



# WHAT DOES THE PANCREAS DO?

Your body is made of lots of small parts called cells. Cells need energy to work. They get energy from a type of sugar called glucose. When you eat food like an apple, your digestive system breaks it down. Once the food is broken down it moves to the small intestine where the sugar moves into your blood. Your blood takes the sugar to each cell in your body.

The cells have a doorway that lets the sugar in, but the doorway is locked. A special hormone called insulin opens the doorway. Insulin comes from special cells called beta cells in an organ called the pancreas. It is located under your stomach. When the pancreas senses increasing glucose in your blood, it sends insulin to open the door. Then, the glucose can go into the cells. Inside the cells, it is used to make energy.

The pancreas has other jobs too! It also releases a fluid into your intestine that is full of enzymes that break down your food. It also produces a hormone called glucagon that helps release sugar that has been stored up in your liver. Your pancreas is always working to make sure there is the right amount of glucose in your blood to fuel your body.

## Questions:

1. What is glucose and how does it get into your body?

Glucose is sugar and when you eat food it gets broken down by the digestive system. Once the broken down food moves into the small intestine, the sugar is absorbed from the food into the blood stream.

2. How are the pancreas and insulin connected? The pancreas is made of cells called beta-cells, which make insulin.

3. What does your body do with glucose? The cells in our bodies use glucose to make energy. Cells need insulin in order to let the glucose into the cells.

4. Name 3 functions (jobs) of the pancreas. Make insulin, release enzymes to break down food, release glucagon.