The Digestive System

The purpose of the digestive system is to change food into a form that can be used by the cells of the body. The first steps of digestion take place in the mouth where the teeth break the food into smaller pieces and saliva is added to the food to make it wet and soft. As food is chewed, the tongue moves around in the mouth and mixes the food with saliva. Saliva is one of the many juices that mixes with the food along the path of digestion. The tongue also pushes the food to the back of the mouth when swallowing.

After swallowing, the food goes into a tube called the esophagus, which is lined with strong muscles to push the food to the stomach. The stomach is a J-shaped sac mostly made of muscles. In the stomach, the food is mixed with juices and squeezed and churned until it becomes a thick liquid.

Now the thick liquid food moves into the small intestine, which is a hollow tube about four times longer than your height. In the small intestine, food is mixed with more juices, some of which are made in the small intestine. The liver makes another juice and stores it in the gallbladder until it passes into the small intestine. The pancreas also makes and passes juices to the small intestine. On the inside of the small intestine are tiny, finger-shaped projections, called villi, that are lined with blood vessels. All of the food that can be used by the body goes into the blood from the small intestine. The blood carries this digested food to all the cells of the body.

The unused food and water that do not go into the blood from the small intestine pass to a wider, but shorter tube called the large intestine. Here, water is taken out of the food and is reabsorbed into the bloodstream. The remaining waste material leaves the body through an opening at the end of the large intestine.