blood and the body's main source of energy. The A1C blood test is used to measure a person's average blood glucose level over 2 to 3 months. Type 2 diabetes is usually diagnosed based on elevated fasting blood glucose (7.0 millimole/litre (mmol/L) or greater).

Blood lipid is a term for fat in the blood stream, and is measured with a lipid profile blood test. The lipid profile test measures total cholesterol (the fat produced by the liver and found in some foods), triglycerides (the storage form of fat in the body), high-density lipoprotein (HDL) cholesterol (a fat molecule that takes extra cholesterol from the blood to the liver for removal), and low density lipoprotein (LDL) cholesterol (a molecule that is a combination of fat and protein that takes excess cholesterol around the body to where it's needed, but excess ultimately rests on the inside of artery walls).

Blood pressure is the force of blood on the inside walls of blood vessels. It is measured by analyzing both the systolic blood pressure, the pressure when the heart pushes blood out into the arteries, and the diastolic blood pressure, when the heart is at rest.

Body Mass Index is a ratio of weight-to-height. Research studies in large groups of people have shown that the BMI can be classified into ranges associated with health risk. There are four categories of BMI ranges in the Canadian weight classification system. These are:

- underweight (BMIs less than 18.5);
- normal weight (BMIs 18.5 to 24.9);
- overweight/pre-obese (BMIs 25 to 29.9), and
- obese (BMIs 30 and over).

Cardiovascular disease is a term that refers to more than one disease of the circulatory system including the heart and blood vessels, whether the blood vessels are affecting the lungs, the brain, kidneys or other parts of the body.

Diabetic retinopathy is diabetic eye disease that results from damage to the small blood vessels in the retina, the back part of the eye that contains the cells that respond to light. It may lead to loss of eyesight. Laser therapy, one possible treatment option, uses a strong beam of light to seal the leaking blood vessels in the eye.

End-stage renal disease is kidney failure requiring dialysis or a transplant to survive.

Impaired fasting glucose is defined as glucose levels of 6.1 to 6.9 mmol/L in fasting patients.

Impaired glucose tolerance is a condition in which a person's blood glucose level is above normal, but not high enough to be considered diabetes. It is defined as two hour glucose levels of 7.8 to 11.0 on the 75-g oral glucose tolerance test.

Insulin is a hormone responsible for regulating the uptake and storing of glucose in the body. When we eat, insulin signals liver and muscle cells to take in excess glucose and store it in the form of glycogen, and fat cells to take in glucose and store it in the form of blood lipids and turn them into triglycerides.

Insulin resistance occurs when normal levels of insulin are insufficient to produce a normal insulin response in muscles, fat and the liver. It is associated with obesity, particularly abdominal obesity. Insulin resistance leads to elevated blood glucose and triglyceride levels and is a characteristic of both metabolic syndrome and type 2 diabetes.

Metabolic Syndrome is a combination of medical problems that increase risk of heart disease and diabetes. People with metabolic syndrome have some or all of the following: high blood glucose, high blood pressure, abdominal obesity, low HDL elevated cholesterol and high triglycerides.

National Diabetes Surveillance System (NDSS) is a network of provincial and territorial diabetes surveillance systems. It was created to improve the breadth of information about the burden of diabetes in Canada so that policymakers, researchers, health practitioners, and the general public could make better public and personal health decisions. The NDSS has a broad stakeholder base including the federal and all provincial and territorial governments, non-governmental organizations, national Aboriginal groups, and researchers. In each province and territory, the health insurance registry database is linked to the physician billing and hospitalization databases to provide a rich data source on diabetes in Canada.

Polycystic Ovary Syndrome, sometimes called Polycystic Ovarian Disease, is a hormonal disorder that affects between 6 and 10 percent of women. It causes the ovaries to produce higher than normal amounts of androgens (male hormones) which interferes with egg production. As a result, the ovary produces a cyst instead of an egg. Women with polycystic ovary syndrome tend to be insulin resistant.

Vascular Disease is mainly caused by atherosclerosis or hardening of the arteries. The arteries are blood vessels that supply the oxygen and nutrients, contained in the blood, to the body from the heart.