
TYPES OF DIABETES

Diabetes is not a single disease. It is a group of conditions that share the same primary symptom—consistently high blood glucose levels—but for different reasons. In the past, forms of diabetes were classified by the age at which it developed (juvenile or adult) or by the method of treatment (insulin or no insulin), but many cases of diabetes do not fall neatly into one of these categories. In 1997, the American Diabetes Association began to define diabetes based on its pathophysiology, or underlying cause.

Type 1 diabetes. The vast majority of cases of Type 1 diabetes are caused by the autoimmune destruction of pancreatic beta cells, which results in an inability to produce insulin and severe insulin deficiency. It is characterized by the rapid onset of symptoms, which include weight loss and increased thirst, urination, and hunger. A person's blood glucose level is often very high at diagnosis. Type 1 diabetes can occur at any age but is most commonly diagnosed in children and adolescents.

Type 2 diabetes. The two main underlying disorders in Type 2 diabetes are insulin resistance and relative insulin deficiency. It is believed that insulin resistance often occurs first, followed by declines in pancreatic function and insulin production. Type 2 diabetes can occur at any age, and cases of Type 2 in

children are increasing dramatically.

Prediabetes. This new term is the name for an intermediate state of glucose intolerance, where blood glucose level is higher than normal yet below the threshold for a diagnosis of diabetes. People who have prediabetes have a high risk of developing diabetes in the future. Depending on how a person's blood glucose level is measured, prediabetes is sometimes called impaired glucose tolerance or impaired fasting glucose.

Syndrome X. Also known as insulin resistance syndrome or metabolic syndrome, this condition is associated with an increased risk of cardiovascular disease and diabetes. It consists of a group of symptoms, including insulin resistance, increased blood insulin levels, glucose intolerance, obesity, high blood pressure, and *dyslipidemia*, specifically low HDL ("good") cholesterol levels and high triglyceride levels. Diagnosis generally requires the presence of three of these symptoms or evidence of insulin resistance and two additional symptoms.

Gestational diabetes. High blood glucose that first occurs during pregnancy is called gestational diabetes. In most cases, blood glucose levels return to normal after delivery, but women who have had gestational diabetes are more likely to develop diabetes later in life.

MODY (Maturity Onset Diabetes of Youth). These relatively rare forms of diabetes, usually diagnosed in people under 25, are caused by genetic defects in beta-cell function.

Drug-induced diabetes. Several drugs and chemicals can cause glucose intolerance and diabetes. These include nicotinic acid (used to lower high triglycerides and raise HDL cholesterol), glucocorticoids (such as prednisone), thyroid hormone, thiazides (a type of blood pressure medicines), diltiazem (an antiseizure drug), and beta-adrenergic agonists (used to treat asthma).

Genetic diseases. Several genetic diseases are associated with increased rates of diabetes, including Down syndrome. There also specific genetic defects in beta-cell function and insulin action that result in diabetes.

Infections and other diseases. Examples of diseases and disorders that can damage the pancreas and lead to diabetes include pancreatitis (inflammation of the pancreas), cystic fibrosis, and hemochromatosis (a genetic condition in which iron accumulates in the body). In addition, diseases that disturb levels of hormones such as growth hormone, thyroid hormone, or glucagon can cause insulin resistance or increased glucose production by the liver and potentially diabetes.
