

Name _____

Review for Digestive System Test

Your mouth begins the process of digestion. Your teeth begin mechanical (mechanical/chemical) breakdown by chewing food. Saliva also breaks down food. This is chemical breakdown.

The food travels down the esophagus to the stomach. Muscles in your stomach mix up the contents. This is mechanical breakdown.

Hydrochloric acid continues breaking down food chemically. (mechanically/chemically) The lining of your stomach has mucus to protect itself from the

hydrochloric acid. If the mucus isn't there, ulcers form, which are sores on the lining of the stomach. Lots of hydrochloric acid also can give you heartburn or indigestion, which feels like a burning sensation.

When the food reaches the small intestine, it isn't recognizable as food; it looks like thick and pasty. Since the food contains high levels of acid, the pancreas makes a chemical that reduces acid.

This is chemical breakdown. The pancreas also produces chemicals that break down proteins and fat in food. Your liver makes bile, which breaks down fat. This is a chemical breakdown.

After the food is broken down, the pieces left over are called nutrients which are absorbed into your blood and are carried to the rest of your body. Most of the final breakdown and nutrient absorption occurs in the small intestine.

That's why it's so long; it's about 15-18 feet in length. The walls of the small intestine have finger-like projections called Villi.

Nutrients pass through these and enter your blood.
All of the blood from your stomach and small intestines goes to your liver.

Before going to the rest of your body. The liver has other jobs besides producing bile. It breaks down toxins and processes nutrients.
So the body can use them.

Any part of the food that was not processed for nutrients by the small intestine goes into the large intestine also known as the colon.
Water and Vitamins are absorbed by the blood. Whatever is left takes the form of Solid waste.

Solid waste is stored in the rectum. The job of the anus is to push out the waste. Solid waste is made of and water. How do bacteria help your large intestine? They break down

some plant material make Vitamin K,
and prevent harmful bacteria.
Unfortunately, there is a trade-off to having bacteria: gas and odors.
The

whole process of digestion, from chewing to leaving the large intestine, takes 18-24 hrs.