

Markham Stouffville Hospital

Adult Diabetes Education – Frequently Asked Questions

What is diabetes?

Diabetes is a disease in which blood glucose levels are above normal. Most of the food we eat is turned into glucose, or sugar, for our bodies to use for energy. The pancreas, an organ that lies near the stomach, makes a hormone called insulin to help glucose get into the cells of our bodies. When you have diabetes, your body either doesn't make enough insulin or can't use its own insulin as well as it should. This causes sugar to build up in your blood.

Diabetes can cause serious health complications including heart disease, blindness, kidney failure, and lower-extremity amputations.

What are the symptoms of diabetes?

People who think they might have diabetes must visit a physician for diagnosis. They might have SOME or NONE of the following symptoms:

- Frequent urination
- Excessive thirst
- Unexplained weight loss
- Extreme hunger
- Sudden vision changes
- Tingling or numbness in hands or feet
- Feeling very tired much of the time
- Very dry skin
- Sores that are slow to heal
- More infections than usual.

Nausea, vomiting, or stomach pains may accompany some of these symptoms in the abrupt onset of insulin-dependent diabetes, now called type 1 diabetes.

What are the types of diabetes?

Type 1 diabetes, which was previously called insulin-dependent diabetes mellitus (IDDM) or juvenile-onset diabetes, may account for 5% to 10% of all diagnosed cases of diabetes.

Type 2 diabetes, which was previously called non-insulin-dependent diabetes mellitus (NIDDM) or adult-onset diabetes, may account for about 90% to 95% of all diagnosed cases of diabetes.

Gestational diabetes is a type of diabetes that only pregnant women get. If not treated, it can cause problems for mothers and babies. Gestational diabetes develops in 2% to 5% of all pregnancies but usually disappears when a pregnancy is over.

Other specific types of diabetes resulting from specific genetic syndromes, surgery, drugs, malnutrition, infections, and other illnesses may account for 1% to 2% of all diagnosed cases of diabetes.

What are the risk factors for diabetes?

Risk factors for type 2 diabetes include older age, obesity, family history of diabetes, prior history of gestational diabetes, impaired glucose tolerance, physical inactivity, and race/ethnicity. African Americans, Hispanic/Latino Americans, American Indians, and some Asian Americans and Pacific Islanders are at particularly high risk for type 2 diabetes.

Risk factors are less well defined for type 1 diabetes than for type 2 diabetes, but autoimmune, genetic, and environmental factors are involved in developing this type of diabetes.

Gestational diabetes occurs more frequently in African Americans, Hispanic/Latino Americans, American Indians, and people with a family history of diabetes than in other groups. Obesity is also associated with higher risk. Women who have had gestational diabetes are at increased risk for later developing type 2 diabetes. In some studies, nearly 40% of women with a history of gestational diabetes developed diabetes in the future.

Other specific types of diabetes, which may account for 1% to 2% of all diagnosed cases, result from specific genetic syndromes, surgery, drugs, malnutrition, infections, and other illnesses.

What is the treatment for diabetes?

Healthy eating, physical activity, and insulin injections are the basic therapies for type 1 diabetes. The amount of insulin taken must be balanced with food intake and daily activities. Blood glucose levels must be closely monitored through frequent blood glucose testing.

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Healthy eating, physical activity, and blood glucose testing are the basic therapies for type 2 diabetes. In addition, many people with type 2 diabetes require oral medication, insulin, or both to control their blood glucose levels.

People with diabetes must take responsibility for their day-to-day care, and keep blood glucose levels from going too low or too high.

People with diabetes should see a health care provider who will monitor their diabetes control and help them learn to manage their diabetes. In addition, people with diabetes may see endocrinologists, who may specialize in diabetes care; ophthalmologists for eye examinations; podiatrists for routine foot care; and dietitians and diabetes educators who teach the skills needed for daily diabetes management.

What causes type 1 diabetes?

The causes of type 1 diabetes appear to be much different than those for type 2 diabetes, though the exact mechanisms for developing both diseases are unknown. The appearance of type 1 diabetes is suspected to follow exposure to an "environmental trigger," such as an unidentified virus, stimulating an immune attack against the beta cells of the pancreas (that produce insulin) in some genetically predisposed people.

Can diabetes be prevented?

A number of studies have shown that regular physical activity can significantly reduce the risk of developing type 2 diabetes. Type 2 diabetes also appears to be associated with obesity.

Researchers are making progress in identifying the exact genetics and "triggers" that predispose some individuals to develop type 1 diabetes, but prevention remains elusive.

How can diabetes affect cardiovascular health?

Cardiovascular disease is the leading cause of early death among people with diabetes. Adults with diabetes are two to four times more likely than people without diabetes to have heart disease or experience a stroke. At least 65% of people with diabetes die from heart disease or stroke. About 70% of people with diabetes also have high blood pressure.

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How are cholesterol, triglyceride, weight, and blood pressure problems related to diabetes?

People with type 2 diabetes have high rates of cholesterol and triglyceride abnormalities, obesity, and high blood pressure, all of which are major contributors to higher rates of cardiovascular disease. Many people with diabetes have several of these conditions at the same time. This combination of problems is often called metabolic syndrome (formerly known as Syndrome X). The metabolic syndrome is often defined as the presence of any three of the following conditions: 1) excess weight around the waist; 2) high levels of triglycerides; 3) low levels of HDL, or "good," cholesterol; 4) high blood pressure; and 5) high fasting blood glucose levels. If you have one or more of these conditions, you are at an increased risk for having one or more of the others. The more conditions that you have, the greater the risk to your health.

Why is it important for people with diabetes to be physically active?

Physical activity can help you control your blood glucose, weight, and blood pressure, as well as raise your "good" cholesterol and lower your "bad" cholesterol. It can also help prevent heart and blood flow problems, reducing your risk of heart disease and nerve damage, which are often problems for people with diabetes.

How much and how often should people with diabetes exercise?

Experts recommend moderate-intensity physical activity for at least 150 minutes per week. Some examples of moderate-intensity physical activity are walking briskly, mowing the lawn, dancing, swimming, or bicycling.

If you are not accustomed to physical activity, you may want to start with a little exercise, and work your way up. As you become stronger, you can add a few extra minutes to your physical activity. Do some physical activity every day. It's better to walk 10 or 20 minutes each day than one hour once a week.

Talk to your health care provider about a safe exercise plan. He or she may check your heart and your feet to be sure you have no special problems. If you have high blood pressure, eye, or foot problems, you may need to avoid some kinds of exercise.

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What are some good types of physical activity for people with diabetes?

Walking vigorously, hiking, climbing stairs, swimming, aerobics, dancing, bicycling, skating, skiing, tennis, basketball, volleyball, or other sports are just some examples of physical activity that will work your large muscles, increase your heart rate, and make you breathe harder – important goals for fitness.

In addition, strength training exercises with hand weights, elastic bands, or weight machines can help you build muscle. Stretching helps to make you flexible and prevent soreness after other types of exercise.

Do physical activities you really like. The more fun you have, the more likely you will do it each day. It can be helpful to exercise with a family member or friend.

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