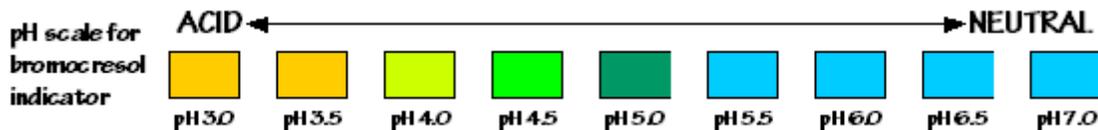
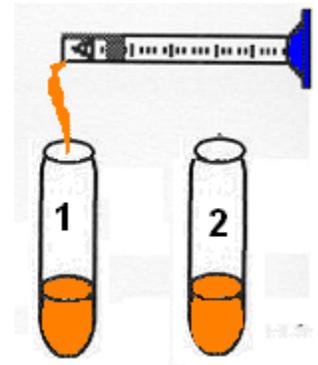


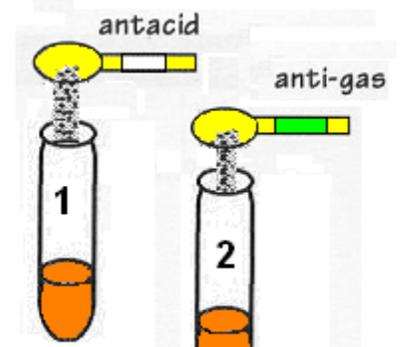
As The Stomach Churns

Procedure

1. Always wear safety goggles.
2. Rinse the graduated cylinder and the two test tubes in the sink.
3. Use the graduated cylinder to measure 15 ml of artificial stomach fluid. Pour this into test tube 1.
4. Repeat measuring and adding stomach fluid to test tube 2.
5. Screw the caps on tightly and shake each test tube well
 - How much foam is in each bottle?
 - What color is the fluid? Is it an acid or neutral?



6. Add one scoop of antacid powder to test tube 1.
Add one scoop of anti-gas powder to test tube 2.
7. Recap the tubes and shake them well.
 - How much foam is in each bottle now?

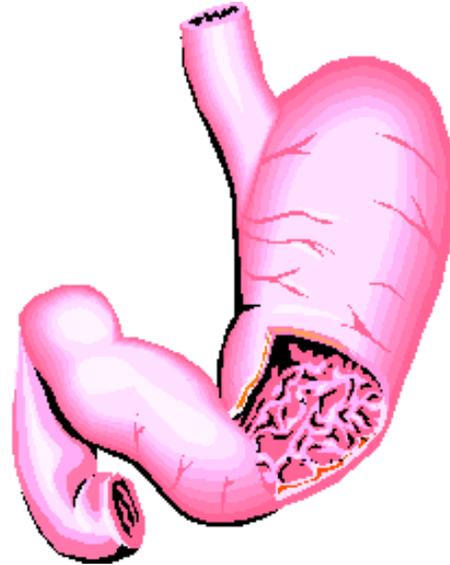


- What color is the fluid? Is it still acid?

8. Empty and rinse the test tubes and graduated cylinder in the sink.

What is antacid used for?

How does it work?



A Closer Look:

Your stomach makes hydrochloric acid (HCl) to help digest food. If your stomach makes too much acid, it may cause indigestion or heartburn. People use antacids to **neutralize** the extra acid in their stomachs.



Gas can be created in your digestive system by either swallowing air or from incomplete digestion of some foods, especially complex sugars like those found in beans and other legumes. Anti-gas medicines usually contain simethicone, an antifoaming agent that causes many small bubbles to merge into a few large bubbles that are easier to expel from the digestive system.

In this experiment, the “stomach acid” is a solution of hydrochloric acid and soap (to create the “gas bubbles”). A color change shows that the antacid is working to neutralize the stomach

acid. The color change comes from an indicator that is yellow in strong acids and blue in weak acids or bases.