



HOMESCHOOL SCIENCE EXPERIMENT

MAKING A MODEL OF THE HUMAN DIGESTIVE SYSTEM



Name: _____ Date: _____

GOAL

To build a model of the human digestive system and demonstrate how food moves through the body and is broken down.



BACKGROUND

The digestive system breaks down food into nutrients that our body can use for energy, growth, and repair. Food travels through a long pathway of organs, starting at the mouth and ending when waste leaves the body.

MATERIALS

- 1 clear plastic bottle (2 liter)
- 1 funnel
- 1 pair of pantyhose or a clean sock
- 2 rubber bands
- Scissors
- Masking tape
- Bowl
- Water
- 2 slices of bread
- 2–3 tablespoons of yogurt
- 1 tablespoon of oil
- (Optional) Food coloring



PROCEDURE

1. Prepare the Bottle

Cut off the bottom of the plastic bottle. This will be the "mouth" end.

2. Add the Funnel

Place the funnel into the top of the bottle (narrow end down). This represents the mouth and esophagus.

3. Prepare the "Small Intestine"

Take the pantyhose or sock and tie a knot in one end. Turn it inside out and place it inside the bottle. This represents the small intestine.

4. Create the "Stomach"

In a bowl, mix the bread, yogurt, and oil with 1 cup of water until it forms a mushy mixture. (Add a few drops of food coloring if desired.) Pour this mixture into the funnel.

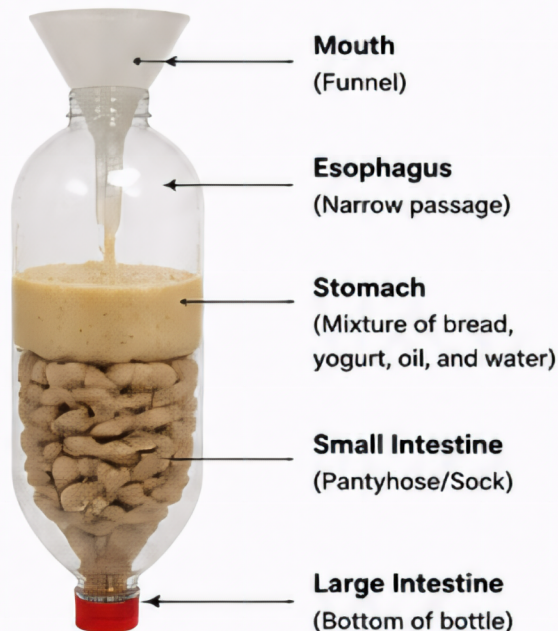
5. Watch the Process

The mixture will travel down the funnel, through the bottle, and into the "intestine." It shows how food moves and is broken down.

6. Observe and Discuss

Look at what happened. Talk about each part of the digestive system and what it does.

THE DIGESTIVE SYSTEM MODEL



OBSERVATIONS

What happened when you poured the mixture into the funnel?

What part of the digestive system does each item represent?

THINK AND DISCUSS

1. What is the job of the stomach?

2. What happens to the food in the small intestine?

3. Why is it important for our bodies to break down food?



EXTENSION IDEA: Research another part of the digestive system (like the liver or pancreas). How does it help with digestion?