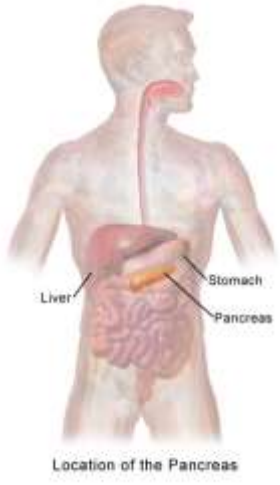
What is diabetes?

Diabetes is a disease that occurs when the amount of glucose in your blood is too high. Blood glucose, sometimes referred to as "blood sugar" is your body's main source of energy. As we've learned it comes from the break-down of carbohydrates in our food, but it can also come from glycogen, a carbohydrate stored in the liver and muscles.

Insulin, a hormone made by the pancreas (see illustration below), helps glucose from food get into your cells to be used for energy. Sometimes your body doesn't make enough—or any—insulin or doesn't use insulin well. Glucose then stays in your blood and doesn't reach your cells. This is where the problem starts.



Above image courtesy Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Pancreas_Location.

Over time, having too much glucose in your blood can cause health problems. Although diabetes has no cure, you can take steps to manage your diabetes and stay healthy.

Sometimes people call diabetes "a touch of sugar" or "borderline diabetes." These terms suggest that someone doesn't really have diabetes or has a less serious case, but every case of diabetes is serious.

What are the different kinds of diabetes?

The most common types of diabetes are type 1, type 2, and gestational diabetes.

Type 1 diabetes

If you have type 1 diabetes, your body does not make insulin. Your immune system attacks and destroys the cells in your pancreas that make insulin. Type 1 diabetes is usually diagnosed in children and young adults, although it can appear at any age. People with type 1 diabetes need to take insulin every day to stay alive.

Type 2 diabetes

If you have type 2 diabetes, your body does not make or use insulin well. You can develop type 2 diabetes at any age, even during childhood. However, this type of diabetes occurs most often in middle-aged and older people. Type 2 is the most common type of diabetes.

Gestational diabetes

Gestational diabetes develops in some women when they are pregnant. Most of the time, this type of diabetes goes away after the baby is born. However, if you've had gestational diabetes, you have a greater chance of developing type 2 diabetes later in life. Sometimes diabetes diagnosed during pregnancy is actually type 2 diabetes.

Other types of diabetes

Less common types include monogenic diabetes, which is an inherited form of diabetes, and cystic fibrosis-related diabetes .

Name: _____ Period: _____ Date: _____

How common is diabetes?

As of 2015, 30.3 million people in the United States, or 9.4 percent of the population, had diabetes. More than 1 in 4 of them didn't know they had the disease. Diabetes affects 1 in 4 people over the age of 65. About 90-95 percent of cases in adults are type 2 diabetes.[1]

Who is more likely to develop type 2 diabetes?

Recall that type 2 diabetes is the kind that develops over the course of your life. You are more likely to develop this condition if you are over the age of 45, if you have relatives that have diabetes, or if you are overweight. Lack of exercise, your ethnic background, and certain health problems such as high blood pressure can also increase your chance of developing type 2 diabetes. A condition called pre-diabetes also greatly increases your chances of developing type 2 diabetes. Pre-diabetes may be connected to diets high in simple sugars such as those found sugary foods and sweetened drinks (such as soda).

What health problems can people with diabetes develop?

Over time, high blood glucose can often lead to problems such as: heart disease

- stroke
- kidney disease
- eye problems
- dental disease
- nerve damage
- foot proble

Questions for Comprehension:

1. In your own words, how would you describe diabetes to a friend who asked you about it?

2. Type 2 diabetes is at least in part an avoidable condition. Referencing the reading, what might you do to change your chances of developing type 2 diabetes?

3. If you have a genetic tendency toward diabetes, is there any reason to modify your behaviors (diet and exercise for example)? Do all people who develop diabetes develop the health problems listed in the last portion of the article?