# TOOTH DECAY EGG EXPERIMENT

### You'll need

Eggs
Container
Water
Tea/Coffee
Fizzy flavoured drink
Vinegar
Toothpaste



#### **Instructions**

Pour the same amount of fizzy drink, vinegar, water and tea or coffee into your containers.

Add a whole raw egg still in it's shell to each container.

Leave for approximately two day.

Remove the eggs and record how their appearance has changed.

Rinse the egg kept in vinegar and rub gently until the shell comes away.

# Why does this happen?

Egg shell is made from a similar substance to the enamel on our teeth.

Tea is rich in tannins which stain teeth if they're not cleaned properly. Cola and fizzy drinks are acidic as well as containing staining products.

Vinegar ( which is acidic) dissolves the calcium carbonate in the egg shell, allowing it to be washed away. You should find just the membrane of the egg is left behind as the egg shell is dissolved.

Imagine if that was your tooth!

## **Challenge**

Cover half an egg with toothpaste before placing it in the coffee or fizzy drink. Does the toothpaste protect the egg?

Science Sparks ™ Adult supervision required. You are responsible for your own safety. www.sciencesparks.com

