



Detroit Medical Center Diabetes Information

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 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 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 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.

If you are concerned about any of these conditions, discuss them with your doctor. If you do not have a doctor, the DMC can find one for you. Call 888-DMC-2500 between 8:30 a.m. and 5:00 p.m., Monday – Friday.

Diabetes is the sixth leading cause of death among Americans. Complications of diabetes include eye problems and blindness, heart disease, stroke, neurological problems, amputation, and impotence. This information will help you learn more about diabetes, including risk factors, diagnosis, and treatment. The DMC is home to the state's leading experts in heart disease, including the physicians of CARDIO TEAM ONE, and the 29-minute Emergency Room Guarantee.

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.

