What is diabetes? Can I know for sure if I'll get it?

When your body's energy factory isn't functioning properly

There are some basic things to understand about diabetes:[1]

- Your healthcare provider can diagnose diabetes with simple blood tests
- There's no cure for diabetes; it's characterised as
- a chronic (always present) disease
- When diabetes is diagnosed early and properly managed, there is a high likelihood of avoiding or delaying complications (particularly with type 2 diabetes)

So what is diabetes?

The following is a basic explanation of a very complex, tightly regulated process within your body where two natural "ingredients" in your body — glucose and insulin — work in harmony:[1]

Glucose (a sugar):

1. The body takes food that you eat (carbohydrates, fats and proteins) and converts it into glucose, which is a form of sugar.
2. When glucose is created, it is carried through your blood to reach all of the cells in your muscles, fat and liver.
3. Glucose provides energy to your cells, or it can be converted into fat when needed.

Insulin (a hormone):

1. Hormones are chemical messengers that help control and regulate bodily functions, from hunger to reproduction to emotions.
2. The insulin hormone is created in an organ called the pancreas (which is located behind the stomach).
3. Insulin breaks down glucose and allows the cells to absorb this sugar to create the energy you need.

In diabetes, your body has problems with regulating your glucose levels. Which means that glucose builds up in your blood. Over a long period of time, this excess glucose begins to cause damage throughout the body.[1]

Types of diabetes[1]

Type 1 diabetes

In type 1 diabetes, the pancreas cannot produce enough or any insulin, which is why too much glucose builds up in the blood. People with type 1 diabetes must have daily insulin injections for the rest of their lives. This form of diabetes is sometimes referred to juvenile-onset diabetes because people are generally younger than 30 when they are diagnosed. However, type 1 diabetes can develop at any age.

Type 2 diabetes

Type 2 diabetes is the most prevalent form of the disease. In type 2 diabetes, cells become resistant to the insulin that the body makes. As a result, too much glucose builds up in the blood, causing damage throughout the body over time.

Gestational diabetes

Gestational diabetes is a temporary type of diabetes that develops during pregnancy (gestation). A woman who had gestational diabetes in one pregnancy has a higher risk of developing gestational diabetes in future pregnancies. Although gestational diabetes reverts to normal after pregnancy, it increases the risk of type 2 diabetes in the future. Regular screening for type 2 diabetes is essential for women who have had gestational diabetes.

1. World Health Organization, “Frequently Asked Questions About Diabetes,” 2016