What is diabetes?

If you or someone you know has diabetes, you're not alone. Millions of people have diabetes. Diabetes cannot yet be cured. But it *can* be managed.

The most common types of diabetes are type 1 and type 2

Type 1

In **type 1 diabetes,** the body makes little or no insulin, due to an overactive autoimmune system. So people with type 1 diabetes must take insulin every day. Type 1 diabetes usually occurs in children and young adults, but it can also appear in older adults. (An autoimmune disease means that the body attacks its own cells by mistake.)

Type 2

In **type 2 diabetes,** your body prevents the insulin it does make from working right. Or it may not make enough insulin. Most people with diabetes have type 2. Some risk factors for this kind of diabetes include older age, being overweight or obese, family history, and having certain ethnic backgrounds.

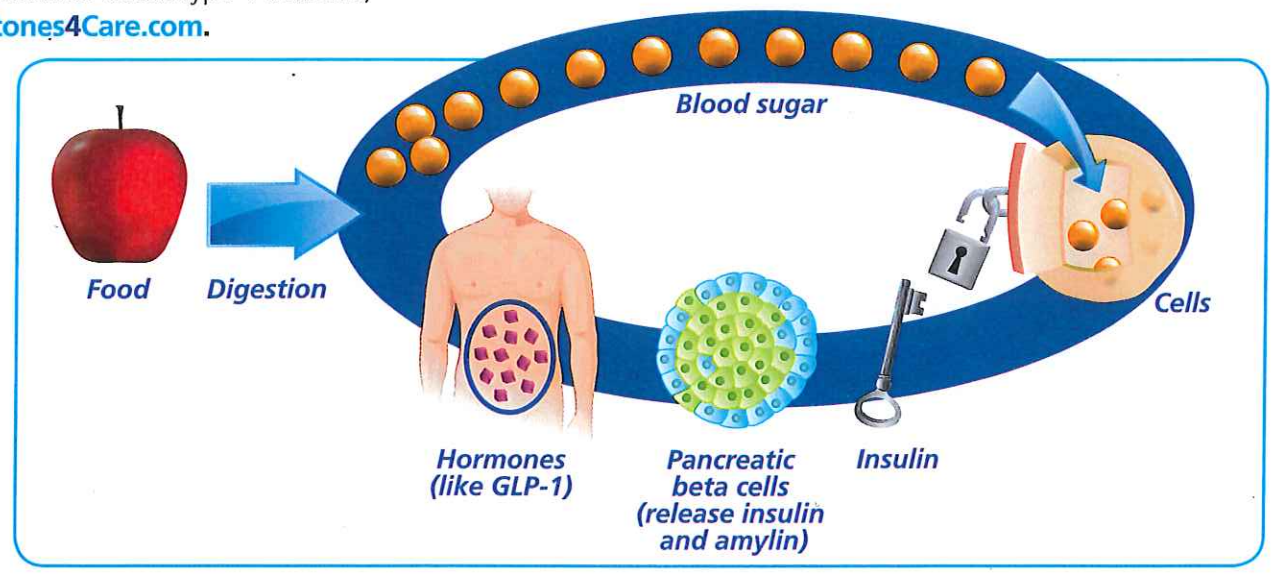
The information below focuses on type 2 diabetes. For more information about type 1 diabetes, visit **Cornerstones4Care.com**.

What happens in diabetes?

Diabetes is a condition in which the body doesn't make or use insulin correctly. The image below shows, in a simple way, what happens normally when you eat.

In people without diabetes:

- When you eat, some of your food is broken down into sugar (also called glucose). Sugar travels in your blood to all your body's cells. Your cells need sugar for energy. Sugar from food makes your blood sugar level go up
- In response to increased sugar, beta cells in the pancreas release a hormone called insulin. Insulin is like a key that unlocks the doors of your cells so that sugar can get into the cells, where it is used as a source of energy
- There are other hormones that play important roles in how the body uses sugar. For example, amylin and GLP-1 help reduce the amount of sugar made by the liver and slow the emptying of food from the stomach. Another hormone called glucagon tells the liver to release stored sugar if your blood sugar gets too low or if you have not eaten for many hours, such as overnight



What is diabetes?

In people with diabetes:

- Your pancreas makes little or no insulin, or
- Your body prevents the insulin you do make from working right. This is called insulin resistance

Checking your blood sugar

Checking your blood sugar yourself can be an important part of a diabetes care plan. Checking often will tell you:

- If your insulin or other diabetes medicine is working
- How physical activity, the foods you eat, and stress affect your blood sugar

You'll usually feel better and have more energy when your blood sugar stays at or near your goal. Managing your blood sugar can also reduce your risk of developing problems from diabetes.

Knowing your A1C

The A1C test measures your estimated average blood sugar level over the past 2 to 3 months. It's like a "memory" of your blood sugar levels. It shows how well you're controlling your blood sugar levels over time.

Your A1C is made up of 2 other blood sugar measurements:

- FPG is your fasting plasma glucose. This is your blood sugar number when you have been fasting (not eating) for at least 8 hours
- PPG is your postprandial plasma glucose. This is your after-meal blood sugar level, which you check about 1 to 2 hours after you eat. It measures the blood sugar spikes that happen after you eat

Both your FPG and your PPG have to be at their targets in order for your A1C to be at target.

Your A1C and your blood sugar levels go up and down together. Here is how A1C relates to the estimated average blood sugar level:

A1C levels	Average blood sugar
6%	126 mg/dL
7%	154 mg/dL
8%	183 mg/dL
9%	212 mg/dL
10%	240 mg/dL
11%	269 mg/dL
12%	298 mg/dL

Adapted from the American Diabetes Association. Standards of medical care in diabetes—2016. *Diabetes Care.* 2016;39(suppl 1):S1-S112