

Diabetes – The Club You Don't Want To Join

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Since Halloween, you have likely been eating more than your share of sugar filled snacks. A new year is upon us, and if this year is anything like the last ten, tens of thousands of American will develop diabetes.

It's certain that many people reading this article have diabetes, and it's just as likely that many other readers will develop this disease sometime during 2002. Everyone who is reading this article surely knows someone who struggles with this illness. With these facts, take the information that follows and use it to help yourself and others.

Diabetes is a disease in which the body does not produce or properly use insulin. Insulin is a hormone that is needed to convert sugar, starches and other food into energy needed for daily life. The cause of diabetes is a mystery, although both genetics and environmental factors such as obesity and lack of exercise appear to play roles. There are two major types of diabetes:

- Type 1 - A disease in which the body does not produce any insulin, most often occurring in children and young adults. People with Type 1 diabetes must take daily insulin injections to stay alive. Type 1 diabetes accounts for 5 to 10 percent of diabetes.
- Type 2 - A metabolic disorder resulting from the body's inability to make enough, or properly use, insulin. It is the most common form of the disease. Type 2 diabetes accounts for 90 to 95 percent of diabetes. Type 2 diabetes is nearing epidemic proportions, due to an increased number of older Americans, and a greater prevalence of obesity and sedentary lifestyles.

Type 1 diabetes is usually diagnosed in children and young adults and was previously known as juvenile diabetes. In Type 1 diabetes, the body does not produce insulin. Insulin is necessary for the body to be able to use sugar. Sugar is the basic fuel for the cells in the body, and insulin takes the sugar from the blood into the cells. When sugar builds up in the blood instead of going into cells, it can cause two problems:

- Right away, your cells may be starved for energy.
- Over time, high blood sugar levels may hurt your eyes, kidneys, nerves or heart.

Finding out you have diabetes is scary. But don't panic! Sure, diabetes is serious. But people with diabetes can live long, healthy, happy lives. You can too by taking good care of yourself.

The pancreas, an organ near your stomach, produces insulin. The pancreas contains cells called beta cells. Beta cells have a vital job: They make insulin, a hormone that helps cells take in the sugar they need.

Sometimes, the beta cells get wiped out and cannot produce insulin anymore.

Many things might have killed your beta cells, but in most people with Type 1 diabetes, the immune system makes a mistake. Cells that normally protect you from germs attack your beta cells instead. The beta cells die. Without beta cells, you make no insulin. Sugar builds up in your blood, and you get diabetes.

Many people with Type 1 diabetes live long, healthy lives. The key is keeping your blood sugar levels within your target range, which can be done with meal planning, exercise and insulin. You will also need to check your blood sugar levels regularly. To check your blood sugar, you need a drop of blood. Place the drop on a special test strip. A device called a glucose meter tells how much glucose the drop of blood contains. Your health care provider will tell you how often to check your blood sugar level.

What Can Go Wrong?

High blood sugar (hyperglycemia) What Is Hyperglycemia?

Hyperglycemia is the technical term for high blood sugar. High blood sugar happens when the body has too little, or not enough, insulin or when the body can't use insulin properly.

A number of things can cause hyperglycemia. For example, if you have type 1 diabetes, you may not have given yourself enough insulin. If you have type 2 diabetes, your body may have enough insulin, but it is not as effective as it should be.

The problem could be that you ate more than planned or exercised less than planned. The stress of an illness, such as a cold or flu, could also be the cause. Other stresses, such as family conflicts or school or dating problems, could also cause hyperglycemia.

What Are The Symptoms Of Hyperglycemia?

The signs and symptoms include: high blood sugar, high levels of sugar in the urine, frequent urination, and increased thirst.

Part of keeping your diabetes in control is testing your blood sugar often. Ask your doctor how often you should test and what your blood sugar levels should be. Testing your blood and then treating high blood sugar early will help you avoid the other symptoms of hyperglycemia.

It's important to treat hyperglycemia as soon as you detect it. If you fail to treat hyperglycemia, a condition called ketoacidosis (diabetic coma) could occur.

Ketoacidosis develops when your body doesn't have enough insulin. Without insulin, your body can't use glucose for fuel. So, your body breaks down fats to use for energy.

When your body breaks down fats, waste products called ketones are produced. Your body cannot tolerate large amounts of ketones and will try to get rid of them through the urine.