

Human Digestive System



Our body needs food to provide it with energy, vitamins, and minerals. However, in order use food, we must first break it down into substances that the various organs and cells in our body can use. This is the job of our digestive system.

The digestive system acts in stages to digest our food. Each stage is important and prepares the food for the next stage. The entire length of our digestive system is around 20 to 30 feet!

Here are the major stages of the digestive system:

1. Chewing - Chewing is the first stage of the digestive system. When you chew your food it breaks up big pieces into little pieces that are easier to digest and swallow. Also, your saliva is more than just water. It has special [enzymes](#) in it that start to break down starchy food (potatoes, bread) while you chew.

2. Swallowing - Swallowing may seem like a simple process to us. It just sort of happens. But food doesn't just fall down our throats into our stomach. First, our tongue helps to push food into the back of our throat. Then there are special throat muscles that force the food down into a long tube that leads to our stomach, called the esophagus. The food doesn't just fall down the pipe, muscles push the food along until it gets to our stomach. At the same time all this is going on, a flap blocks off our windpipe making sure food doesn't go the wrong way. This flap is called the epiglottis and, fortunately for us, it works automatically.

3. Stomach - The next stage is the stomach. Food hangs out in the stomach for around four hours. While the food sits there, more enzymes go to work on it, breaking down things like proteins that our bodies can use. The stomach kills a lot of bad bacteria as well, so we don't get sick.

4. Small Intestine - The first part of the small intestine works with juices from the liver and pancreas to continue to break down our food. The second part is where the food gets absorbed from the intestine and into our body through the blood.

5. Large Intestine - The last stage is the large intestine. Any food that the body doesn't need or can't use is sent to the large intestine and later leaves the body as waste.

The Liver and Pancreas

The liver and pancreas do a lot to help the digestive system along. Both work with the small intestine. The liver provides bile (stored in the gall bladder) that helps break up fat into smaller bits. The pancreas provides additional enzymes to help digest all sorts of food. The liver also processes the digested food from your blood before it gets sent to various places in your body to be used.

