Bubbly Avocado
Investigation #7

Description
Bubble me this: Which fruit do you think will be the bubbliest?

Materials
• Avocado
• Banana
• Pineapple
• Melon
• Apple
• Knife
• Cutting board
• 5 glasses
• Hydrogen peroxide
• Liquid measuring cup with milliliter markings
• Fork

Procedure
1) Cut a one-inch square piece of each fruit and set aside, noting which is which.
2) Put 20 milliliters of hydrogen peroxide into each glass.
3) Place a single piece of fruit in each glass and observe.
4) What do you notice?
5) You may choose to mash the pieces of fruit up a bit with a fork to see if anything else occurs.
My Results

Explanation
Our bodies rely on different molecules to convert food and oxygen into the energy and nourishment we need to survive. Enzymes are proteins that speed up chemical reactions in living cells. Enzymes have specific functions. These proteins might break down molecules so the body can use the food more efficiently, or the proteins may speed up the bonding process of other molecules.

Catalase is an enzyme that breaks down peroxides into water and oxygen. The amount of catalase in living things varies. In this investigation, we can discover how much catalase is in each fruit sample, based upon the bubbles we observe. If the fruit has more catalase, there will be more bubbles as the enzyme reacts with the peroxide, forming water and releasing oxygen gas. This is the case with avocado and then banana. The apple, however, has very little catalase so there are few bubbles to observe.
Here are some tricks to make some fruits ripen faster or last longer:

- To ripen an avocado faster, wrap the avocado in newspaper and place in a brown bag with a banana. This tip can speed up the ripening by five days!

- Want to keep the flavor of your tomatoes? Try storing tomatoes on the counter rather than in the refrigerator. Yum!

- Keeping citrus fruits on the counter and out of the sun will make these fruits last longer, plus they are beautiful to look at!

- Bell peppers will stay crisper if stored in a paper bag. Crunch!

- If you put foil or plastic wrap around the banana stems, the skin won’t brown as fast.

These tricks are pear-fect!

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