

Diabetes Definitions:

Diabetes Mellitus is defined as a group of metabolic diseases in which a person has high blood sugar, either because the pancreas does not produce enough insulin (insulin deficiency) or because cells do not respond to the insulin being produced (insulin resistance).

The three main types of diabetes are type 1, type 2 and gestational. All types of diabetes are serious. Using insulin does not define the severity of this chronic disease.

- ***Type 2 Diabetes Mellitus*** is caused by multihormonal pathophysiology involving insulin resistance and subsequent decline in insulin production
 - Type 2 diabetes accounts for 90% of patients diagnosed with diabetes
 - Obesity plays the most significant role in the development of the disease
 - Treatment includes: diet, exercise, weight management, oral medications and injectable medications such as insulin or GLP-1 agonists
 - Once an individual begins using insulin they are still considered a type 2 diabetic
 - Risk factors: family history, age >45 years, inactivity, race/ethnicity, metabolic abnormalities (high blood pressure, obesity, HDL cholesterol level ≤ 35 mg/dl, and/or triglyceride level ≥ 250 mg/dl), polycystic ovary syndrome, or pre-diabetes
- ***Type 1 Diabetes Mellitus*** is typically an autoimmune disease leading to the destruction of insulin producing beta cells causing insulin deficiency
 - Type 1 diabetes accounts for 5-10% of patients diagnosed with diabetes and can develop at any age but is usually diagnosed before 30
 - All type 1 diabetics require insulin due to insulin deficiency
- ***Gestational Diabetes*** is diabetes diagnosed during pregnancy and is a risk factor for the development of type 2 diabetes
 - Gestational diabetes occurs in up to 9.2% of pregnancies in the United States
 - It is very important for a mother to tightly control her glucose to prevent likely harm to herself and her baby from poorly controlled blood glucose levels

Common Signs and Symptoms of High Blood Sugar

- Thirsty
- Hungry
- Frequent urination
- Blurred vision
- Tired
- Dry skin
- Unexplained weight loss

Diagnosis Criteria*

***Any one of the following meets diagnosis criteria of diabetes mellitus:**

- Fasting glucose (no food or drink for a minimum of 8 hours) ≥ 126 mg/dl. Normal fasting glucose should be < 100 mg/dl
- Casual glucose ≥ 200 mg/dl or with signs and symptoms of hyperglycemia (casual means any time of the day without regard to last time food was consumed)
- Oral glucose tolerance test in which the two hour glucose is ≥ 200 mg/dl.
- A1C $\geq 6.5\%$.