



## Curiosity Guide #204

### Digestive System

Accompanies Curious Crew, Season 2, Episode 4 (#204)

#### Intestinal Lengths

Investigation #5

#### Description

How long are your intestines? Surprise your friends and family with this demonstration!

#### Materials

- 20-foot length of yarn, rope, or hose, coiled
- 5-foot length of thicker hemp or rope, coiled

#### Procedure

- 1) Ask your friends and family: How long do you think the small and large intestines are? Which one is longer? Make some predictions.
- 2) Unwind the thinner rope. This is the small intestine.
- 3) Unwind the thicker rope. This is the large intestine.
- 4) What do you notice?

#### My Observations

## Explanation

From the stomach, the food enters the small intestine, a twenty-foot long, one-inch diameter tube that pulls out the nutrients from the food we eat. While the stomach was acidic, the small intestine is alkaline in nature. The small intestine uses bile and other enzymes to extract the nutrients from the food. The large intestine, a five-foot long organ that is roughly three inches in diameter, contains healthy bacteria amassed throughout a person's lifetime.

It seems strange to think that the small intestine is four times longer than the large intestine, but it is. The reason it is called "small" is because it is much thinner than the large intestine. Being smaller allows more of the intestinal walls to touch the food as it goes by and capture more nutrients. And have you ever had a stomachache? Actually those feelings usually come from your intestines.... "Mommy, I have a small intestine ache." Of course, that does sound kind of strange!

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