

TO: SNI Families

From: Dental

Subject: Home Science Project for Students

Building Egg-celent, Healthy Teeth



Sugary drinks like soda may be tempting, but they can be harsh on the hard outer shell of your teeth (enamel). This demonstration shows what sugary and acidic drinks can do to your teeth, as well as the protective abilities of the fluoride found in your toothpaste or mouth rinse.

You'll need:

- 2 fresh eggs (make sure there aren't any cracks!)
- 1 can of cola
- Fluoride mouth rinse (you can find it in the dental aisle)
- White vinegar
- 4 small, clear plastic containers (big enough to hold an egg)

Instructions:

Place the eggs in two of your plastic containers. Fill one container with cola and the other with fluoride mouth rinse. Let the eggs sit in the liquids overnight.

Remove the eggs from the liquids and place them in the remaining containers. Fill both containers with white vinegar and observe their reactions. The cola egg should become covered in small bubbles, while there should be no reaction on the fluoride egg.

Lesson Learned:

The acids in the cola have weakened the eggshell, making it more vulnerable to the acid in the vinegar. The bubbles on the shell are caused by air escaping the egg through the thinner, weaker shell.

The vinegar's acid doesn't have any effect on the egg that was soaked in fluoride mouth rinse because the fluoride strengthened the shell in the same way it strengthens teeth. That's why it's so important that kids (and parents!) brush their teeth twice a day with fluoride toothpaste and drink water with fluoride from the tap.