

Individual Activity Lesson Plan

Date: Monday 6th July 2020

Activity Title: Tooth Decay 'Eggsperiment'

Learning Intention: to follow instructions to carry out an experiment and notice changes.

Activity Overview:

Carry out an 'eggciting' science experiment to explore the importance of looking after our teeth.

Links to EYFS: Understanding the World:

Looks closely at similarities, differences, patterns and change.

Resources:

- White Eggs (one for each liquid tested, we recommend at least three)
- Fizzy Pop/Tap Water/Vinegar/Orange Juice (and any other liquid you'd like to test)
- Clear cups/glasses (or clear jars)

Key vocabulary:

Experiment, investigate, scientist, equipment, resources, predict, instructions, conclusion.

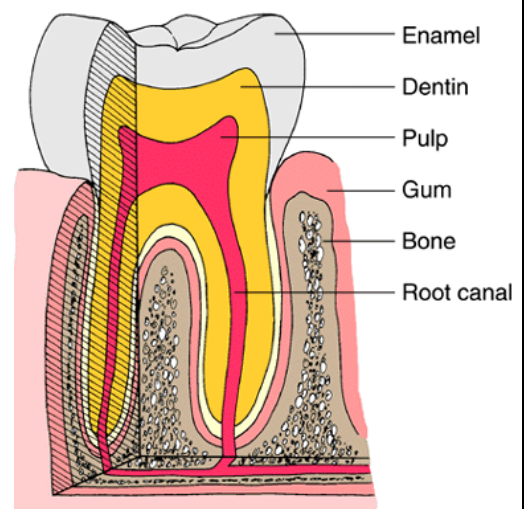
ACTIVITY IMPLEMENTATION (including key questions)

Introduction:

- Look at the diagram of the tooth and explain that the outer layer of the tooth is called enamel.
- Explain that today we are going to carry out an experiment to find out how different drinks affect the enamel on our teeth (are all drinks good for our teeth?)
- However, instead of testing our teeth, we are going to use eggs (as their shell is similar to our tooth enamel).

Main Activity:

- Make hard boil eggs. Place the eggs in a pot of water and ensure there is enough water to cover the eggs as the water boils off. Bring the water to boil over high heat, once boiling cover the eggs, and remove them for heat and let them sit for eight to ten minutes. Drain the water, and allow the eggs to cool.
- Place each egg in a clear cup/container.
- Add each selected liquid to the cups individually and ensure the liquid covers the eggs.



- Encourage your child to predict what they think will happen to each of the eggs.
- Let the eggs sit for 2-3 days
- Remove the eggs and inspect them for changes! You will be amazed!



Results:

Discuss what you can see. Encourage your child to observe the changes which have happened and to compare the changes between the eggs.

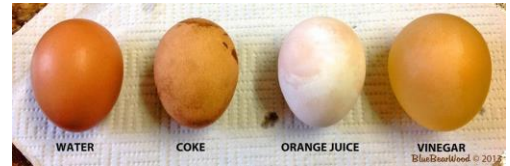
- Water - The egg in water will have no changes, this is because the acidity (pH) of water is very close to the resting pH of our body. Water will not breakdown our teeth, and is one of the healthiest liquids

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we can drink.

- Fizzy Pop -The fizzy pop will cause some softening of the outer shell of the egg, but not as much as the vinegar/orange juice. Most notably, the fizzy pop will cause a discoloration of the white egg; especially if the fizzy pop is dark. The acid content of fizzy pop can lead to weakening of our tooth enamel.
- Vinegar/Orange Juice - Lastly, the acidic content of vinegar shows the damage that is done to our teeth when we drink too much acidic liquid. After a few days there is almost no shell remaining.

Explain to your child the importance of brushing our teeth – to ensure we brush away any acid or sugar, so that it doesn't affect our teeth the way it does the egg shell.



Additional ways to support your child:

Support your child by drawing their attention to the changes and modelling scientific language.

Extension:

Invite your child to draw diagrams to show the process of the investigation and the results.