

Distant Relatives: Organs That Help the Digestive System

You have just learned that the five main organs do most of the work for the digestive system. Those organs are all connected. Beginning at the mouth, food moves through the esophagus, stomach, and small intestines before it is removed from the body through the large intestines. Other organs also play an important role in digesting your food, but they are not directly connected to the digestive tract.

Salivary Glands

First of all, you have a set of six **salivary glands**. The largest glands are called the **submaxillary glands**, and they are found under your lower jaw. The **sublingual glands** are located under your tongue, and the **parotids** are found in front of each ear. All of the salivary glands make saliva. This fluid, which we often call spit, makes your mouth wet. It also makes your food softer and easier to swallow. The saliva also begins the chemical digestion of your food as it breaks down starches into simpler sugars.

When I was a young child, I had to stay home from school for several days because I had the mumps. This was a fairly common childhood disease resulting from a virus infecting my salivary glands. I had a bit of a fever and my cheeks puffed up. I looked pretty silly. You probably will not have to worry about getting mumps, because a special vaccine was invented in 1967. The vaccine is given to young children so they will not get the mumps virus.

The Pancreas

Tucked into your body, close to your stomach, is an organ that is shaped a bit like a bunch of grapes. It is about 20 centimeters long and is about four centimeters wide. It is about 2.5 centimeters thick. This organ, the **pancreas**, has an important job to do in two different systems in your body: the endocrine system and the digestive system. For the digestive system, the pancreas makes enzymes. The enzymes are sent to the small intestines through a tube called the **pancreatic duct**. The pancreatic enzymes help your body break down carbohydrates, proteins, and fats.

The Liver

Just under your diaphragm, lying on top of your stomach, is a large red organ known as the **liver**. The liver is a very important organ, helping many of your body systems. One of the jobs the liver has is to make **bile**. Bile is a fluid containing special salts. Those salts are important for breaking down fats into smaller molecules. The bile is made in the liver and is stored in a nearby organ called the **gallbladder**. The gallbladder sends bile into the duodenum, which is the first part of the small intestine. The bile travels from the gallbladder to the small intestine through a tube called the **bile duct**.

Name: _____ Date: _____

Activity

Look at the diagrams below. Label the parts of the diagrams using the word bank.

Word Bank:

- submaxillary glands
- sublingual glands
- parotid glands
- pancreas
- pancreatic duct
- liver
- gallbladder
- bile duct

