

## Learn about Diabetes

You can learn how to take care of your diabetes and prevent some of the serious problems diabetes can cause. The more you know, the better you can manage your diabetes.

Share this booklet with your family and friends so they will understand more about diabetes. Also make sure to ask your health care team any questions you might have.



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You can learn how to take care of your diabetes.

## What is diabetes?

Diabetes is when your blood **glucose\***, also called blood sugar, is too high. Blood glucose is the main type of sugar found in your blood and your main source of energy. Glucose comes from the food you eat and is also made in your liver and muscles. Your blood carries glucose to all of your body's cells to use for energy.

Your **pancreas**—an organ, located between your stomach and spine, that helps with digestion—releases a hormone it makes, called **insulin**, into your blood. Insulin helps your blood carry glucose to all your body's cells. Sometimes your body doesn't make enough insulin or the insulin doesn't work the way it should. Glucose then stays in your blood and doesn't reach your cells. Your blood glucose levels get too high and can cause diabetes or **prediabetes**.

Over time, having too much glucose in your blood can cause health problems.

\*See the Pronunciation Guide for tips on how to say the words in **bold** type.

## What is prediabetes?

Prediabetes is when the amount of glucose in your blood is above normal yet not high enough to be called diabetes. With prediabetes, your chances of getting type 2 diabetes, heart disease, and stroke are higher. With some weight loss and moderate physical activity, you can delay or prevent type 2 diabetes. You can even return to normal glucose levels, possibly without taking any medicines.



## What are the signs and symptoms of diabetes?

The signs and symptoms of diabetes are

- being very thirsty
- urinating often
- feeling very hungry
- feeling very tired
- losing weight without trying
- sores that heal slowly
- dry, itchy skin
- feelings of pins and needles in your feet
- losing feeling in your feet
- blurry eyesight

Some people with diabetes don't have any of these signs or symptoms. The only way to know if you have diabetes is to have your doctor do a blood test.

## What kind of diabetes do you have?

The three main types of diabetes are type 1, type 2, and **gestational** diabetes. People can develop diabetes at any age. Both women and men can develop diabetes.

### Type 1 Diabetes

Type 1 diabetes, which used to be called juvenile diabetes, develops most often in young people; however, type 1 diabetes can also develop in adults. In type 1 diabetes, your body no longer makes insulin or enough insulin because the body's **immune** system, which normally protects you from infection by getting rid of bacteria, viruses, and other harmful substances, has attacked and destroyed the cells that make insulin.

Treatment for type 1 diabetes includes

- taking shots, also called **injections**, of insulin.
- sometimes taking medicines by mouth.
- making healthy food choices.
- being physically active.
- controlling your blood pressure levels. Blood pressure is the force of blood flow inside your blood vessels.
- controlling your **cholesterol** levels. Cholesterol is a type of fat in your body's cells, in your blood, and in many foods.

## **Type 2 Diabetes**

Type 2 diabetes, which used to be called adult-onset diabetes, can affect people at any age, even children. However, type 2 diabetes develops most often in middle-aged and older people. People who are overweight and inactive are also more likely to develop type 2 diabetes.

Type 2 diabetes usually begins with insulin resistance—a condition that occurs when fat, muscle, and liver cells do not use insulin to carry glucose into the body’s cells to use for energy. As a result, the body needs more insulin to help glucose enter cells. At first, the pancreas keeps up with the added demand by making more insulin. Over time, the pancreas doesn’t make enough insulin when blood sugar levels increase, such as after meals. If your pancreas can no longer make enough insulin, you will need to treat your type 2 diabetes.

Treatment for type 2 diabetes includes

- using diabetes medicines
- making healthy food choices
- being physically active
- controlling your blood pressure levels
- controlling your cholesterol levels

## **Gestational Diabetes**

Gestational diabetes can develop when a woman is pregnant. Pregnant women make hormones that can lead to insulin resistance. All women have insulin resistance late in their pregnancy. If the pancreas doesn't make enough insulin during pregnancy, a woman develops gestational diabetes.

Overweight or obese women have a higher chance of gestational diabetes. Also, gaining too much weight during pregnancy may increase your likelihood of developing gestational diabetes.

Gestational diabetes most often goes away after the baby is born. However, a woman who has had gestational diabetes is more likely to develop type 2 diabetes later in life. Babies born to mothers who had gestational diabetes are also more likely to develop obesity and type 2 diabetes.

Read more about diabetes and pregnancy in *What I need to know about Gestational Diabetes* at [www.diabetes.niddk.nih.gov](http://www.diabetes.niddk.nih.gov).

### **Why do you need to take care of your diabetes?**

Over time, diabetes can lead to serious problems with your blood vessels, heart, nerves, kidneys, mouth, eyes, and feet. These problems can lead to an **amputation**, which is surgery to remove a damaged toe, foot, or leg, for example.

The most serious problem caused by diabetes is heart disease. When you have diabetes, you are more than twice as likely as people without diabetes to have heart disease or a stroke. With diabetes, you may not have the usual signs or symptoms of a heart attack. The best way to take care of your health is to work with your health care team to keep your blood glucose, blood pressure, and cholesterol levels in your target range. Targets are numbers you aim for.

### **Who is part of your health care team?**

Most people with diabetes get care from primary care providers, such as internists, family physicians, or pediatricians. A team of health care providers can also improve your diabetes care.

In addition to a primary care provider, your health care team may include

- an **endocrinologist** for more specialized diabetes care
- a dietitian, a nurse, or a certified diabetes educator—experts who can provide information about managing diabetes
- a counselor or mental health professional
- a pharmacist
- a dentist
- an **ophthalmologist** or an optometrist for eye care
- a podiatrist for foot care



If diabetes makes you feel sad or angry, or if you have other problems that worry you, you should talk with a counselor or mental health professional. Your doctor or certified diabetes educator can help you find a counselor.

Talk with your doctor about what vaccines and immunizations, or shots, you should get to keep from getting sick. Preventing illness is an important part of taking care of your diabetes.

When you see members of your health care team, ask lots of questions. Prepare a list of questions before your visit. Be sure you understand everything you need to know about taking care of your diabetes.



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