Milk and More

BIOCHEMISTRY WORKSHOP

Making Butter

In this activity you will learn about the butter making process and make your own butter.

What you need

Whipping cream at room temperature
A clear plastic jar with a leak proof lid
A large bowl
A sieve

What to do

- Half fill your jar with whipping cream
- Replace the lid on the jar ensuring there are no leaks
- Shake the jar until you have made butter (time taken depends on the amount of cream)
- Place the sieve over the bowl
- Pour the contents of the jar into the sieve to separate the butter from the buttermilk
- Rinse the butter in cold water a few times to extract all the buttermilk
- Enjoy!

What's going on

Cream is obtained when whole milk is heated then cooled – as it cools the cream rises to the top. There are many types of cream sold in the UK and the difference between them is the fat content. In order to make butter, a high fat content cream (>30%) is required so whipping or double cream should be used.

Cream is a mixture of fat, water and protein. The fat globules in cream are dispersed in water. By shaking (or churning) the cream, the fat globules are forced together creating large clumps that first form whipped cream then eventually form butter. The water that separates out contains the protein and is known as buttermilk.

It is possible to find many different videos of butter churning on the internet but this British Pathe instructional film gives a great insight to how butter was made in the 1940s:
https://www.youtube.com/watch?v=oaXjq9Qf4z8&t=410s

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