**The Story of Digestion**

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| **The story we're about to tell is of stormy seas, acid rains, and dry, desert-like conditions. It's an arduous journey that traverses long distances and can take several days. It's one in which nothing comes through unchanged. It's the story of your digestive system whose purpose is turn the food you eat into something useful -- for your body! It all starts with that first bite of pizza. Your teeth tear off that big piece of crust. Your salivary glands start spewing out spit like fountains. Your molars grind your pizza crust, pepperoni, and cheese into a big wet ball. Chemicals in your saliva start chemical reactions. Seemingly like magic, starch in your pizza crust begins to turn to sugar! A couple of more chews and, then, your tongue pushes the ball of chewed food to the back of your throat. A trap door opens, and there it goes, down your gullet! Next, your muscles squeeze the wet mass of food down, down, down a tube, or esophagus, the way you would squeeze a tube of toothpaste. It's not something you tell your muscles to do -- they just do it -- in a muscle action called peristalsis. Then, the valve to the stomach opens and pizza mush lands in your stomach! Imagine being inside a big pink muscular bag -- sloshing back and forth in a sea of half-digested mush and being mixed with digestive chemicals. Acid rains down from the pink walls which drip with mucus to keep them from being eroded. Sound a little like an amusement ride gone crazy? Every time you think you've got your equilibrium back, the walls of muscle contract and fold in on themselves again. Over and over again, you get crushed under another wave of slop. Every wave mixes and churns the food and chemicals together more--breaking the food into even smaller and smaller bits. Then another valve opens. Is the end in sight you ask, as the slop gets pushed into the small intestine.Inside the small intestine, chemicals and liquids from places like your liver and pancreas break down and mix up the leftovers. The small intestine looks like a strange underwater world filled with things that resemble small finger-like cactuses. But they're not cactuses, they're villi. Like sponges, they're able to absorb tremendous amounts of nutrients from the food you eat. From the villi, the nutrients will flow into your bloodstream. But hold on! The story's still not over yet -- the leftovers that your body can't use still have more traveling to do! Next, they're pushed into the large intestine. It's much wider and much drier. You find that the leftovers getting smaller, harder and drier as they're pushed through the tube. After all, this is the place where water is extracted and recycled back into your body. In fact, the leftovers that leave your body are about 1/3 the size of what first arrived in your intestines! Finally, the end of the large intestine is in sight! Now the drier leftovers are various handsome shades of brown. They sit, at the end of their journey, waiting for you to expel them -- out your anus. Of course, you know the rest! A glorious, if slightly stinky, journey, don't you think?** **Digestion Facts:*** **Intestines are at least 25 feet in an adult. Be glad you're not a full-grown horse -- their coiled-up intestines are 89 feet long!**
* **Chewing food takes from 5-30 seconds**
* **Swallowing takes about 10 seconds**
* **Food sloshing in the stomach can last 3-4 hours**
* **It takes 3 hours for food to move through the intestine**
* **Food drying up and hanging out in the large intestine can last 18 hours to 2 days!**
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