

Diabetes is a chronic (lifelong) disease marked by high levels of sugar in the blood.

### Causes

According to the Diabetes educators at Mercy Medical Center, insulin is a hormone produced by the pancreas to control blood sugar. Diabetes can be caused by too little insulin, resistance to insulin, or both. To understand diabetes, it is important to first understand the normal process by which food is broken down and used by the body for energy. Several things happen when food is digested:

- A sugar called glucose enters the bloodstream. Glucose is a source of fuel for the body.
- An organ called the pancreas makes insulin. The role of insulin is to move glucose from the bloodstream into muscle, fat, and liver cells, where it can be used as fuel.

People with diabetes have high blood sugar. This is because:

- Their pancreas does not make enough insulin
- Their muscle, fat, and liver cells do not respond to insulin normally

- Both of the above

There are three major types of diabetes:

- [Type 1 diabetes](#) is usually diagnosed in childhood. Many patients are diagnosed when they are older than age 20. In this disease, the body makes little or no insulin. Daily injections of insulin are needed. The exact cause is unknown. Genetics, viruses, and autoimmune problems may play a role.
- [Type 2 diabetes](#) is far more common than type 1. It makes up most of diabetes cases. It usually occurs in adulthood, but young people are increasingly being diagnosed with this disease. The pancreas does not make enough insulin to keep blood glucose levels normal, often because the body does not respond well to insulin. Many people with type 2 diabetes do not know they have it, although it is a serious condition. Type 2 diabetes is becoming more common due to increasing obesity and failure to exercise.
- [Gestational diabetes](#) is high blood glucose that develops at any time during pregnancy in a woman who does not have diabetes.

Diabetes affects more than 20 million Americans. Over 40 million Americans have prediabetes.

There are many risk factors for type 2 diabetes, including:

- Age over 45 years
- A parent, brother, or sister with diabetes
- Gestational diabetes or delivering a baby weighing more than 9 pounds
- Heart disease
- High blood cholesterol level
- Obesity
- Not getting enough exercise
- [Polycystic ovary disease](#) (in women)
- Previous impaired glucose tolerance

- Some ethnic groups (particularly African Americans, Native Americans, Asians, Pacific Islanders, and Hispanic Americans)

## Symptoms

High blood levels of glucose can cause several problems, including:

- Blurry vision
- Excessive thirst
- [Fatigue](#)
- Frequent urination
- Hunger

- Weight loss

However, because type 2 diabetes develops slowly, some people with high blood sugar experience no symptoms at all.

Symptoms of type 1 diabetes:

- Fatigue
- Increased thirst
- Increased urination
- Nausea

- Vomiting
- Weight loss in spite of increased appetite

Patients with type 1 diabetes usually develop symptoms over a short period of time. The condition is often diagnosed in an emergency setting.

Symptoms of type 2 diabetes:

- Blurred vision
- Fatigue
- Increased appetite

- Increased thirst
- Increased urination

## **Prevention**

Maintaining an ideal body weight and an active lifestyle may prevent type 2 diabetes.

Currently there is no way to prevent type 1 diabetes.

There is no effective screening test for type 1 diabetes in people who don't have symptoms.

Screening for type 2 diabetes and people with no symptoms is recommended for:

- Overweight children who have other risk factors for diabetes starting at age 10 and repeating every 2 years
- Overweight adults ([BMI](#) greater than 25) who have other risk factors
- Adults over 45, repeated every 3 years

To prevent complications of diabetes, visit your health care provider or diabetes educator at least four times a year. Talk about any problems you are having.

Regularly have the following tests:

- Have your blood pressure checked every year

(blood pressure goals should be 130/80 mm/Hg or lower).

- Have your glycosylated hemoglobin (HbA1c) checked every 6 months if your diabetes is well controlled, otherwise every 3 months.
- Have your cholesterol and triglyceride levels checked yearly (aim for LDL levels below 100 mg/dL).
- Get yearly tests to make sure your kidneys are working well ( [microalbuminuria](#) and [serum creatinine](#) ).
- Visit your ophthalmologist (preferably one who specializes in diabetic retinopathy) at least once a

year, or more often if you have signs of diabetic retinopathy.

- See the dentist every 6 months for a thorough dental cleaning and exam. Make sure your dentist and hygienist know that you have diabetes.
- Make sure your health care provider inspects your feet at each visit.

For more information about Diabetes and diabetes management, contact the Mercy Diabetes Education Program at (712) 279-2345, or visit [www.mercysiouxcity.com](http://www.mercysiouxcity.com)

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