

## Diabetes

Diabetes is a condition in which the body does not produce enough insulin or does not use the insulin produced properly. There are three types of diabetes: type 1 (formerly called juvenile or insulin-dependent diabetes), type 2 (formerly called adult-onset or non-insulin dependent diabetes) and gestational diabetes (diabetes that only occurs during pregnancy). All three involve problems with insulin, a hormone that removes glucose from the blood and allows it to enter the body's cells. Glucose is used to create energy for the body functions. If your body is unable to make or use insulin properly, you have a high blood glucose level.

Recently, a condition called pre-diabetes has been recognized. Pre-diabetes occurs when a person's blood glucose levels are higher than normal but not high enough for a diagnosis of type 2 diabetes. People with pre-diabetes will likely develop type 2 diabetes unless they take actions that lead to maintaining a normal blood sugar levels.

### Causes

The causes of diabetes are not known, but certain factors that put a person at more risk of developing diabetes are known. These are called risk factors. Risk factors fall into two general categories—genetics and lifestyle.



The causes of type 1 diabetes are uncertain, but inheriting genes that predispose a person to type 1 diabetes and environmental conditions that trigger the genes into action probably combine to cause it.

The suspected causes of type 2 diabetes are also genetics and environmental triggers. Genetics plays a stronger role than in type 1, but other associated risk factors appear necessary to bring on type 2 diabetes. These other factors are:

- Age, older than 45 (type 2 diabetes may develop earlier than 45, however)
- Body mass index (BMI) greater than 30
- A family history of type 2 diabetes
- Race (diabetes is more common among American Indians, Hispanic/Latino Americans, African Americans, Asian Americans, and Pacific Islanders)
- High blood pressure or high levels of blood fats (such as cholesterol and triglycerides)
- History of gestational diabetes
- Physical inactivity

Gestational diabetes is caused by hormones produced by the placenta that prevent the mother's insulin from being effective. The risk factors for gestational diabetes include:

- BMI greater than 30
- A family history of diabetes
- Gestational diabetes with a previous pregnancy
- Glucose in urine

## Type 1 Diabetes

Although type 1 diabetes can occur at any age, it occurs most often in children, teenagers or young adults. Symptoms include increased thirst, hunger fatigue and urination. Children with type 1 diabetes rarely have these symptoms for longer than three weeks before the disease is diagnosed.

Type 1 diabetes occurs when beta cells of the pancreas, the cells that make insulin, are destroyed by the body's immune system and the pancreas can no longer make insulin. The main treatment for type 1 diabetes is insulin injections or a combination of inhaled insulin and injections. In addition, people with type 1 diabetes need to regularly monitor their blood sugar, follow a meal and exercise plan that fits their health, age and lifestyle, and get regular exams to detect complications.

## Symptoms of type 1 diabetes

Warning signs of diabetes include:

- Increased thirst
- Unusual tiredness
- Unexplained weight loss
- Excessive appetite
- Increased urination

## Type 2 Diabetes

Type 2 diabetes is the most common form of diabetes and usually develops gradually, with few, if any, warning signs. With type 2 diabetes, the pancreas keeps making insulin, but it does not make enough or the body does not use the available insulin effectively. As a result, glucose builds up in the blood. Your doctor may diagnose diabetes by tracking a gradual increase in blood glucose levels.

Before people develop type 2 diabetes, they commonly have a condition called pre-diabetes. In pre-diabetes, blood glucose levels are higher than normal but not yet high enough to be diagnosed as diabetes. If people with pre-diabetes make changes in their diet and exercise habits, they may prevent the development of type 2 diabetes.

Because type 2 diabetes can develop without symptoms, healthy people older than 45 should have a screening test every three years, especially those who are over weight (a BMI of 25 or higher). People younger than 45 should be screened if they are overweight and have additional any of these additional risk factors:

- Are habitually physically inactive
- Have a first-degree relative (mother, father, sibling, child) who has been diagnosed with diabetes
- Are members of a high-risk ethnic population (African American, Latino, Native American, Asian American, Pacific Islander)
- Have delivered a baby weighing more than 9 pounds or have been diagnosed with gestational diabetes
- Have high blood pressure (140/90 mmHg or higher)
- Have an HDL cholesterol level less than 35 mg/dL and/or a triglyceride level greater than 250 mg/dL
- Have polycystic ovarian syndrome
- Have been diagnosed with pre-diabetes
- Have a history of vascular disease

## Symptoms of type 2 diabetes

- Increased thirst
- Increased hunger
- Fatigue
- Increased urination, especially at night
- Weight loss
- Blurred vision or changing vision
- Sores that do not heal
- Areas of skin with sensory changes such as numbness, tingling, burning or pain

The main way to treat type 2 diabetes is through lifestyle changes that include weight management and exercise. In some cases, medications or insulin may be needed to lower blood glucose levels. However, for many adults with type 2 diabetes, following self-care steps alone is all that is necessary to manage the disease.

## **Gestational Diabetes**

In some women, the hormonal changes of pregnancy demand more insulin than the body can make, and diabetes develops. After the birth of the baby, blood glucose levels return to normal and the diabetes goes away. However, women who have had gestational diabetes are at greater risk for developing type 2 diabetes later in life.

Women at high risk for gestational diabetes should be screened at their first prenatal visit. Factors that indicate high risk include obesity, having gestational diabetes in the past, glucose found in a urine sample, or a strong family history of diabetes. Women of average risk should be tested at 24 to 28 weeks of gestation.

## **Treatment Goals for Adults With Diabetes**

People with diabetes are at high risk for the development of serious complications of diabetes, especially heart disease. So, it is important to control blood glucose and other conditions that could lead to complications.

For most people with diabetes, the following are considered to be good blood glucose control:

- A hemoglobin A1c of 7 percent or less (this is a test that shows blood glucose control during the preceding three months)
- A blood glucose level taken before eating of 90 to 130 mg/dL
- A blood glucose level taken one to two hours after eating of less than 180 mg/dL

People with diabetes often have hypertension. A blood pressure of less than 120/80 mmHg is considered ideal. A blood pressure in which the top number is greater than 130 or the bottom number is greater than 80 may mean a health care provider will suggest lifestyle changes or medication to manage blood pressure.

People with diabetes often have high cholesterol levels. Cholesterol is transported in the body in particles called lipoproteins. There are two types of lipoproteins that are important to people with diabetes: low-density lipoproteins and high-density lipoproteins. Low-density lipoproteins (LDLs) carry cholesterol where it is needed. High-density lipoproteins (HDLs) carry leftover cholesterol back to the liver. For people with diabetes, LDL cholesterol should be less than 100 mg/dL; HDL cholesterol should be 40 or higher.

## **Self-Care**

### **Eat a Healthful Diet**

- Watch your total caloric intake. Your diet should consist of appropriate amounts of protein, complex carbohydrates and fat. The type of carbohydrates eaten will determine how quickly the blood sugar rises following a meal. Complex carbohydrates raise the sugar more slowly, while simple sugars can cause a rapid rise. Low-carbohydrate diets (total carbohydrates less than 130 grams per day) are not recommended.
- Follow a meal plan. A meal plan tells you how much food you need and how to plan meals and snacks so you know what to eat and when. It should be suited to your lifestyle and nutritional needs.
- Maintain or attain a healthy weight. If you have type 2 diabetes and are overweight, it is important to reach a reasonable body weight. Often if you lose only 5 to 10 pounds, your blood glucose levels are easier to control. For children with type 1 diabetes, it is important to consume enough calories to provide for normal growth and development.

### **Monitor Your Blood Glucose Regularly**

Uncontrolled, high blood glucose levels can cause serious health problems, including heart disease, kidney disease, blindness or nerve damage. If you have diabetes, you can help prevent these problems by keeping your blood glucose levels in check. Your health care provider can teach you how to monitor your blood glucose. He or she will also recommend how often you should test your blood.

## Exercise

Exercise can lower blood glucose levels, making body cells more sensitive to insulin and improving their ability to use and store glucose. In fact, exercise combined with fewer calories will often control type 2 diabetes without the need for medication. If you exercise, you can also enjoy other benefits, such as improved heart and lung efficiency, reduced body fat, improved muscle tone and improved fitness. Your goal should be 30 to 60 minutes of moderate aerobic activity most days of the week, when possible. An hour a day of moderate (walking) or 30 minutes a day of vigorous (jogging) activity may be needed to lose weight. Your doctor can help you determine the type of program that is best for you.

## Prevention

If you don't have diabetes, there are steps you can take to reduce your risk:

- Attain or maintain a healthy weight. It is not normal to gain weight as you get older. If you are overweight, even a small amount of weight loss will be beneficial.
- Stay active. Try to get at least 30 minutes of activity most days of the week.

If you do have diabetes, prevention efforts are directed at preventing complications of diabetes:

- Get recommended exams to detect complications of diabetes.
- Follow your treatment plan to control your blood sugar, blood pressure and cholesterol.
- Get a flu shot each year and a pneumococcal vaccine if you are older than 64.
- Discuss taking low-dose aspirin to prevent a heart attack with your health care provider to see if it is right for you.

*Krames Staywell*

## Avoid Identity Theft



Identity theft occurs when someone uses your personal information to obtain credit cards and loans or conduct other financial transactions in your name. These fraudulent transactions can affect your credit rating and finances if they are not identified and handled immediately. Follow the link below to learn how to avoid identity theft and what to do if it happens to you.

[Read More](#)

## Organize Your Home Life



Keeping personal items, work, and events organized is key to living a balanced and productive life. By organizing effectively, you will be better able to prioritize and plan, leaving more time to do the things that are important to you. Read on for tips and techniques that can help you establish an organization routine that will lead to a simpler and less stressful life at home.

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