



# LET'S TALK ABOUT THE PANCREAS AND SMALL INTESTINE

## DID YOU KNOW?

Today, we will learn about two new lifesaving organs that are connected inside of our bodies; they are the pancreas and the small intestine. If we were to unravel the small intestine, it is approximately 20 feet long. That is the length of a huge jump rope!

## MATERIALS:

- 1 A variety of beverages or drink boxes, other than water, that have a nutrition label (soft drinks, orange juice, fruit punch, tea, etc.).
- 2 A long item such as a jump rope or a few shoelaces.
- 3 Measuring tape (if you do not have measuring tape, you can use a ruler, but you will need help marking your measurements).

## BACKGROUND INFORMATION:

The pancreas is shaped like a flat pear and is similar to the size of a sweet potato. It is about six inches long and is located behind the stomach and liver. As stated above, the pancreas connects to the first section of the small intestine.

### The pancreas has two main jobs:

- 1 To make essential or special proteins called enzymes that help you digest food.
- 2 To make insulin or sugar for your body.

The enzymes made by the pancreas are sent to the small intestine; they help break down the food you eat into proteins, carbohydrates and fats to be absorbed by the body. This process is what gives you energy. The insulin helps raise and lower your blood sugar levels. It's like a key that unlocks the body's cells so that sugar can get into the cells and be changed into energy.



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There are certain genetic diseases and even birth defects that can cause both of these organs to no longer function properly. One of the most common reasons someone might need a pancreas transplant is diabetes, which can be caused when the pancreas makes too much or too little insulin. Also, sometimes, a person can be born with intestines that are entangled.

We cannot always determine why these organs stop functioning properly, but one thing we can do to help protect them is drink a lot of water and eat a healthy diet so the pancreas doesn't have to work as hard to digest food.

## HOME ACTIVITY:

- 1 Find an item in your house that is several feet long, such as a shoelace or jump rope.
- 2 First, measure out five feet. This is the length of your large intestine.
- 3 Now, measure the entire length of the object. Is it around 20 feet? If not, add on to it, making it 20 feet. This is how long your small intestine is — and it's all inside of you!

## CHALLENGE:

Gather several different beverages or drink boxes from your house without looking at the nutrition label. Try to arrange the drinks in order from the least amount of sugar to the most. Lastly, turn each beverage around to look at the sugar content on the food label. Were you correct?

\* It's important to drink a lot of water and fewer sugary beverages to keep your insulin levels steady and to keep your pancreas from working too hard.