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## Agriculture & Natural Resources

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### NEWS RELEASE

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#### **Something to Chew On**

The food we eat travels through about 30 feet of digestive system in a journey that can last from 20 hours to several days. We eat everyday and give little thought to the process. So, what really happens to the food we eat?

Naturally, the whole thing starts right in your mouth. After you have bitten off a piece of food, your teeth grind it up and it is mixed with saliva poured in from the salivary glands. Saliva lubricates food's movement and provides only a small amount of an enzyme that begins the breakdown of starches (carbohydrates) in your food. The resulting unrecognizable mass, called a bolus, easily slides down your throat through the esophagus in about one to six seconds for liquids and 30 to 60 seconds for solids.

Next stop: the stomach. The bolus is further ground up and mixed with hydrochloric acid and other gastric juices. Hydrochloric acid acts as your body's first defense against bacteria and microorganisms that might be present in the food. It is in your stomach that your body begins to break down the protein present in your food. This part of digestion takes about four hours, longer if the meal is high in fat. This further broken down mass you called lunch is now called chyme.

Chyme travels from your stomach into the small intestine where it is combined with a neutralizing substance. This prevents damage to the intestine from the hydrochloric acid. It also adds bile and other pancreatic juices. These help the small and large intestines complete the process of digesting and absorbing the nutrients from your food. The small intestine is where most of this will take place. Here food will remain for about four hours in the first part of the intestine, the duodenum, and about two hours in the rest of the small intestine.

Once the small intestine has fully broken down and absorbed the nutrients from your food it leaves the rest of the work to your large intestine, the colon. Any remaining minerals are absorbed here. This part of the journey lasts about 14 hours. Material that contains no nutrients is passed through to the rectum, where it is formed into stool.

When stool is ready for elimination it is finally passed through the anus. And thus the journey of your food through the digestive system comes to an end.

Source: [www.intelihealth.com/](http://www.intelihealth.com/)