



Fizzy Sherbet

Unlock the secret of sweet and sour science! This fun and fizzy experiment is an edible example of an “acid-base” reaction. Get ready to feel gas bubbles in your mouth as you delight your senses!

Materials

- 🚀 1 teaspoon of citric acid
- 🚀 1 teaspoon of sodium bicarbonate (bicarb soda)
- 🚀 3 tablespoons of icing sugar
- 🚀 2 tablespoons of flavoured jelly crystals
- 🚀 Spoon or stick
- 🚀 Sandwich bag
- 🚀 Bowl



Method

Step 1: In a bowl, pour one teaspoon of citric acid, one teaspoon of bicarbonate soda, three tablespoons of icing sugar and at least two tablespoons of jelly crystals.

Step 2: With a spoon, mix all the materials together.

Step 3: Taste test the mixture (you may need to vary some ingredients).

Step 4: When your sherbet is ready, store it in a sandwich bag until you are ready to eat it!

What is happening? The Science explained.

In fizzy sherbet, the sodium bicarbonate (base) reacts with the citric acid (acid). This acid-base reaction produces CO₂ gas bubbles. These chemicals barely react to the natural humidity in the air, although when the sherbet comes into contact with water in saliva, these two compounds react easily and you feel the sensation of CO₂ bubbles on your tongue. Since the citric acid and bicarbonate soda are sour, the icing sugar is needed to add sweetness, and the jelly crystals to add flavour.

