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## Diabetes Overview

If you just found out you have diabetes, you probably have a lot of questions and you may feel a little uncertain. But you're not alone. In the United States, 23.6 million people have diabetes. Most of these people lead full, healthy lives. One of the best things you can do for yourself is to learn all you can about diabetes. This handout will tell you some of the basics about diabetes.

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### What is diabetes?

Diabetes is a disease that occurs when a person's body doesn't make enough of the hormone insulin or can't use insulin properly. There are 2 types of diabetes. Type 1 diabetes occurs when your body's pancreas doesn't produce any insulin. Type 2 diabetes occurs when the pancreas either doesn't produce enough insulin or your body's cells ignore the insulin. Between 90% and 95% of people who are diagnosed with diabetes have type 2 diabetes.

When you digest food, your body changes most of the food you eat into glucose (a form of sugar). Insulin allows this glucose to enter all the cells of your body and be used as energy. When you have diabetes, because your body doesn't make enough insulin or can't use it properly, the glucose builds up in your blood instead of moving into the cells. Too much glucose in the blood can lead to serious health problems, including heart disease and damage to the nerves and kidneys.

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### How can I help myself stay healthy if I have diabetes?

Although diabetes can't be cured, you can still live a long and healthy life. The single most important thing you can do is control your blood sugar level. You can do this by eating right, exercising, maintaining a healthy weight and, if needed, taking oral medicines or insulin.

**Eat a healthy diet.** The recommended diet for many people who have diabetes is very similar to that suggested for everyone: low in fat, low in cholesterol, low in salt and low in added sugar. In order to help keep your blood sugar at a healthy level, it's important to eat at least 3 meals per day and never skip a meal. For more information, read our [Diabetes and Nutrition](#) handout.

**Exercise.** Exercising will help your body use insulin and lower your blood sugar level. It also helps control your weight, gives you more energy and is good for your overall health. For more information, read our [Diabetes and Exercise](#) handout.

**Maintain a healthy weight.** Losing excess weight and maintaining a healthy body weight will help you in 2 ways. First, it helps insulin work better in your body. Second, it will lower your blood pressure and decrease your risk for heart disease.

**Take your medicine.** If your diabetes can't be controlled with diet, exercise and weight control, your doctor may recommend medicine or insulin. Oral medicines (taken by mouth) can make your body

produce more insulin or help your body use the insulin it makes more efficiently. Some people need to add insulin to their bodies with insulin injections, insulin pens or insulin pumps. Always take medicines exactly as your doctor prescribes. For more information, read our [Oral Medicines for Diabetes](#) handout.

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## How do I check my blood sugar level?

Your doctor may suggest that you check your blood sugar level (also called blood glucose level) at home. Checking your blood sugar level involves pricking your finger to get a small drop of blood that you put on a test strip. You can read the results yourself or insert the strip into a machine called an electronic glucose meter. The results will tell you whether or not your blood sugar is in a healthy range. To learn more, read our [Monitoring Your Blood Sugar Level](#) handout.

Check your blood sugar level as often as your doctor suggests. You may need to check it more often at first, until you get the feel for how it changes and what makes it change.

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## What if my blood sugar gets too low?

People who have diabetes may have times when their blood sugar level is too low. Low blood sugar is called hypoglycemia. Signs of hypoglycemia include the following:

- Feeling very tired
- Frequent yawning
- Being unable to speak or think clearly
- Loss of muscle coordination
- Sweating
- Twitching
- Seizures
- Suddenly feeling like you're going to pass out
- Becoming very pale
- Loss of consciousness

People who have diabetes should carry at least 15 grams of a fast-acting carbohydrate with them at all times in case of hypoglycemia. The following are examples of quick sources of energy that can relieve the symptoms:

- Nondiet soda-  $\frac{1}{2}$  to  $\frac{3}{4}$  cup
- Fruit juice-  $\frac{1}{2}$  cup
- Fruit- 2 tablespoons of raisins
- Milk- 1 cup
- Candy- 5 Lifesavers
- Glucose tablets- 3 tablets (5 grams each)

If you don't feel better 15 minutes after having a fast-acting carbohydrate, or if monitoring shows that your blood sugar level is still too low, have another 15 grams of a fast-acting carbohydrate.

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## What health problems can diabetes cause?

Diabetes can be a dangerous and life-threatening disease if you don't control your blood sugar level. Over time, high blood sugar levels can damage your eyes, blood vessels, nerves and kidneys. Here are some of the problems (also called complications) diabetes can cause:

**Blindness and vision loss (called diabetic retinopathy):** Diabetes can damage the small blood vessels in the retina, which can cause vision loss and even blindness. For more information, read our [Diabetes: Eye Care](#) handout.

**Heart disease:** People who have diabetes are twice as likely to have heart disease and damage to the blood vessels in the heart. This increases their risk of heart attack and stroke. For more information, read our [Diabetes and Heart Disease](#) handout.

**Nerve and blood vessel damage (called diabetic neuropathy):** Damage to blood vessels in the legs can limit the supply of blood to the nerves in the legs and feet. This can cause burning, tingling and numbness in the affected areas (usually starting in the toes and spreading to the whole foot). It also makes it difficult to feel injuries (such as foot sores). Damage to the blood vessels can also put you at risk for infections and sores that don't heal. In severe cases, parts of the foot or lower leg may have to be amputated (removed). For more information, read our [Diabetic Neuropathy](#) handout.

**Kidney disease (called diabetic nephropathy):** Diabetes can damage the small blood vessels in the kidneys, which then can't filter out the body's waste. In some people, the kidneys stop working completely. These people require dialysis or a kidney transplant. Dialysis is a treatment that eliminates wastes in the blood. For more information, please read our [Diabetic Nephropathy](#) handout.

The good news is that diabetic complications can often be prevented by taking care of yourself, following your doctor's orders and controlling your blood sugar level. For more information on how to prevent these problems, please read our [Preventing Diabetic Complications](#) handout.

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## Other Organizations

- [American Diabetes Association](http://www.diabetes.org)  
<http://www.diabetes.org>

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## Source

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