Blood glucose (or “blood sugar”) is the fuel that gives your body energy.

When you eat, your body digests the food and turns some of it into a special type of sugar called “blood glucose” (also called “blood sugar”).

Your blood vessels carry blood glucose to cells in all parts of your body where it can be used for energy.

With diabetes, blood glucose can build up in your blood and make your blood glucose too high.

To give your body energy, blood glucose needs to move from your blood into the rest of your body. Normally, this happens easily. But if you have diabetes, it does not happen easily:

- Having diabetes means that it is hard for glucose to move from your blood into the cells of your body the way it is supposed to.

- When glucose does not move easily from your blood into the rest of your body, too much glucose stays in your blood. Your level of blood glucose gets too high and your cells are starved for energy.

What can happen if your level of blood glucose stays too high?

If your blood glucose stays too high for a long time, it can cause serious health problems. These health problems are called “complications” of diabetes. Here are some complications that high blood glucose can cause:

- **Nerve damage**
  High blood glucose can damage nerves throughout your body, causing numbness or tingling. Nerve damage is especially common in feet and hands.

- **Damage to your heart and your kidneys**
  High blood glucose can damage the blood vessels that lead to your heart. This damage can cause heart disease and heart attacks. High blood glucose also damages the blood vessels in your kidneys. This weakens your kidneys and can eventually cause them to stop working.

- **Damage to your eyes and vision**
  Your eyes have tiny blood vessels that can be easily damaged by a high level of blood glucose. This damage can lead to blindness.

*(more on the next page)*
(complications of diabetes, continued)

- Sores on your skin that are slow to heal and can become infected easily.
  High blood glucose makes it harder for a sore to heal. Sores are especially common on feet.

- Gum disease and tooth decay.
  High blood glucose damages the blood vessels that normally help keep your gums and teeth healthy. Having extra glucose in your blood makes gum infections worse.

How can you stay healthy with diabetes?

Keep your blood glucose at the right level

Keeping your blood glucose at the right level — not too high and not too low — helps prevent the complications of diabetes. Here are tips:

- Watch what you eat
  To keep your blood glucose at the right level, you need to eat the right kinds of food, in the right amounts, at the right times. Different foods affect your blood glucose in different ways. Ask your doctor for information on healthy eating and how to get help from a nutritionist.

- Get regular exercise
  Staying active is one of the best ways to help keep your blood glucose under control.

- Follow instructions for using medicine and checking your blood glucose
  If you need to test your blood, your doctor will give you instructions and tell you what to do if your blood glucose gets too high or too low.

Get regular checkups

The tests and exams you get at your checkups help you know how well you are doing at keeping your blood glucose at the right level. Getting regular checkups helps catch complications of diabetes at an early stage, when they are easier to treat. Here is what your checkups should include:

- Blood pressure and blood tests, including a cholesterol test and an “A-1-C” blood test (this test tells what your average blood glucose has been during the past 2 to 3 months).

- A test to find out how well your kidneys are working.

- A “dilated” eye exam. This exam checks on whether there has been any damage to the blood vessels in your eyes. (This exam is not the same as the type of eye exam you get for glasses or contact lenses.)

- A foot exam that checks for nerve damage, sores, and other problems.