

Activity Idea

DIY Homemade Butter

Recommended for Ages 8 – 12

People once used to make butter by hand using a butter churn. To make it at home all you need is a jar and some super strong muscles!

Supplies

- 1 small to medium sized airtight jar
- Heavy cream at room temperature
- Optional: Two or Three marbles, cleaned with soap and water
- Optional: 1 small jar to store the leftover buttermilk

First, pour the cream into the jar until the jar is half full. Put in the optional marbles. The marbles help make the shaking go quicker. The size of jar depends on how much butter you want. The larger the jar, the more butter you will make.

Screw the lid tightly onto the jar.

Hold the jar in your hand and shake it hard for 5 to 20 minutes to make butter.

You should start to see the cream changing within 10 minutes. At this point the heavy cream has become whipped cream.

Your butter is ready when it has completely separated from the liquid and forms a single, solid clump. The solid is butter and the liquid is buttermilk.

You can save the buttermilk in a separate jar to be used later for cooking. The solid butter is ready to use right away.

The Science of Butter

To make butter, the cream is agitated (stirred up) so that the fat molecules get shaken out of position and clump together. Eventually, after enough agitation, the fat molecules clump together so much that butter forms. When this happens, the fat molecules have clearly separated from the liquid in the cream, and this liquid can be removed and made into buttermilk.