

**Objective:** To observe what happens when teeth are not properly cleansed and acids attack the teeth

**You Will Need:**

- 2 clear jars with lids (large enough for an egg)
- 2 labels
- 2 hardboiled eggs
- Water
- White vinegar
- Pencils
- Printout : [Dental Diseases](#)

*Ask students what they know about tooth decay. Explain that you will be conducting a scientific experiment on what happens when teeth are not properly cleaned and the acids produced by plaque attach the teeth. Acids in the mouth, like the acid in vinegar, react with the food and start to break it down. Some acid is helpful to eat food, but too much can hurt teeth. Regularly brushing, flossing teeth, and going to the dentist helps to keep away too much acid from the teeth.*

**Procedure:**

- 1) Explain that vinegar is a mild acid. If teeth are not brushed plaque forms and gives off acids similar to vinegar.
- 2) Tell the students to pretend like the egg shell is their teeth and the vinegar is plaque and tell them that like their teeth, the eggshells contain calcium.
- 3) Place one egg into each of the two jars.
- 4) Ask the students to guess what will happen when you add water to one of the jars and to write their guesses on the printouts.
- 5) Repeat above about what will happen when you add vinegar to one of the jars.
- 6) Fill one of the jars with enough water to cover the egg and label and date.
- 7) Fill the other jar with enough vinegar to cover the egg and label and date.
- 8) Tell the students to watch the contents of the two jars.
- 9) Explain that the small bubbles forming on the egg in the vinegar is like what the acid does to teeth when eating.
- 10) Ask students to a guess about what will happen if you leave the vinegar and the egg in the jar for over-night and to write their answer under “Day 1/What Happened?” in the chart on the printouts.
- 11) Observe changes that take place once a day for the next two days and have students record what they see on the chart.
- 12) Discuss how this person could improve his/her diet to avoid getting cavities, yet still provide the body with the energy and nutrients needed to stay healthy.

**Module Extension:**

- Have students watch “First Trip to the Dentist” or another on-line resource (see [Dental Days Reading List](#))

# DENTAL DISEASES

## ***My Guess:***

What will happen when you put an egg in water?

Why?

What will happen when you put an egg in vinegar?

Why?

What will happen to the eggs after two days in water? In vinegar?

Why?

DAY	WHAT HAPPENED?
Day 1	
Day 2	
Day 3	