

Fast facts on diabetes

Here are some key points about diabetes.

Diabetes is a long-term condition that causes high blood sugar levels.

- **Type 1 Diabetes** - the body does not produce insulin. Approximately 10% of all diabetes cases are type 1.
- **Type 2 Diabetes** - the body does not produce enough insulin for proper function. Approximately 90% of all cases of diabetes worldwide are of this type.
- **Gestational Diabetes** - this type affects females during pregnancy.
- The most common diabetes symptoms include **frequent urination**, intense thirst and hunger, weight gain, unusual weight loss, **fatigue**, cuts and bruises that do not heal, **male sexual dysfunction**, numbness and tingling in hands and feet.
- If you have Type 1 and follow a healthy eating plan, do adequate exercise, and take insulin, you can lead a normal life.
- Type 2 patients need to eat healthily, be physically active, and test their blood glucose. They may also need to take oral medication, and/or insulin to control blood glucose levels.
- As the risk of cardiovascular disease is much higher for a diabetic, it is crucial that blood pressure and cholesterol levels are monitored regularly.
- As smoking might have a serious effect on cardiovascular health, diabetics should stop smoking.
- Hypoglycemia - low blood glucose - can have a bad effect on the patient. Hyperglycemia - when blood glucose is too high - can also have a bad effect on the patient.

How to determine whether you have diabetes, prediabetes or neither

Doctors can determine whether a patient has a normal metabolism, prediabetes or diabetes in one of three different ways - there are three possible tests:

- **The HbA1C test**
 - at least 6.5% means diabetes
 - between 5.7% and 5.99% means prediabetes
 - less than 5.7% means normal

- **The FPG (fasting plasma glucose) test**

- at least 126 mg/dl means diabetes
- between 100 mg/dl and 125.99 mg/dl means prediabetes
- less than 100 mg/dl means normal

An abnormal reading following the FPG means the patient has impaired fasting glucose (IFG)

- **The OGTT (oral glucose tolerance test)**

- at least 200 mg/dl means diabetes
- between 140 and 199.9 mg/dl means prediabetes
- less than 140 mg/dl means normal

An abnormal reading following the OGTT means the patient has impaired glucose tolerance (IGT)

Why is it called diabetes mellitus?

Diabetes comes from Greek, and it means a "siphon". Aretus the Cappadocian, a Greek physician during the second century A.D., named the condition *diabainein*. He described patients who were passing too much water (polyuria) - like a siphon. The word became "diabetes" from the English adoption of the Medieval Latin diabetes.

In 1675, Thomas Willis added mellitus to the term, although it is commonly referred to simply as diabetes. *Me* in Latin means "honey"; the urine and blood of people with diabetes has excess glucose, and glucose is sweet like honey. Diabetes mellitus could literally mean "siphoning off sweet water".

In ancient China people observed that ants would be attracted to some people's urine, because it was sweet. The term "Sweet Urine Disease" was coined.

Controlling diabetes - treatment is effective and important

All types of diabetes are treatable.

- Diabetes type 1 lasts a lifetime, there is no known cure.
- Type 2 usually lasts a lifetime, however, some people have managed to get rid of their symptoms without medication, through a combination of exercise, diet and body weight control.



Special diets can help sufferers of type 2 diabetes control the condition.

- Gastric bypass surgery can reverse type 2 diabetes in a high proportion of patients. Within three to five years the disease recurs in approximately 21% of them. The recurrence rate was mainly influenced by a longstanding history of Type 2 diabetes before the surgery. This suggests that early surgical intervention in the obese, diabetic population will improve the durability of remission of Type 2 diabetes.
- Patients with type 1 are treated with regular insulin injections, as well as a special diet and exercise.
- Patients with Type 2 diabetes are usually treated with tablets, exercise and a special diet, but sometimes insulin injections are also required.
- If diabetes is not adequately controlled the patient has a significantly higher risk of developing complications.

Complications linked to badly controlled diabetes:

Below is a list of possible complications that can be caused by badly controlled diabetes:

- **Eye complications** - **glaucoma**, cataracts, diabetic retinopathy, and some others.
- **Foot complications** - neuropathy, ulcers, and sometimes gangrene which may require that the foot be amputated
- **Skin complications** - people with diabetes are more susceptible to skin infections and skin disorders

- **Heart problems** - such as ischemic heart disease, when the blood supply to the heart muscle is diminished
- **Hypertension** - common in people with diabetes, which can raise the risk of kidney disease, eye problems, **heart attack** and stroke
- **Mental health** - uncontrolled diabetes raises the risk of suffering from depression, anxiety and some other mental disorders
- **Hearing loss** - diabetes patients have a higher risk of developing hearing problems
- **Gum disease** - there is a much higher prevalence of gum disease among diabetes patients
- **Gastroparesis** - the muscles of the stomach stop working properly
- **Ketoacidosis** - a combination of ketosis and acidosis; accumulation of ketone bodies and acidity in the blood.
- **Neuropathy** - diabetic neuropathy is a type of nerve damage which can lead to several different problems.
- **HHNS (Hyperosmolar Hyperglycemic Nonketotic Syndrome)** - blood glucose levels shoot up too high, and there are no ketones present in the blood or urine. It is an emergency condition.
- **Nephropathy** - uncontrolled blood pressure can lead to kidney disease
- **PAD (peripheral arterial disease)** - symptoms may include pain in the leg, tingling and sometimes problems walking properly
- **Stroke** - if blood pressure, cholesterol levels, and blood glucose levels are not controlled, the risk of **stroke** increases significantly
- **Erectile dysfunction** - male impotence.
- **Infections** - people with badly controlled diabetes are much more susceptible to infections
- **Healing of wounds** - cuts and lesions take much longer to heal