

**From:** "Sparkle plc" <Simmonds@sparkleplc.com>  
**To:** "Oral health research group" <research@healthrp.co.uk>  
**Subject:** Healthy Teeth

Dear Research Group,

We at Sparkle Toothpaste plc have been asked by Bubble Drinks plc to create a toothpaste ideal for cleaning teeth after a sugary drink. They want to keep their drinks tasty and sweet without rotting people's teeth.

Please find attached some recent newspaper articles that explain how sugary drinks damage teeth.

We need you to:

1. Find out how sugary drinks can damage teeth.
2. Explain how toothpaste helps fight tooth decay.
3. Investigate what taste, smell and colour of toothpastes people like best.
4. Find out what the main ingredients of toothpaste are, and what they do.

We look forward to hearing from you with your results.

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Disclaimer

This email transmission is confidential and intended solely for the organisation to whom it is addressed.

## Activity Sheet 1b: Newspaper Cuttings



Some of the UK's most popular brands of juice drink contain more sugar than cola, increasing the risk of damage to children's teeth!

### **Tooth decay warning over soft drinks**

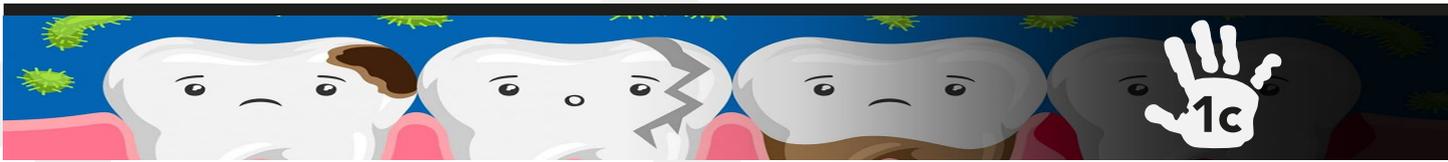
Some soft drinks manufacturers are producing juice drinks that are pretending to be healthy, but

Even some drinks that claim to be kind to teeth can still cause tooth decay.

### **Juice Drinks fall short of healthy image**

**Some drinks tested had less than 5% real fruit juice, others had so much sugar that they were 60% sweeter than pure fruit juice.**

# Activity Sheet 1c: Tooth Decay Flow Chart



Make a flow chart to show how sugar can cause tooth decay remember to use words and pictures. You could start by showing someone drinking a sugary drink like Cola.

1.



2.



3.



4.



5.

**Useful Words:** plaque, decay, tooth, cavity, eats away, bacteria, sugary drink, gum disease, toothpaste, toothbrush, rot.

# Activity Sheet 1d: What does plaque acid do to our teeth?



When we eat sugary food, the sugar mixes with germs (bacteria) in our mouths and this then makes plaque. This makes plaque acid that eats away at our teeth.

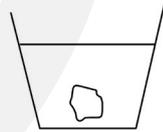
We are using egg shell because

We are using vinegar because

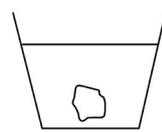
A

B

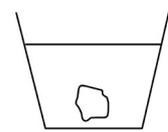
C



Egg shell in water



Egg shell in half water, half vinegar



Egg shell in vinegar

What do you think will happen to the eggshell in the each pot?

Pot	Prediction e.g. shape, colour, texture (smoothness), hardness
A: Water	
B: Water and Vinegar	
C: Vinegar	

# Activity Sheet 1e: Results



Start

Draw and label pictures in boxes 1, 2 and 3.

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After 1-2 hours

Describe shape, colour, feel and hardness.

Water	Water and vinegar	Vinegar

After being left overnight

Water	Water and vinegar	Vinegar

Conclusion

What does vinegar do to the eggshells?

What do you think plaque acid does to our teeth?

# Activity Sheet 1f: Results



Look at the labels on different drink packages.

Fill in the table below.

Name of drink	Amount of sugar (%)	How do you think it will affect our teeth? ☹☹☹ = very bad (very sugary) ☹☹ = bad (fairly sugary) ☹ = fairly bad (some sugar) 😊 = healthy (very little sugar)

Which drink is probably the best for your teeth?

Why?

Which drink is probably the worst for your teeth?

Why?