

As promised, this week, we are going to continue to use apples in our experiments, so I hope you stocked up! This experiment is going to show you that germs are everywhere, even if you cannot see them! Let's get started...

***Remember to ask an adult before doing this experiment.**

Materials

disposable rubber gloves

apple

knife

5 plastic zip bags

marker

adult to help you

3 surfaces

dark area

one week

Procedure

1. Pick three surfaces in your house that you can test for germs. For instance, kitchen sink, entry floor, door knob.
2. Label each of the five bags (based on the surfaces you chose) as follows: control, kitchen sink, entry floor, door knob, hands.
3. The adult helper must wash his/her hands very well and carefully place the rubber gloves on.
4. The adult must cut the apple into five pieces. DO NOT PUT DOWN, place immediately in the plastic bags.
5. Zip up the bag you labelled control. You will set this one aside, it is finished.
6. You can take one of the apples and touch it with your hands – rub the back of your hands as well with it.
7. Place the apple in the bag labelled ``bare hands`` and zip it up.
8. Have the adult go with you to the surfaces you chose. Remove the apple with the gloves on and rub the apple back and forth a couple of times on the surface.
9. Place the apple in the appropriate bag immediately and seal up.
10. Repeat for all of the surfaces you chose.
11. You now have to be patient. Place all of the apples now in their bags in a dark area at room temperature such as a cupboard or drawer. Allow them to sit for one week.
12. After one week, look at the apples. DO NOT REMOVE THEM FROM THE BAG.

13. Observe what you see on the apple slices.

What is going on?

All of the apples should have different amounts of growth on them. You should see black, white or green fuzz growing on the top of the slices. These are germs such as mold and bacteria growing on the surface. Germs are so small, that we often need a microscope to see them. In this experiment, over time, they grew so big that we no longer need a microscope to see them. The apple you placed in the bag immediately (the control) should have had the smallest amount of growth on it because you did not touch anything with it, and you used clean gloves to touch it. This shows you how many germs can be in different places. Remember, they are there even if you cannot see them initially!

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