

Science

Last week we looked at the foods that we eat. We thought about where different foods come from and how we can group them. We also looked at healthy eating. This week we are going to think about the health of our teeth.

Can you think about the things that you do to look after your teeth? Tell a grown-up what you know about keeping your teeth healthy. How do you clean them? Who can you visit to check your teeth?

Do you think that the food we eat, or liquid we drink, can make a difference to the health of our teeth? Let's do an experiment to test this question.

For this experiment you will need eggshells. We are using eggshells as they contain calcium similar to the enamel coating of our teeth. Enamel is the protective coating of our teeth. Acids and sugars, in our food and drink, can attack the enamel of our teeth. This can stain our teeth and cause decay. Once it is damaged, enamel cannot be repaired. The eggshell will have a similar reaction in the liquid as the enamel on our teeth would.

Eggshell experiment

Equipment

3 clear containers (empty jars would be ideal, or glass beakers, you need to be able to see through them to watch what is happening to your eggshell)

A measuring jug

3 eggshells

3 different liquids (choose from: cola, water, orange juice, tea, coffee, hot chocolate, milk)

Once you have chosen which liquids you are going to test you need to predict what you think will happen to the eggshell.

Complete a table, like the example below, with the liquid you are using and what you think will happen. If you are in reception, can you tell a grown-up what you think will happen and draw a picture of what you think the eggshell will look like. If you are in Year 2, I would like you to also give a reason for your prediction.

Liquid	Prediction	Reason	Result
Tea	It will turn the egg brown.	The liquid is brown.	
Cola	It will rot the shell.	I know cola is bad for my teeth because it has lots of sugar in it	

Orange juice	The eggshell will be strong.	Orange juice is healthy.	
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Method

Label each jar with the liquid it will have in it.

Pour the liquid you have chosen into each container. Make sure you put the same amount in each. (Why is it important to make sure we use the same amount of liquid for each container? You have talked with Miss Swinson about fair testing before. For the test to be fair, everything has to be the same apart from one thing. The one thing that we are changing in this experiment is the type of liquid that we are using.)

Put 1 eggshell into each liquid. Make sure that the liquid covers the eggshell.

You will need to leave your experiment for a week. Check on it everyday to see if you can identify any changes to the eggshells that you can tell your grown-up about. You might like to take a photo of your experiment each day to record how the eggshells are changing.

At the end of the week record the results on your table. Were your predictions correct? Did anything about your experiment surprise you?

I look forward to hearing all about the things you have discovered from your science experiment.