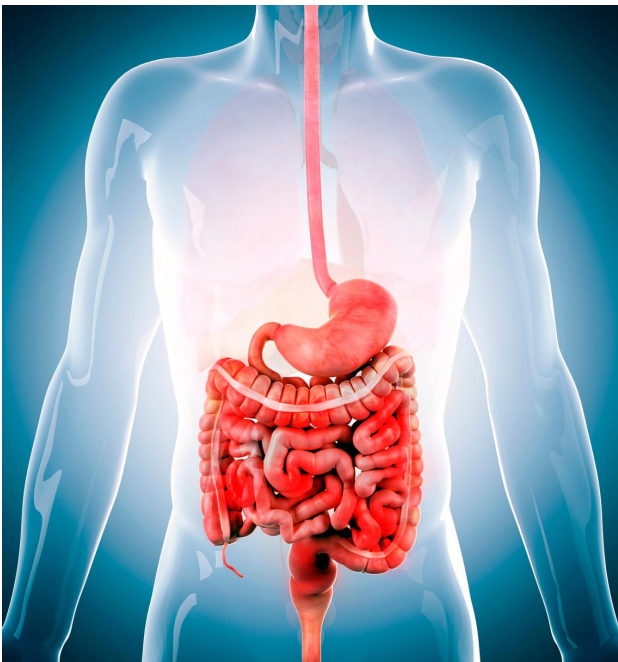


EDUCATIONAL ENRICHMENT

ELEMENTARY STEM KITCHEN CHEMISTRY WITH LEMON VOLCANOES



ASK A QUESTION:

Every time you digest food, acids and bases are at work in your digestive system. What are acids and bases?



GATHER MATERIALS:

Grab several lemons, baking soda, food coloring, Dawn dish soap, tray, and craft sticks.
Grownups should use the knife to cut the lemons in half. Consider using safety goggles and gloves for chemical reactions.



GUESS THE ANSWER:

Click [here](#) to learn about the properties of acids and bases and how to make your own pH scale. Guess how the acid and base will react with each other in your experiment.

DO YOUR EXPERIMENT:

Add several drops of food coloring to the lemon halves. Squeeze soap detergent over the food coloring. Generously cover the lemon with baking soda. Mix together.



STUDY YOUR RESULTS:

What is the science behind lemon volcanoes? Try to explain why the reaction between the acid and the base occurred.



SHARE YOUR FINDINGS:

Tell someone what you learned! Consider sharing a video or photos, or even live streaming, with family and friends.



KEEP EXPERIMENTING!

Try limes, oranges, and grapefruits.
Add lemon juice to the reaction.
Use baking soda instead of baking powder.

