

Type 2 Diabetes


Topic Overview

By Healthwise

This topic provides general information about [type 2 diabetes](#). If you are looking for information on the management of type 2 diabetes, see:

- [Type 2 Diabetes: Recently Diagnosed](#), if you have been told recently that you have type 2 diabetes.
- [Type 2 Diabetes: Living With the Disease](#), if you have type 2 diabetes.
- [Type 2 Diabetes in Children](#), if your child has type 2 diabetes.
- [Type 2 Diabetes: Living With Complications](#), if you have eye, kidney, heart, nerve, or blood vessel disease caused by your diabetes.

What is type 2 diabetes?

Type 2 diabetes is a lifelong disease that develops when the [pancreas](#)  cannot produce enough [insulin](#) or when the body's tissues become [resistant](#) to insulin. Insulin helps sugar (glucose) enter cells, where it is used for energy. It also helps the body store extra sugar in muscle, fat, and liver cells. The stored sugar can be released and used for energy when needed.

When insulin is not available or is not used properly, blood sugar rises above a safe level. If blood sugar remains high for years, blood vessels and nerves throughout the body may be damaged, putting you at increased risk for eye, heart, blood vessel, nerve, and kidney disease. Blood sugar can rise to an unsafe level even before diabetes symptoms occur.

Type 2 diabetes can develop at any age, although it usually develops in adults. It used to be called adult-onset diabetes. It also was called non-insulin-dependent diabetes mellitus (NIDDM), because it can often be treated without using insulin.

Between 90% and 95% of people with diabetes have type 2 diabetes.¹[Type 1 diabetes](#), [gestational diabetes](#), and [secondary diabetes](#) are other forms of the disease. Some people believe, incorrectly, that type 2 diabetes is a milder form of the disease than type 1 diabetes, but it can cause the same harmful effects as type 1.

What causes type 2 diabetes?

Type 2 diabetes is caused by insulin resistance, which occurs when the body's cells and tissues do not respond properly to insulin. Your weight, level of physical activity, and family history affect how your body responds to insulin. People who are overweight, get little or no exercise, or have diabetes in their family have an increased risk of developing type 2 diabetes.

What are the symptoms?

Hallmark symptoms of diabetes are increased thirst, frequent urination, and increased hunger. Unplanned weight loss, extreme fatigue, and irritability also are common. However, in type 2 diabetes, blood sugar levels rise intermittently or so slowly that you may not have symptoms despite having the disease for many years before diagnosis.

You may discover that you have type 2 diabetes during a regular medical checkup or during an appointment for another illness or condition, such as [high blood pressure](#), a persistent infection, or a slow-healing wound. Some people do not find out they have diabetes until they have a complication from the disease, such as vision problems, kidney disease, nerve disease, or heart and blood vessel problems. About 18.2 million people in the United States have diabetes; of those, an estimated 17 million people have type 2. About one-third of all people with diabetes do not know that they have it.¹

How is type 2 diabetes treated?

Treatment includes eating a balanced diet that spreads carbohydrates throughout the day, getting regular exercise, monitoring blood sugar levels, and possibly taking medication. Frequent checkups to evaluate treatment and to monitor for complications also are important. You can live a long, healthy life with type 2 diabetes if you keep your blood sugar levels as close to normal as possible.

People with diabetes are 2 to 4 times more likely than people who don't have diabetes to die from heart and blood vessel diseases.² If you are 30 or older, talk to your health professional about taking a low-dose, or baby, aspirin daily to help prevent [heart attack](#), [stroke](#), or other large blood vessel disease ([macrovascular disease](#)).² You can reduce your risk further by lowering [high blood pressure](#) and [high cholesterol](#).

Can type 2 diabetes be prevented?

If you are at risk for developing type 2 diabetes, you may be able to prevent or at least delay the disease by getting regular exercise and eating a balanced diet that spreads [carbohydrates](#) throughout the day to prevent high blood sugar after meals. Modest weight loss of as little as 5% to 10% of your body weight can lower your body's resistance to insulin and increase its ability to use insulin more effectively. Quitting smoking and getting treatment for high blood pressure or high cholesterol also may help prevent type 2 diabetes.

Who is at risk for type 2 diabetes?

Type 2 diabetes is most common in people over age 40. However, the number of children diagnosed with this disease is increasing. People who develop type 2 diabetes are often are overweight and not physically active. If your blood sugar level is between normal and diabetic, a condition called [prediabetes](#), you are at increased risk for developing type 2 diabetes.

Other factors that increase your risk for diabetes are having a close family member with the disease; being an African-American, Hispanic, Native American, or Pacific Islander; having had [gestational diabetes](#) or delivering a large baby [more than 9 lb (4.1 kg)]; or having high blood pressure or [high cholesterol](#).

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