# What keeps teeth healthy and strong?



This simple egg-speriment will show us how dietary choices can affect the health of our teeth



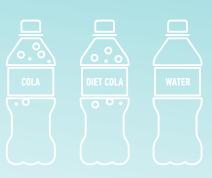
#### **SCIENTISTS**

Always have an adult to help you with your egg-speriments. And it is always wise to wash your hands after handling eggs and your other scientific equipment.



## **EQUIPMENT CHECKLIST**

- ☐ 3 tall glasses or beakers or plastic cups
- ☐ 3 eggs with white shells, hard boiled and cooled down, with no cracks
- □ regular cola
- ☐ diet cola
- □ water
- □ an old toothbrush
- □ toothpaste
- □ a timer





# **METHOD**

Day 1

**STEP 1:** Fill one cup with regular cola, one with diet cola, and one with water. Make a note or label which is which.



**STEP 2**: In each cup, place one of the hardboiled white-shell eggs. Leave them overnight.



# What keeps teeth healthy and strong? continued

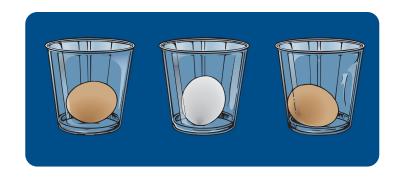
### METHOD (Continued from Day 1)

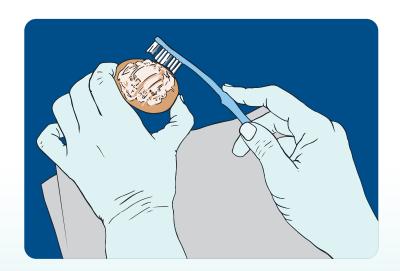
Day 2

**STEP 1**: Without breaking the shell of the eggs, carefully pour the liquid out of each cup. What are your scientific observations — are the eggshells still white, or are they stained?

**STEP 2**: Use the toothbrush and toothpaste to brush the eggs. Use your timer to note down how long it takes to brush the stains away on each egg so that you can see the white shell again.

**STEP 3:** You can repeat this eggs-periment with other drinks such as orange juice, milk and other sodas. Each time you try it, see how long it takes to brush away the stains on the eggshells. Think about what this means for your teeth.





#### **RESULTS AND CONCLUSIONS**

Our teeth are made of calcium and are covered in enamel. In this egg-speriment the eggshells represent tooth enamel. Lots of drinks contain sugar and acid and can cause tooth decay.

**To think about:** Do you brush your teeth every day? How often do you drink water and how often do you drink pop or other drinks? Which do you think is better for your teeth—water or pop?

