



Egg Teeth

Eggshells and teeth are made from very similar materials.

We can use this fact to investigate the effect of various soft drinks on the state of our teeth.

You will need

- Some eggshell
- Glasses of various soft drinks (e.g. cola, squash, fruit juice, water)
- Needle and thread
- Drinking straws
- Scissors

Steps

1. Use the needle to attach some thread to medium-sized pieces of eggshell.
2. Hang the pieces from a section of drinking straw, and suspend each one in a glass of soft drink.
3. Leave for a week, and then examine the results.

Follow-up

The eggshell suspended in the cola will be soft to the touch. The pieces soaked in squash and juice will be also be soft – but not as much as with the cola. The piece from the water should be undamaged.

Certain drinks, like cola, are acidic. The eggshell is mostly made of **calcium carbonate** – the acid reacts with this substance and damages the structure of the eggshell.

Now for the worrying bit... the experiment would have the same effect if you used human teeth instead of eggshells, as calcium is the major ingredient in the **enamel** of your teeth.

Sugar also 'feeds' the bacteria in your mouth, which then produce acids that can damage your teeth. Over time, this leads to major problems like **cavities**.