

What makes teeth go bad?



If you look after your teeth they should last for your lifetime. Sometimes things go wrong and your teeth start to rot and decay. If you're not careful your teeth may develop cavities (holes) which the dentist may then have to fill.

Cavities are a sign of tooth decay. Tooth decay happens when food and drink is broken down by the plaque bacteria that are in our mouths. The plaque bacteria make acid which breaks down the tooth and creates holes.

Sugary foods are particularly bad for teeth – plaque bacteria just love to feed on sugar!

Try this experiment at home. The eggshells of hens' eggs are made of a substance called calcium carbonate which is very like what teeth are made of. Use clean eggshells for this investigation and pretend the eggshells are teeth.

You will need:

Clean eggshells

Liquids to test, e.g. water, milk, vinegar, fizzy drink with sugar, sugar-free fizzy drink, orange juice

Plastic cups

Instructions:

1. Crack the eggs and wash the shells.
2. Examine the shells carefully. Note how they look and feel.
3. Put a different liquid into each cup – fill them about half way.
4. Place an eggshell half in each cup. The eggshells represent teeth.
5. Leave the eggshells for a couple of days. Pour off the liquid and refill with fresh liquid.
6. Leave for another week, topping up the liquids if you need to.
7. What do you notice happens to the eggshells in the different liquids?



Think about it.

What conclusions can you draw? If the eggshells were your teeth, what would rot them most quickly? What do you think would be the best drink to have to keep your teeth healthy?