How Does Diabetes Work?

Diabetes is a health condition that affects the way your body balances blood sugars.

- Your body turns many foods that you eat into sugar (glucose). To use the food we eat for energy, we need the help of insulin.

- Insulin is a hormone or messenger in the body. Its job is to help balance blood sugars.

- Blood sugars travels through the blood to our cells. Insulin works like a key, opening the door to the cell, allowing sugar to enter. This allows the cell to get energy. This is how things work, normally.

- Diabetes is when the body can’t take enough sugar out of the blood. This means sugars cannot get into your cells for energy. This happens because of a problem with insulin.

- For example, it may become harder for the insulin (key) to find the receptor site (keyhole) to enter if the cell changes shape. This leads to too much sugar in the blood.
How Does Diabetes Work?

Insulin is made by the pancreas, an organ that sits just behind your stomach.

How the pancreas works without diabetes:

- When you have diabetes, your pancreas is not working right, so your body might not make enough insulin to keep blood sugar levels healthy. Sometimes the insulin that you make does not work right, so your cells resist (do not respond to) it.

- The liver can also make sugar. With diabetes, sometimes it makes too much which causes blood sugars to go up.

- When blood sugar levels are too high, it can damage your body including your eyes, heart, kidneys and nerves.

- Keeping blood sugars balanced lowers the risk of damage to your body.

How the pancreas works with diabetes:

Diabetes changes over time. Keeping blood sugars on target by being active, eating well, and taking medicines can prevent damage and help you stay healthy.