

About diabetes

1. What Is diabetes?

Diabetes is a serious disease in which the body does not produce or properly use insulin resulting in high blood sugar (hyperglycemia).

Insulin is a hormone that is necessary to convert sugars, starches and other food into energy needed for daily life.

Having untreated high blood sugar can lead to long-term damage to various organs, including the eyes, kidneys, heart, blood vessels and nerves. There is no cure for diabetes, but it can be treated to prevent these complications.

Hypoglycemia = Low blood sugar [typically below 70 mg/dL]
Hyperglycemia = High blood sugar [typically above 200 mg/dL]

Type 1 Diabetes was previously known as "insulin-dependent diabetes (IDDM)" or "juvenile diabetes." Type 1 diabetes is a life-long condition in which the pancreas stops making insulin. Without insulin, the body is not able to use the sugar glucose for energy. A person with type 1 diabetes who does not get enough insulin will suffer blood sugars high enough to cause life-threatening ketoacidosis.

Ketoacidosis is an emergency condition that can lead to diabetic coma or death. It occurs when dangerously high levels of ketones build up in the blood when the body must burn body fat for energy rather than blood sugars. A **ketone** is a poisonous chemical produced by the body when it burns fat.

To treat type 1 diabetes, a person must take insulin injections each day.

Type 1 Diabetes = always treated with insulin.

Type 2 Diabetes was previously known as "non-insulin-dependent diabetes (NIDDM)" or "adult onset diabetes." People with type 2 diabetes produce insulin, but less than what their body needs. Type 2 diabetes may not have many symptoms. It typically develops 5 to 10 years before it is diagnosed.

Type 2 diabetes is the most common type of diabetes for residents of long-term facilities. They may also need to take pills and/or insulin. The different treatment plans can include:

Type 2 diabetes = diet alone
Type 2 diabetes = diet and pills
Type 2 diabetes = diet pills and insulin
Type 2 diabetes = diet and insulin

2. What Is pre-diabetes?

Pre-Diabetes is a term used to describe a condition where a person has impaired glucose tolerance (IGT) or impaired fasting glucose (IFG).

NOTE: The term "borderline diabetes" is no longer used.

With pre-diabetes, the blood sugar levels are higher than normal but not yet high enough to be diagnosed as diabetes. People with pre-diabetes are at very high risk for type 2 diabetes, so it is important to diagnose and treat this condition before it develops into type 2 diabetes. The treatment can include:

Pre-diabetes = diet alone
Pre-diabetes = diet and pills

3. Symptoms of diabetes and pre-diabetes

Symptoms of diabetes typically include the following, although some people may not notice that they have symptoms:

- Having to urinate often
- Being thirsty or hungry all the time
- Being easily tired
- Losing weight for no reason

People with pre-diabetes usually have no symptoms. However, 1 in 5 adults has pre-diabetes, and the condition is even more common in older people.

4. How diabetes is diagnosed

There are 3 different ways to diagnose type 2 diabetes:

1. Fasting plasma glucose (FPG) level is **126 mg/dL or higher**.
 - a. Fasting is defined as having no caloric intake for at least 8 hours before the test.
 - b. Verify the findings by repeating the test on another day.
2. A two-hour plasma glucose level is **200 mg/dL or higher**.
 - a. This is tested using a 75-gram oral glucose tolerance test (OGTT).
 - b. Verify the findings by repeating the test on another day.
3. Symptoms of diabetes are present plus a random plasma glucose (blood sugar) level of **200 mg/dL or higher**. Random means any time of day regardless of when the resident last ate.

NOTE: Elderly people may not show any symptoms typically found with diabetes.

5. How pre-diabetes is diagnosed

Pre-diabetes is usually diagnosed when testing for type 2 diabetes, but with lower plasma glucose (blood sugar) levels:

1. Fasting plasma glucose (FPG) level is **100-125 mg/dL**.
 - a. Fasting is defined as having no caloric intake for at least 8 hours before the test.
 - b. Verify the findings by repeating the test on another day.
2. A two-hour plasma glucose level is **140-199 mg/dL**.
 - a. This is tested using a 75-gram oral glucose tolerance test (OGTT).
 - b. Verify the findings by repeating the test on another day.