



Experiment # 1: A Tooth Decay With Hard boiled Eggs

Key Messages

The eggshell protects the egg just like the hard enamel on our teeth protects the tooth. Both eggshells and teeth are made of calcium, a hard white substance (material) that also builds our bones. Sugary and acidic drinks affect our teeth and can damage our health and cause cavities.

Objectives

- To examine how the water, sugar, and acidity of beverages affect our teeth.

Preparation

Four hardboiled eggs with eggshells

Four plastic transparent cups

Masking tape

Sharpie

Water

A dark-colored fruit juice like grape juice

A dark-colored sugary soda

Orange juice

Gloves

Instructions:

1. Label the cups, one with each drink.
2. Pour the drink into the cup with its label - do not fill all the way up because you will need to place the egg inside the cup.
3. Store your cups in a safe spot.
4. **Wait 48 hours or more**

Day 2:

- Wear gloves and take out the egg from its cup
- Ask the children what happened to the eggs in each cup.
- Show the children the effect of sugar and acid on the eggshell.

Ask the class the following questions:



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1. What happened to the egg that was in the grape juice?
2. What happened to the egg that was in orange juice?
3. What happened to the egg that was in sugary soda?
4. What happened to the egg that was in the water?
5. What is the best drinking choice to keep our teeth healthy and white?

The conclusion of this experiment should be that water is the best choice for our teeth. Sugar and acids are very harmful to teeth. Acids can dissolve the enamel, giving bacteria an inroad to begin decaying it, and sugar causes cavities.

Experiment #2: Brushing Teeth

Preparation:

Four eggs from the last experiment

Toothbrush

Toothpaste

Gloves

Water

Paper towel

Instructions:

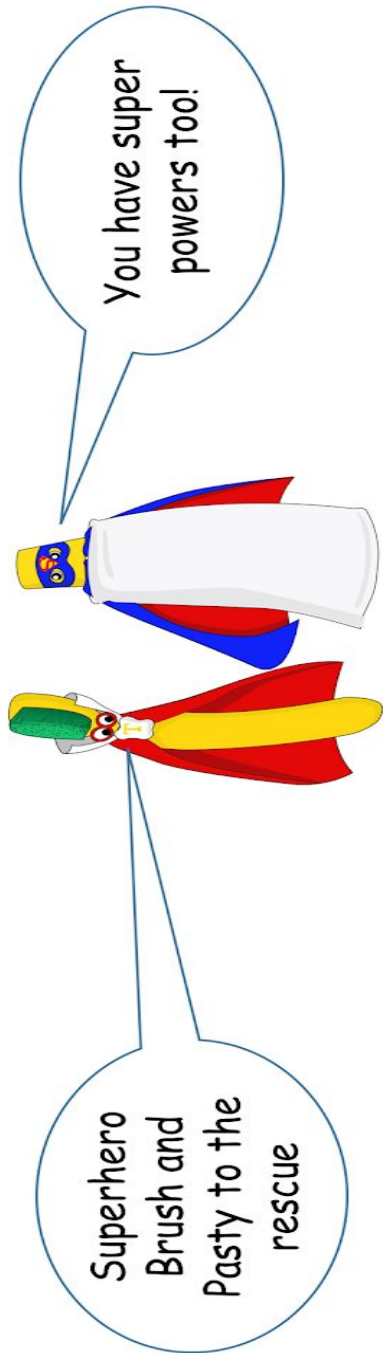
1. Take the eggs and try to brush them gently in small circles just with a toothbrush. See what happens. Ask the children to observe
2. Place pea size toothpaste on the toothbrush and brush the egg gently in small circles - wipe it with water and paper towel

For each of four eggs, ask the class the following questions:

1. What happened to the eggs we brushed first without a toothpaste?
2. What happened to the eggs we brushed with toothbrush and toothpaste?

Conclude the results

Sugar, color, and acids in our drinks harm our teeth. The stains and cracks they cause are difficult to remove even with brushing. Therefore, it is better to drink water and brush our teeth twice a day for two minutes.



	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
