

# DIABETES AND STROKE

People with diabetes are twice as likely to have a stroke as someone who does not have the disease. Perhaps this is because some of the complications that result from diabetes are also stroke risk factors.

## ABOUT DIABETES

Diabetes is a disease that affects a person's ability to move blood sugar, or glucose, out of the blood and into the cells – where it is used as the body's primary source of fuel.

There are two types of diabetes, insulin dependant (also called Type I) and non-insulin dependent (Type II). Type I diabetes usually emerges in childhood and is characterized by the body's inability to produce enough insulin. Insulin is the hormone the body uses to convert sugar, starches and other food into energy needed for daily life.

Type II is more common. It is estimated that more than 90 percent of all Americans diagnosed with the disease have Type II diabetes. With this type, the body is able to produce insulin, but tissues develop a resistance to it and blood sugar levels rise above normal. It generally develops during adulthood and may escape notice for some time. That's because many symptoms of the disease – frequent urination, excessive thirst, extreme hunger, unusual weight loss, increased fatigue, irritability and blurry vision – seem harmless.

## WHY IS THERE A LINK TO STROKE?

Many people with diabetes have health problems that increase their risk for stroke.

At the top of this list is high blood pressure, also known as hypertension. As many as two out of three adults with diabetes have high blood pressure. Uncontrolled high blood pressure is the leading cause of stroke.

Heart attack and atrial fibrillation (a type of irregular heart beat) are also common among people with diabetes. Both of these types of heart disease increase the risk for stroke. Many people with diabetes also have high levels of cholesterol, increasing their risk for stroke. Build-up of LDL cholesterol, sometimes called the “bad” cholesterol, can block blood vessels and reduce blood flow to the brain. Any time you decrease blood flow to the brain, you increase your risk for stroke.

Brain damage may be more severe and extensive if blood sugar is high when a stroke happens. Careful regulation of blood sugar, either with insulin or blood sugar-lowering pills, can help.

## DIAGNOSIS

Being tested for diabetes is quick and easy. Your doctor's office will collect a blood sample and then check your blood sugar levels with a fasting plasma glucose (FPG) test. High levels may signal diabetes.

## TREATMENT

Both types of diabetes can be controlled, reducing the risk of long-term health problems such as stroke. Type I is treated by closely monitoring blood sugar and taking daily shots of insulin. Type II, which is worsened by obesity, can frequently be controlled through weight loss, exercise and changes in eating habits. Daily insulin injections are not always necessary.

The good news? It's never too late to take control of your health. By preventing or managing diabetes, you can reduce your risk for stroke.

### *Other things you can do:*

- **Foot Care** - Inspect your feet daily for signs of trouble. If you have a foot sore or callus, get it checked by your doctor or podiatrist.
- **Eye Care** - See your eye doctor at least once a year. Diabetes can lead to eye disease, but there are good treatments if you catch the problems early.
- **Dental Care** - See your dentist every six months. Excess blood sugar in your mouth makes it a good home for bacteria, which can lead to infection.
- **Be More Active** - Physical activity can lower your blood sugar, blood pressure and cholesterol; help insulin work better; improve your blood circulation; and keep your joints flexible.
- **Eat a Healthy Diet** - Eat smaller portions, more fruits and vegetables, and foods that are high in fiber. Also, watch your salt, fat and sugar intake.

Note: This fact sheet is compiled from general, publicly available medical information and should not be considered a recommendation of treatment for any particular individual. Ask your doctor about any personal medical concerns.

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