## Post-Visit Activity 3 Resource

**Gut Reaction** 



## What we need:

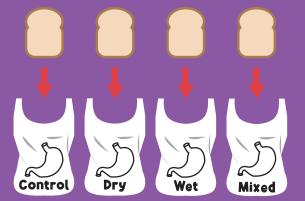
- 4 Resealable Plastic Bags
- 4 Slices of Bread/Crackers
- Water
- Marker

**Educator Demonstration** 

1. Label your 4 bags: Control, Dry, Wet, Mixed. Each of these bags represent a stomach which we will be filling with food! Draw a stomach on each bag using a marker.



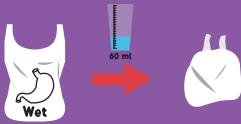
2. Place a slice of bread into each bag.



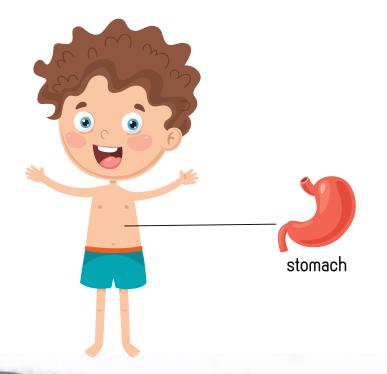
3. In the dry bag, squash the bread with your hands for a few minutes.



4. In the wet bag, add  $\frac{1}{4}$  cup (60 ml) of water into the bag and move it around. Make sure it's closed well!

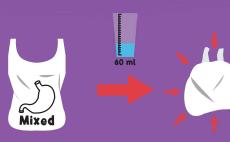


It's most likely that the bread in the mixed bag looks the most broken down. This is what happens in our stomachs! The stomach helps digestion by using muscles as well as stomach acid to squash and squish your food into tiny pieces. Where does your food go next? Have a look at our science show Body Wonders at Esplora to find out!

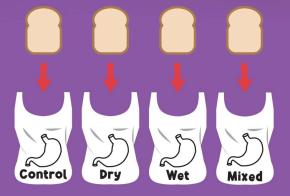




5. In the mixed bag add  $\ensuremath{{1}\!\!\!/}_4$  cup of water, close the bag and squash up the bread.



6. Which piece of bread looks the most broken down?



## **FACT**

The stomach also helps your body to defend from pathogens. The acid which is found in the human stomach can kill certain pathogens and neutralize some toxins.



Our bodies work a little differently than this experiment because food would have already been chewed up and broken down by our teeth before arriving in our stomachs. Our stomachs break the food down even further.