

## How to make butter

Have you ever wondered how butter is made? You can try making butter with a few items from your kitchen cupboard.

Watch the video here: <https://bit.ly/32QKw7M>

In this video, education coordinator (<https://rsc.li/2EVZq4m>) Katie demonstrates how you can make butter in a few simple steps. This simple activity can be set for students to try at home with a responsible adult or used as a classroom experiment.

### Equipment list

- Double cream (about 100 ml)
- Container with a lid (make sure the container lid fits well otherwise you will make a mess – jam jars or click lock containers work well)
- A pinch of salt (optional)

### Health and safety

- Wash your hands
- Make sure the container is clean if you want to try the butter at the end

### Activity instructions

1. Put some double cream into a container (about 100 ml). Make sure the container is only about a third or half full as there needs to be space for the cream to move.
2. Shake the container hard until a solid lump of butter is formed. This can take a little while (10–15 minutes) so you may need someone else to help when your arm starts to hurt.
3. Remove from the remaining buttermilk using a sieve, add a pinch of salt to taste.
4. Spread immediately on bread or a cracker and test how it tastes.

### Explanation

Butter is a mixture of milk fat and water called an emulsion. By shaking the cream the fat molecules start to stick together. Over time more and more fat molecules will stick together forming one single lump of butter.

Adding a pinch of salt not only tastes good but it can help preserve the butter. Of course, you can add other flavourings to your butter too.

### Also check out

- Experiment with the Vikings (<https://rsc.li/32HaQBe>) – a comprehensive collection of activities that help to incorporate STEM into your Vikings topic, which includes making butter (Page 38 of 'Experiment with the Vikings – Everyday Life').
- Chemistry in your cupboard YouTube playlist (<https://bit.ly/2YZ7kRN>) – the full series of chemistry in your cupboard episodes, which your students can try at home or you can bring to the classroom.
- Read the CLEAPSS guidance on practical activities for pupils at home during extended periods of school closure, GL339 (<https://bit.ly/32Q8wli>).
- Read the SSERC guidance for primary home learning (<https://bit.ly/3bhG0Dn>).

This resource was downloaded from here: <https://rsc.li/35ALsQI>