



THE LAB

Eight pages of things to make and do



Make meringues

WARNING!
This recipe involves an oven. Ask an adult to help you.

Discover the science behind these tasty treats.

What you need

- Four large egg whites
- 225g caster sugar
- Food colouring (optional)
- Baking tray
- Greaseproof paper
- Large mixing bowl
- Electric whisk
- Metal tablespoon

Instructions

Preheat the oven to 140°C (120°C for a fan) oven and line the baking tray with greaseproof paper. Separate the egg whites from the egg yolks. Place the whites in the mixing bowl (save the yolks for something else). Using an electric whisk, mix the egg whites for one minute, then slowly add the sugar. If you'd like to make colourful meringues, add a drop of food colouring now. Continue to whisk until the mixture forms soft foamy peaks. This could take up to five minutes. Spoon dollops of the mixture on to the tray, making sure to leave some space between them. Bake for 30 minutes, then turn the temperature down to 100°C and bake for a further 30 minutes. Take out and leave to cool.



Whisk egg whites with sugar to form soft peaks.

How does it work?

Egg whites are about 90% water and the rest is made up of proteins all bunched together. When you beat raw egg whites, air bubbles get into the liquid and begin to unfold the proteins, causing the mix to fluff up and become stiffer. Adding sugar to fluffy egg whites makes them thick and glossy, rather than forming a thin foam. It also helps the mixture hold together. Baking the meringues dries the mixture out. This tightens the protein strands and ensures that the structure of the meringue sets perfectly in stiff peaks.