

Why do fizzy drinks make you burp?

You'll need

- A bottle of fizzy water - unopened
- A bowl of warm water (not boiling)
- A Balloon

Instructions

Carefully open the bottle of fizzy water and place the balloon over the bottle's mouth.

Gently swirl the water around the bottle. You should see gas bubbles rising and starting to inflate the balloon.

Carefully place the bottle in the bowl of warm water (this represents a warm tummy). The increased temperature should help the gas bubbles escape the water more quickly, making the balloon inflate more.

Gently pull the balloon off the bottle and let the gas out with a burping noise.

What's happening?

Fizzy water contains dissolved carbon dioxide gas.

When the fizzy water enters your tummy, it warms up. Warm liquids can't hold as much gas as cold liquids, so the gas breaks free and builds up inside the balloon.

When you burp, the sphincter muscle at the top of your stomach opens to let out gas. In this activity, releasing the balloon mimics the sphincter opening.

Extension Tasks

Keep one bottle in the fridge and one in warm water, and investigate to find out which inflates a balloon the fastest.

Compare fizzy water with a sugary fizzy drink to see which produces the most gas.



ADULT SUPERVISION NEEDED

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