

Diabetes mellitus, commonly referred to as diabetes, is a chronic metabolic disorder characterized by high blood sugar levels over a prolonged period. It occurs when the body either does not produce enough insulin or cannot effectively utilize the insulin it produces. Insulin is a hormone produced by the pancreas that regulates the metabolism of carbohydrates, fats, and proteins and helps control blood sugar levels.

There are several types of diabetes:

Type 1 Diabetes: It is an autoimmune condition where the immune system attacks and destroys the insulin-producing cells in the pancreas. People with type 1 diabetes require lifelong insulin therapy.

Type 2 Diabetes: This is the most common form of diabetes and typically develops in adulthood. It occurs when the body becomes resistant to the effects of insulin or does not produce enough insulin to maintain normal blood sugar levels. Type 2 diabetes is strongly associated with obesity, sedentary lifestyle, and poor dietary habits. It can often be managed with lifestyle changes, oral medications, and sometimes insulin.

Gestational Diabetes: This type of diabetes affects pregnant women who have high blood sugar levels during pregnancy. It usually resolves after giving birth, but women who have had gestational diabetes have a higher risk of developing type 2 diabetes later in life.

Common symptoms of diabetes include increased thirst, frequent urination, unexplained weight loss, increased hunger, fatigue, blurred vision, slow healing of wounds, and recurrent infections. However, some people with type 2 diabetes may not exhibit noticeable symptoms in the early stages.

If left uncontrolled, diabetes can lead to various complications, including cardiovascular disease, kidney damage, nerve damage (neuropathy), eye problems (diabetic retinopathy), foot complications, and an increased risk of infections.

The management of diabetes involves maintaining blood sugar levels within a target range through a combination of healthy eating, regular physical activity, weight management, and, in some cases, medication or insulin therapy. Regular monitoring of blood sugar levels, along with periodic check-ups with healthcare professionals, is essential for effective management.

Prevention of type 2 diabetes includes maintaining a healthy weight, engaging in regular physical activity, adopting a balanced diet rich in fruits, vegetables, and whole grains, and avoiding tobacco use.