

Life Without Limitation

Facts About Diabetes

What is diabetes?

Diabetes is a metabolic disorder characterized by a failure to secrete enough insulin, or, in some cases, the cells do not respond appropriately to the insulin that is produced. Because insulin is needed by the body to convert glucose into energy, these failures result in abnormally high levels of glucose accumulating in the blood. Diabetes may be a result of other conditions such as genetic syndromes, chemicals, drugs, malnutrition, infections, viruses, or other illnesses.

The three main types of diabetes - type 1, type 2, and gestational - are all defined as metabolic disorders that affect the way the body metabolizes, or uses, digested food to make glucose, the main source of fuel for the body.

What is prediabetes?

In prediabetes, blood glucose levels are higher than normal but not high enough to be defined as diabetes. However, many people with prediabetes develop type 2 diabetes within 10 years, states the National Institute of Diabetes and Digestive and Kidney Diseases. Prediabetes also increases the risk of heart disease and stroke. With modest weight loss and moderate physical activity, people with prediabetes can delay or prevent type 2 diabetes.

How does diabetes affect blood glucose?

For glucose to be able to move into the cells of the body, the hormone insulin must be present. Insulin is produced primarily in the pancreas, and, normally, is readily available to move glucose into the cells.

However, in persons with diabetes, either the pancreas produces too little or no insulin, or the cells do not respond to the insulin that is produced. This causes a build-up of glucose in the blood, which passes into the urine where it is eventually eliminated, leaving the body without its main source of fuel.

How do the three main types of diabetes differ?

Although the three main types of diabetes are similar in the build-up of blood glucose due to problems with insulin, there are differences in cause and treatment:

type 1 diabetes

Type 1 diabetes is an autoimmune disease in which the body's immune system destroys the cells in the pancreas that produce insulin, resulting in no or a low amount of insulin. People with type 1 diabetes must take insulin daily in order to live.

type 2 diabetes

Type 2 diabetes is a result of the body's inability to make enough, or to properly use, insulin. Type 2 diabetes may be controlled with diet, exercise, and weight loss, or may require oral medications and/or insulin injections.

gestational diabetes

Gestational diabetes occurs in pregnant women who have not had diagnosed diabetes in the past. It results in the inability to use the insulin that is present and usually disappears after delivery. Gestational diabetes may be controlled with diet, exercise, and attention to weight gain. Women with gestational diabetes may be at higher risk for type 2 diabetes later in life.

Complications of diabetes:

Diabetes is the sixth leading cause of death among Americans, and the fifth leading cause of death from disease. Although it is believed that diabetes is under-reported as a condition leading to or causing death, each year, more than 200,000 deaths are reported as being caused by diabetes or its complications. Complications of diabetes include eye problems and blindness, heart disease, stroke, neurological problems, amputation, and impotence.

Because diabetes (with the exception of gestational diabetes) is a chronic, incurable disease that affects nearly every part of the body, contributes to other serious diseases, and can be life threatening, it must be managed under the care of a physician throughout a person's life.