

Eggsperiment

Teachers' notes

The point of this experiment is to demonstrate the protective effect of fluoride in toothpaste.

The half of the egg shell protected by fluoride should remain strong.

The half of the egg that has been exposed to the vinegar should easily break or rub away.

This experiment also shows the effect of acid and how this could soften and damage teeth. In this experiment, the acid is in the form of vinegar but there are lots of other foods that contain acid. Fizzy drinks are the most obvious example of acidic drinks.

Even diet fizzy drinks are extremely acidic. They do not contain sugar but can still damage teeth because of the acid they contain.

Fruit juices such as orange juice are also very acidic. It is important not to brush your teeth straight after having anything acidic. You should brush your teeth before breakfast if you are having something acidic like orange juice. If you brush after something acidic, you must not brush for at least 30 minutes.

Acidic food and drink softens the top layer of your enamel. Brushing straight after an acidic drink may brush away this softened layer.