

learning about TYPE 2 DIABETES

Your body's main source of energy is glucose, a type of sugar.

Your body gets sugar from 2 major sources:

1. The foods that you eat
2. The sugar that your liver makes when you have not eaten food

It is important to balance the level of sugar in your body. Your body helps to do this by releasing insulin, a hormone made by the pancreas. Insulin moves the sugar from your blood into your cells to use for energy.

Diabetes is a disease of high blood sugar.

A person with type 2 diabetes may not have enough insulin, or the insulin that the body makes may not work as well as it should. This causes the blood sugar level to become out of balance because it gets too high.

Symptoms of high blood sugar include increased thirst, increased urination, weight loss, and blurred vision. Uncontrolled high blood sugar, when present for a long time, can cause health problems, such as heart disease, kidney disease, blindness, and poor circulation, which may lead to limb amputation.

Sometimes the liver makes more sugar than the body needs, which causes the blood sugar level to get even higher and out of balance.

In summary,

- Diabetes is a disease of high blood sugar.
- A person with diabetes may not have enough insulin, or the insulin that the body makes may not work as well as it should.
- The liver can keep making sugar even though the body does not need it.
- Uncontrolled high blood sugar can cause health problems when present for a long time.

Eyes

Diabetes can damage your eyes and is the leading cause of blindness among adults. Controlling your blood sugar can help prevent or delay eye damage, so be sure to have your eyes examined at least once a year.

Feet

Nerve damage, circulation problems, and infections can cause serious foot problems, which sometimes lead to amputations. However, more than half of these amputations can be prevented with regular checkups.

Heart

Disease of the heart and blood vessels (cardiovascular disease) is the major cause of death in patients with type 2 diabetes. People with type 2 diabetes are 2 to 4 times more likely to have heart disease and stroke than people without the disease because diabetes may contribute to elevated cholesterol levels, high blood pressure, or both.

Kidneys

High blood sugar and high blood pressure can lead to kidney disease. Diabetes is the main cause of kidney failure. Controlling your blood sugar and blood pressure can help prevent or delay kidney disease.

Nerves

Between 60% and 70% of patients with diabetes have nerve damage, mostly in the nerves of the feet and legs. Controlling your blood sugar can help prevent or delay nerve damage and related problems.

Teeth

People with diabetes are more likely to have problems with their teeth and gums. See your dentist twice a year, and remind your dentist that you have diabetes.

Diabetes & Me

A to G

▣ A1C Tests and Blood Sugar Monitoring

Getting the A1C Test

The A1C is a standard test that shows the average amount of sugar (glucose) in your blood over the past 2 to 3 months—as well as how well your blood sugar level is being controlled over time. A1C can be measured with a blood test in a laboratory or at your doctor's office.

Keeping track of A1C is important because high blood sugar can, over time, lead to problems, including damage to the blood vessels.

Talk with your healthcare provider about what your A1C target should be. Even if your A1C is higher right now than is recommended, remember that every step toward your A1C target helps reduce your risk of problems associated with diabetes.

Also talk with your healthcare provider if you frequently experience high or low blood sugar levels. You may need to discuss changes in diet, activity, or diabetes medicine.

▣ Blood Pressure

A blood pressure reading measures the force of blood as it presses against the inside walls of the blood vessels (arteries).

Blood pressure is written as 2 numbers:

- **Systolic blood pressure** (top number) is the force when the heart pumps
- **Diastolic blood pressure** (bottom number) is the force between heart pumps

High blood pressure (hypertension) may not cause symptoms, but over time it damages the heart, other organs, and blood vessels.

Get your blood pressure checked regularly, and know your target blood pressure.

▣ Cholesterol

Your body needs cholesterol (a type of fat) to function properly—it helps your body build new cells, produce hormones, and digest food. But, as with anything in life, too much of a good thing can become bad for you over time.

According to the 2006 ADA guidelines, targets for appropriate patients with diabetes are:

- HDL cholesterol greater than 40 mg/dL for men
- HDL cholesterol greater than 50 mg/dL for women
- LDL cholesterol less than 100 mg/dL
- Triglycerides less than 150 mg/dL

▣ Diet

You should discuss your specific dietary needs with your healthcare provider. Eating a variety of foods from the basic food groups as directed by a healthcare provider may help manage your diabetes.

Also, remember that you don't have to accept weight gain (a side effect of some diabetes medications) as part of the process of controlling diabetes. Discuss with your healthcare team all the things that could be affecting your weight, including your medication, the foods you eat, and your exercise program.

▣ Exercise

Regular exercise is important for everyone, but especially so if you have diabetes. Regular exercise helps control the amount of sugar in the blood and increases levels of HDL (good) cholesterol. It also burns excess calories and fat to help you achieve optimal weight.

It is important to work with your healthcare provider to create an exercise program that is right for **you**.

▣ Family, Friends, and Feelings

Living with diabetes can be a daily challenge—and can be emotionally difficult at times. Understand that many other people with type 2 diabetes have similar feelings.

Remember that you don't have to deal with your diabetes alone. With the support of your family and friends, your healthcare team, and your community, you can take charge of your diabetes.

▣ Good Days With Diabetes

You will have good days and bad days with diabetes. It may help to think of every day as a new opportunity to do something good for yourself. Every day may not be perfect, but you can always start fresh tomorrow.

You don't have to make all these changes at once. Take small steps. Set a manageable goal each day, and work to achieve it. Celebrate every improvement you make, no matter how small. Feel good about your efforts to manage your diabetes.



MERCK Where patients come first