

## **Diabetes Basics - What is Diabetes?**

Diabetes is a disease in which the body does not produce or properly use insulin. Insulin is a hormone that is needed to convert sugar, starches and other food into energy needed for daily life. The cause of diabetes continues to be a mystery, although both genetics and environmental factors such as obesity and lack of exercise appear to play roles.

There are 23.6 million children and adults in the United States, or 7.8% of the population, who have diabetes. While an estimated 17.9 million have been diagnosed with diabetes, unfortunately, 5.7 million people (or nearly one quarter) are unaware that they have the disease.

In order to determine whether or not a patient has pre-diabetes or diabetes, health care providers conduct a Fasting Plasma Glucose Test (FPG) or an Oral Glucose Tolerance Test (OGTT). Either test can be used to diagnose pre-diabetes or diabetes. The American Diabetes Association recommends the FPG because it is easier, faster, and less expensive to perform.

With the FPG test, a fasting blood glucose level between 100 and 125 mg/dl signals pre-diabetes. A person with a fasting blood glucose level of 126 mg/dl or higher has diabetes.

In the OGTT test, a person's blood glucose level is measured after a fast and two hours after drinking a glucose-rich beverage. If the two-hour blood glucose level is between 140 and 199 mg/dl, the person tested has pre-diabetes. If the two-hour blood glucose level is at 200 mg/dl or higher, the person tested has diabetes.

### **Type 1 Diabetes**

Results from the body's failure to produce insulin, the hormone that "unlocks" the cells of the body, allowing glucose to enter and fuel them. It is estimated that 5-10% of Americans who are diagnosed with diabetes have type 1 diabetes.

### **Type 2 Diabetes**

Results from insulin resistance (a condition in which the body fails to properly use insulin), combined with relative insulin deficiency. Most Americans who are diagnosed with diabetes have type 2 diabetes.

### **Gestational Diabetes**

Immediately after pregnancy, 5% to 10% of women with gestational diabetes are found to have diabetes, usually, type 2.

### **Pre-Diabetes**

Pre-diabetes is a condition that occurs when a person's blood glucose levels are higher than normal but not high enough for a diagnosis of type 2 diabetes. There are 57 million Americans who have pre-diabetes, in addition to the 23.6 million with diabetes.

**Source:** American Diabetes Association: <http://www.diabetes.org/>