

What is Diabetes?

Diabetes (officially known as Diabetes mellitus) is a disease that prevents your body from properly using the energy from the food you eat. Diabetes occurs when either:

- The pancreas produces little insulin or no insulin at all. (Insulin is a naturally occurring hormone produced by the beta cells of the pancreas that helps the body use sugar for energy.)
- The pancreas makes insulin, but the insulin made does not work as it should. This condition is called insulin resistance.

To better understand diabetes, it helps to know more about how the body uses food for energy (a process called metabolism). Your body is made up of millions of cells. To make energy, the cells need food in a very simple form. When you eat or drink, much of your food is broken down into a simple sugar called glucose. Glucose provides the energy your body needs for daily activities.



The blood vessels and blood are the highways that transport sugar from where it is either taken in (the stomach) or manufactured (in the liver) to the cells where it is used (muscles) or where it is stored (fat). Sugar cannot go into the cells by itself. The pancreas releases insulin into the blood which serves as the helper, or the "key," that lets sugar into the cells for use as energy.

When sugar leaves the bloodstream and enters the cells, the blood sugar level is lowered. Without insulin, or the "key," sugar cannot get into the body's cells for use as energy. This causes sugar to rise. Too much sugar in the blood is called "hyperglycemia" (high blood sugar) or diabetes.