

# Bentleigh West Kindergarten Inc.

HOME LEARNING – Science experiment



## EGG AND VINEGAR EXPERIMENT

What You Will Need:

- Hard boiled eggs
- A clear cup or jar
- Vinegar
- Glad wrap or a lid for the jar

Before the Egg in Vinegar Experiment

Let your child examine a hardboiled egg. Explain the egg represents our teeth. If your child doesn't already know that the hard outside of her teeth is called enamel. Tell them the eggs shell represent the enamel of your teeth.

Experiment:

1. Place the hardboiled egg in a clear cup or jar and fill it with white vinegar.
2. Cover the top of the container with a lid or gladwrap. Explain to your child that covering the cup is sort of like leaving your mouth closed without brushing her teeth.
3. Observe the egg on day one. The egg should be covered in bubbles.
4. Continue to observe the egg for another two-3 days.
5. Remove the cover from the container and drain the vinegar. Give the egg a rinse with some water.



6. Allow your child to touch the egg. The shell should be soft and pitted, if not completely dissolved. (it can take up to 6 days for the shell to fully dissolve)

#### What Happened:

The bubbles you saw during the experiment are carbon dioxide, a gas that is released during the chemical reaction between the acetic acid (vinegar) and calcium carbonate of the eggshell. The acid breaks down the calcium and essentially eats away at the eggshell.

#### Understanding how the experiment applies to teeth:

Your child may wonder how an egg in vinegar has anything to do with their teeth. Though it doesn't happen as quickly as the reaction between the egg and vinegar, there's a similar reaction that happens in your child's mouth.

The bacteria that live in a child's mouth stick to the hard surfaces of their teeth. Some of these bacteria create acids when they are combined with the sugar in foods and beverages she/he consumes. These acids can break down the enamel of the teeth if the child doesn't brush often and/or consumes lots of high sugar or high acid foods.