



# SCIENCE MINDED

## Digestion Experiment

The process of breaking up food into nutrition is mostly invisible inside our bodies, but it is still incredibly important to keeping us healthy!

To make a simplistic visible model of digestion, you will need some crackers, a ziplock bag, some clear soda (such as club soda or sprite), an absorbent towel, and a good place to make a mess.

The *first part* of digestion is *chewing*. Your teeth mash up your food. Mash up your crackers anyway you like.

The *second part* of digestion is *breaking down* in the stomach. Your food travels down your esophagus and into your stomach where your stomach acid and the churning motion of the stomach muscles turn the food into mush. Put your mashed up crackers in the ziplock bag with some soda (soda is a not very strong acid) and then seal the bag very carefully. Mimic the motion of the stomach by squashing the crackers around and shaking them up until you get mush.

The *third part* of digestion is *ABSORPTION OF NUTRIENTS*. Your food moves from your stomach to your intestines. As it travels through your intestines, the nutrients and liquids are absorbed to feed your body. Dump the mush into the towel and roll up the towel around the mush. Squeeze the towel, just like the intestines squeeze the food. We have a lot of intestines, so squeeze a lot!

When you open the towel, you will find what is usually leftover from our food...**POOP!** (sort of)

*NOTE: Digestion is actually more complex than this with crazy chemicals and essential bacteria and other awesome stuff. For more information, check out:*

<https://www.nationalgeographic.com/science/health-and-human-body/human-body/digestive-system/>