

# Which drink makes teeth rot faster and why?

## Why we did it?

We decided to do this project because it's a unique experiment to test our thinking skills and it's also an interesting topic for us to do. We also did this because we want to teach children and adults what drinks can do to your teeth.

## Why teeth rot?

Teeth rot because a sticky substance called plaque is always forming around your teeth and your gums. Plaque contains bacteria that feed on the sugars in the food that you eat. [webmd.com](http://webmd.com)

We used eggs because they decay faster than teeth, both teeth and eggs have a layer of calcium. Eggs have calcium carbonate and teeth have calcium phosphate. [ucsf.edu](http://ucsf.edu)

## Analysis

Coke cola was the liquid that stained and rotted the egg shell faster than the other liquids. Apple juice was second, moderately rotting the eggshell, and the outer layer peeling off. Coffee was third with the eggshell extremely stained and mildly rotten and water was last with no significant change. We do not have the results of the sheep teeth because the enamel was too thick which takes longer than a week for the teeth to rot.

## Aim

Our aim is to discover which drink rots teeth the fastest and why?

## Method

- Pour cups of water, coke, coffee and apple juice into separate cups.
- Put sheep teeth and eggs in separate cups.
- Create a time lapse of eggs and teeth for 5 days.
- Find out which drink makes teeth rot the fastest and why.
- Finally create a graph.

## Hypothesis

We confidently believe that coke cola will rot teeth the fastest because coke cola has more sugar than other liquids.

## Conclusion

From this unique experiment we have discovered that coke cola rots teeth the fastest. Apple juice came 2nd because Apple juice has natural sugars which rot teeth. We will now think before we act on what we drink. We hope that you also understand what drinks can do to your teeth and how quickly they can effect them.

## Problems

We did not collect the eggs and the teeth early enough. The length of time was insufficient for them to rot so we had to leave them over the weekend which meant we could not take the photos on days 5 and 6. We also had trouble with making the graph.

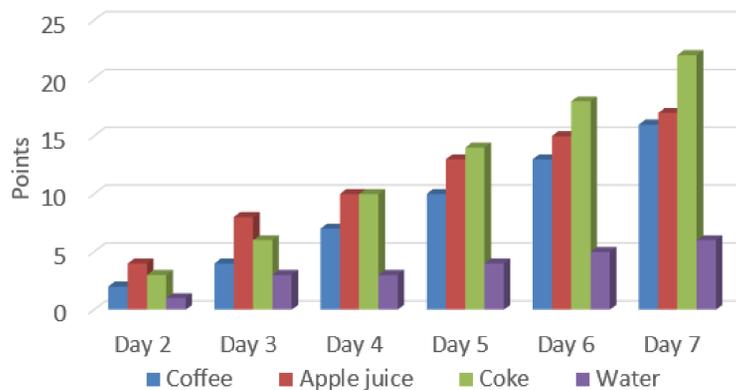
## Improvements

As a group we should have begun the experiment earlier to allow enough time for the eggs and teeth to decay, to give us more accurate or improved results. We should have also asked for help earlier to create the graph.

## Further experiments

We can alter different variables for example temperature, different liquids, exposure to dark/light only, and weighing and measuring the eggs.

Drink results



Day 1	Photos
Water	
Coke	
Apple juice	
Coffee	

Day 2	Photos
Water	
Coke	
Apple juice	
Coffee	

Day 3	Photos
Water	
Coke	
Apple juice	
Coffee	

Day 4	Photos
Water	
Coke	
Apple juice	
Coffee	

Day 7	Photos
Water	
Coke	
Apple juice	
Coffee	

