

WHAT IS **DIABETES?**

Diabetes begins with your pancreas, an organ tucked behind the stomach. Cells in the pancreas, called beta cells, make the hormone insulin. Insulin helps the body use food as energy.

When you eat, the body breaks food down into glucose, a form of sugar. The glucose enters the blood stream to fuel the cells. In a healthy body, the pancreas releases insulin into the bloodstream. The insulin acts as a key to open “doors” to the cells so the glucose can get inside to fuel them. In people with diabetes, the pancreas has a problem either making, or making and using, insulin.

With no insulin, or not enough, the body breaks food down into glucose, but then has no way to use it as fuel. The glucose builds up in the blood stream while the cells go hungry. Over time, the blood glucose levels get dangerously high. Very high blood glucose levels can make people sick and even lead to comas. Having high blood glucose over a long time can lead to blindness, heart disease, kidney failure, and other problems. These are the complications of diabetes.

There are two main types of diabetes. When the pancreas stops making insulin it's called “type 1” diabetes. People with type 1 diabetes must take insulin every day, either via shots or an insulin pump. Sometimes the pancreas still makes some insulin but can't make enough and can't use what it does make very well. That's called “type 2” diabetes. People with type 2 diabetes may take insulin shots, pills, or in some cases, they can manage diabetes through healthy eating and exercise.

Today more than 20.8 million children and adults have diabetes in the United States. Of those, about 1 million have type 1 and about 17 million have type 2. It used to be thought that only children &

A Note to the Educator

The American Diabetes Association provides this information to give you a basic background in diabetes that you can pass on to your students. Our goal is to help you teach them about diabetes, diabetes prevention, and how adopting healthier lifestyles can help prevent or delay diabetes and avoid its terrible complications.

If you have any questions or need more information, please visit our Web site at diabetes.org or call us at 1-800-DIABETES (342-2383).

adolescents developed type 1 diabetes and only adults developed type 2. But adults do develop type 1, and more and more children & adolescents are being diagnosed with type 2.

Scientists don't know exactly what causes diabetes, and there's no way to prevent type 1. But research has shown that adopting healthier lifestyles—eating well and exercising—can prevent or delay type 2 diabetes. That's why the American Diabetes Association provides these educational materials with the School Walk for Diabetes program. To prevent diabetes, Americans must be taught how to lead healthier lifestyles. And the earlier people start learning to eat well and exercise, the better. Use these lessons in your classroom. Talk with your students about diabetes, healthy eating, and staying active. They'll not only feel better and have more energy now, but they'll also live longer, healthier lives in the years to come.

Please visit us at diabetes.org/schoolwalk for more information about diabetes and healthy lifestyles, or to download more classroom materials.