

Brown Apples Experiment

When we slice an apple open an enzyme reacts to being exposed to the air turning the flesh of the apple brown. This reaction is called oxidization. Molecules from the apple are being released into the air.

However, some common household items prevent oxygen from destroying our food. Or at least, it slows down the process.

Of course, we could always cover the apple, but that's not always possible. For example, when we serve an apple salad, it can't be covered the entire time.

This experiment will help determine which items in our cupboards we should use to keep our apple slices fresher, longer.

You will need:

1 apple

1 tablespoon milk + 1/2 cup water

1 tablespoon vinegar + 1/2 cup water

1 tablespoon lemon juice + 1/2 cup water

1/2 cup water

And you may also try these items, too.

1 tablespoon baking soda + 1/2 cup water

1/2 cup coffee

1 tablespoon vegetable oil + 1/2 cup water

1 tablespoon orange juice + 1/2 cup water

1/2 cup peppermint tea

Slice the apple into 5 slices if only using the first 4 ingredients. However, you will need one extra slice for each additional ingredient used in the experiment. Place each slice in a separate dish.

Set aside one dish as the control apple. In each of the remaining dishes, add one solution. Label the dishes (diagram1) with the matching solution.



Use the form below to record changes in the apples. After the first 5 minutes, determine the best intervals to check the changes in your apples. Mark

the changes you see in the boxes.

