

The Passage of Food

Our bodies are made of cells that need food to stay alive. The human body has a group of organs that work together to take in the food we eat, make it useable for our cells, and pass the unused food out of our bodies. This group of organs is called the digestive system. Let's take a close look at the organs of the digestive system to find out what each organ does that carries out life's processes.

Food begins its journey to our cells in our **mouths**. There, our teeth tear the food into small pieces. Our **tongues** mix the food pieces with liquid called saliva until it is wet and soft and can be swallowed. When swallowed, food passes through a tube called an **esophagus** where it is pushed into our **stomachs**.

The stomach is a major organ of our digestive systems. An adult **stomach** is about ten inches long and is shaped like a hotdog. As food passes into the stomach, it stretches much like a balloon. Our **pancreas** send chemicals into our **stomachs** to help break down the food. The strong muscles in the walls of our **stomachs** push the food around to mix it with the chemicals from our **pancreas**. Our **gall bladders** add bile to the food in our **stomachs**. This bile helps break the food down into even smaller bits.

When the food is a fine paste, the muscles of the **stomach** push the food into a twenty-three-foot long tube called our **small intestines**. In our **small intestines**, the final breakdown of food takes place as it continues to mix with the bile and chemicals. Along the walls of our **small intestines** are tiny hair-like villi that are the doors that the food passes through to enter our blood stream where it is carried to our **livers** for cleaning, then to cells throughout our body. Food that can't be broken down to pass through villi and into our blood is pushed into our **large intestines** where water and other liquids that our body can use are removed. The unused food is called waste. The waste passes from our **large intestines** into our **rectum** where it is held until our **rectums** are full. Finally, the waste is passed out of our body through an opening called the **anus**.

These amazing organs of our bodies called the digestive system, work together to feed our cells and keep our bodies healthy.

The Passage of Food Teacher Key

Wording of the answers will vary, but the ideas should be consistent with the answers in this key.

1. What is the main idea of this article?

The digestive system is a group of organs that work together to take in the food we eat, make it usable for our cells, and pass the unused food out of our bodies. (Main idea)

2. When we are thinking of food and our mouth waters, what is the liquid in our mouths?

Saliva (Implicit)

3. What is the job of the liver in the digestive system?

The liver cleans the food before it is passed into the blood stream. (Explicit)

4. The article states that the stomach is a major organ of the digestive system. What details support this idea?

1. An adult stomach is about ten inches long and it stretches as food passes into it. (Explicit)

2. Chemicals are passes into the stomach to help break down the food there. (Explicit)

3. Muscles in the stomach walls push the food around to mix it with chemicals from the pancreas. (Explicit)

The Passage of Food Sample Outline

- I. Mouth
 - A. Teeth
 - B. Tongue
 - C. Saliva
- II. Stomach
 - A. Pancreas chemicals
 - B. Gall Bladder bile
 - C. Muscles
- III. Intestines
 - A. Small
 - 1. Final breakdown of food
 - 2. Through villi to blood
 - a. Food to liver for cleaning
 - b. Food to body cells
 - B. Large
 - 1. Remove liquid
 - 2. Waste remains

Rectum and Anus