

Brushing Experiment

This experiment demonstrates why brushing is important after eating sugary foods or drinking sugary beverages. It meets the National Science Education Standard F—Science in Personal and Social Perspectives.

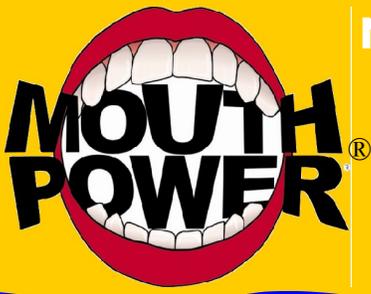
Materials:

- 5 containers (per group)
- 5 hard-boiled eggs (per group)
- Water
- Bottle of soda (preferably cola)
- Bottle of grape juice
- Bottle of iced tea
- Bottle of red cranberry juice
- Labels
- Fluoride toothpaste
- Toothbrush (one per group)
- Handout
- Flip chart or whiteboard
- Spoons or egg dippers
- Crayons

Procedure:

1. Divide the class into groups of 3-4 students for the experiment. Each group will need 5 containers, 5 hard-boiled eggs, and 5 labels. Let students work together to label each container with a different type of drink.
2. Have students work together in groups to fill each container half-full with the appropriate beverage.
3. Explain that eggs will be used in the experiment to represent teeth. Have the students look at the eggs and record how they look before they are put into the containers.
4. Have a class discussion about what might happen to the eggs if they are left in the containers overnight. Students will record their predictions on their activity sheet. Have group members take turns carefully placing one egg into each container using a spoon or egg dipper.
5. Let the eggs sit overnight in the liquids in the containers.
6. On the following day, have students return to their groups to finish the experiment. Have students carefully take out the eggs using a spoon or egg dipper, one at a time, from their containers. Students will record their observations about the eggs on the activity sheet using crayons.
7. In a class discussion talk about what happened to the eggs. Have students offer suggestions of how to make the eggs white again. Offer the suggestion of brushing the eggs with toothpaste.
8. Model how to gently brush the egg with a toothbrush. Tell students to wash the toothbrush after each use.
9. Distribute toothpaste, toothbrush, spoon or egg dipper and a cup of water to each group. Let the students take turns to try to carefully brush off each type of sugary drink from the eggs. Make sure students clean the eggs by carefully placing the brushed eggs in water using a spoon or egg dipper.
10. In a class discussion, talk about what happened to the eggs once the toothpaste and toothbrush were used. Compare how brushing the sugary drinks off the eggs is like brushing your teeth. Have students describe why brushing is important to their health. Talk about sugar and why it can harm our teeth.
11. In groups, have students list healthy drink and food choices.



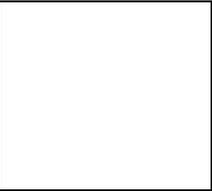
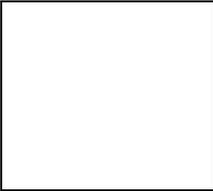
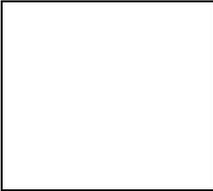
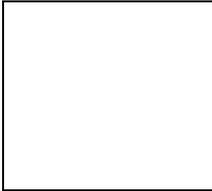


Name: _____ Date: _____

Brushing Experiment

Day 1

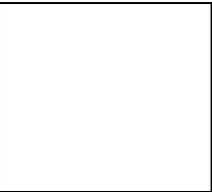
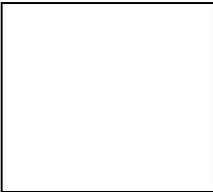
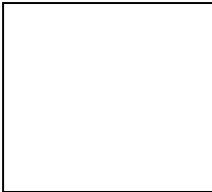
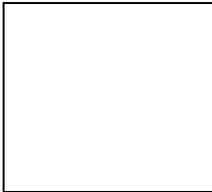
My eggs looked like this before I put them into the containers.

Egg in Water	Egg in Soda	Egg in Iced Tea	Egg in Grape Juice	Egg in Cranberry Juice
				

What do you think will happen to the eggs? _____

Day 2

After staying in their containers overnight, this is what my eggs look like.

Egg in Water	Egg in Soda	Egg in Iced Tea	Egg in Grape Juice	Egg in Cranberry Juice
				

What happened to the eggs? _____

What did brushing the eggs do? _____

Why is it important to brush your teeth? _____

