

# Egg Inquiry

## FOR TAMARIKI

**Tamariki discover the effect of tooth-friendly drinks and sugar-sweetened drinks have on eggs.**

**Tamariki choose tooth-friendly drinks to drink- water and plain milk.**

### **Kōrero What to do**

For this inquiry, use hardboiled eggs. The changes sugar-sweetened drinks cause to eggs mimic changes to teeth.

Put hardboiled eggs in separate cups (or plastic bags) of

1. Coke
2. Fruit juice
3. Milk
4. Water/wai

Label the cups/bags. After several days remove the eggs. Guide tamariki to observe the colour of the eggs and any other changes.

Use toothbrushes and paste to clean the eggs. Discuss which drinks are tooth-friendly.

Discuss with children how to keep our smiles bright and clean by choosing tooth-friendly drinks – water and plain milk. Talk about water and the benefits of choosing water and plain milk.

When we do drink sugary drinks, brushing our teeth with fluoride toothpaste is more important than ever. So is having a dental therapist check our teeth every year.

Display your inquiry work to encourage whānau to engage with the topic.

### **Additional Resources**

- A learning story from Kidditech Early Learning Centre
- [‘Five Cups of Water’](#) waiata
- [‘Benefits of drinking water’](#) poster
- [‘Sugary drink’](#) infographics
- [‘100 % water resources’](#)
- ‘The Happy Tooth’ book in [‘Teeth Tools’](#)
- ‘Oranga Niho’ book in [‘Teeth Tools’](#)
- [Guidelines on tooth-friendly food and drinks](#)
- [‘No sugary drinks’](#) logo

### **Key messages**

- 🦷 Baby teeth matter- they help me smile, chew and talk
- 🦷 Brush teeth twice a day- morning and night - with fluoride toothpaste
- 🦷 Brush teeth together with whānau
- 🦷 Spit don’t rinse after brushing
- 🦷 Choose water and plain milk to drink
- 🦷 Choose healthy kai
- 🦷 Have a dental check-up each year

# Our Experiment

## A Learning Story from Kidditech Early Learning Centre

*Written by Anne Dowle*

We have done this experiment a number of times, as it's so memorable for children, and the display is a great conversation-starter with adults too! One of our kaiako's husband's parents had 'saved' his baby teeth, so they were good to use this time, but we've also used chalk or boiled eggs.

The children hypothesised what might happen to each tooth if we left the tooth for 8 days in each liquid. Children then observed what happened over these days. We put the four teeth in four small plastic bags and displayed them on the wall. They were a great talking point. One parent said it was a fantastic experiment that would stay with them for a lifetime.

### Learning Story

'As part of our project, 'Our Amazing Bodies', we investigated teeth and we decided to do a great tooth experiment! We started by counting [how many teaspoons of sugar were in the drinks](#) that we found at the local dairy and talked about how sugar affects our bodies. The children were all shocked when we counted twenty teaspoons in the can of coke. We then put four teeth into different containers with fruit juice, milk, water and coke. We left the teeth in for 8 days and had many discussions about what would happen. After sitting in the different liquids we fished them out and investigated the teeth! The milk and water left the teeth reasonably the same but the juice had turned the tooth brown and the coke almost completely dissolved the tooth and what is left is very black. This was a great chance for the children to investigate, use mathematics and make real discoveries.'

### Our Hypothesis

#### ***What do we think is going to happen to the teeth in the milk?***

Joseph: 'The milk will make it go yucky.'

Levi: 'Maybe turn brown.'

Ben: 'Will make the tooth strong like a house.'

#### ***What do we think is going to happen to the teeth in the water?***

Ella: 'It will stay the same.'

#### ***What do we think is going to happen to the teeth in the juice?***

Maggie: 'It might disappear.'

Asher: 'I think that the tooth in the sugary juice might go yuck because we haven't brushed it.'

Ashton: 'The juice has sugar in it.'

#### ***What do we think is going to happen to the teeth in the coke?***

Sarah: 'The coke is going to make the tooth vanish.'

Lachie: 'It will go black.'

### Our conclusion:

Water: All the children: 'The same.'

Milk: All the children: 'The same.'

Juice: Ashton: 'Not the same.'

Coke: Levi: 'The coke has ruined the tooth. It's black and little.' Maggie: 'Lots of sugar in the coke and it will make it rot away.'

