

Tooth decay

Objectives: Students will

- participate in hands-on activities that lead them to good-health conclusions.
- explain how each experiment illustrates the importance of brushing their teeth every day.

Keywords: dental health, teeth, brush, Dental Health Month, toothbrush

Materials Needed

- hard-boiled eggs
- soft drink, such as cola or root beer
- vinegar
- dried chicken bones
- water and sugar solutions
- water and salt solutions

Lesson Plan

This lesson offers a handful of experiments designed to demonstrate the potential effects of sweets and other foods on healthy teeth. Students might work in small groups to perform the experiments.

Experiment 1

For this simple experiment for primary grade students, fill one container with water and another with a brown soft drink -- cola or root beer, for example. Place a hard-boiled egg into each container. (You might give each student an egg to place in the soft-drink container.) Leave the eggs in the soft drink overnight. Pour out the liquid the next day and examine the eggs. Have students compare the eggs left in the soda to the egg left in the water. How are the eggs different? Why? Students should be able to draw the conclusion that it is important to brush each night to keep their teeth clean and white.

Experiment 2

Before doing this experiment, collect chicken bones and set them aside to dry for a few days. (You might ask students a week in advance to collect chicken bones at home and bring them into school.) Provide each student or small group of students with 2 or more bones. Have student(s) place one of the bones in a plastic cup; then pour vinegar in the cup to cover the bone. Leave the other bone exposed to the air. Let the bones sit for several days, and then have students compare the two bones. What has happened? Why? (The bones soaked in vinegar will be noticeably softer. Vinegar is an acid. It has eaten away some of the bones' calcium.) Students should conclude from this activity that brushing and flossing teeth removes harmful food particles from teeth. Food left between teeth eventually turns to a kind of acid that can decay teeth.

Source: Education World, submitted by Gary Hopkins