

Diabetes is a condition where the body has trouble keeping blood sugar in a healthy range. Normally, insulin from the pancreas lowers blood sugar by moving glucose into cells, while glucagon raises it when needed. In diabetes, this balance is disrupted, leading to blood sugar that is too high over long periods. The two main types are type 1 and type 2, but type 2 diabetes is the most common.

In type 2 diabetes, the pancreas still makes insulin, but the body's cells do not respond to it well. This is called insulin resistance. Because the "key" of insulin does not open the cells effectively, glucose stays in the blood instead of moving inside. Over time, the pancreas tries to make more insulin to compensate, but it eventually cannot keep up.

Risk factors for type 2 diabetes include being overweight, lack of exercise, poor diet, and family history. Age can also increase the risk, though more young people are being diagnosed now than in the past. The condition develops slowly and can begin years before a person is diagnosed. Some people may not notice symptoms at first.

The main symptoms of type 2 diabetes include frequent urination, constant thirst, feeling tired, and blurry vision. Some people also experience slow healing of cuts or frequent infections. Because these symptoms are not always obvious, regular blood sugar testing is important for people at risk.

If blood sugar remains high for too long, type 2 diabetes can lead to complications. These include damage to the eyes, kidneys, nerves, and blood vessels. It also increases the risk of heart disease and stroke. Good blood sugar control is essential to reduce these risks and protect long-term health.

Treatment for type 2 diabetes often begins with lifestyle changes. Eating a healthy diet, exercising regularly, and losing even a small amount of weight can improve how the body uses insulin. If lifestyle changes are not enough, medicines may be prescribed to lower blood sugar or help the body respond better to insulin.

Newer treatments, such as GLP-1 receptor agonists and SGLT2 inhibitors, are helping people manage type 2 diabetes more effectively. GLP-1 drugs increase insulin release, lower glucagon, and slow digestion, while SGLT2 inhibitors help the kidneys remove extra sugar through urine. These treatments are often used along with traditional medicines like metformin.

In summary, type 2 diabetes is a condition where the body resists insulin, causing blood sugar to stay high. It is influenced by lifestyle, genetics, and age. While it can cause serious health problems if uncontrolled, it can often be managed through healthy habits, medicines, and newer treatments that help keep blood sugar steady.