



# Homemade Butter

This simple activity is a good supplement to a lesson on dairy farming and dairy products.

Butter is made from cream, a component of milk. Cream is lighter than the rest of the milk and floats to the top, where it can be skimmed off and packaged separately. One pound of butter is made from the cream found in ten quarts of milk.

The more butterfat milk contains, the more butter it will make. The Jersey breed of cattle produces milk with the highest percentage of butterfat. The Holstein breed gives the greatest quantity of milk, but with the lowest percentage of butterfat.

Today, most people purchase commercially-made butter at the supermarket. Years ago, however, most people made butter at home using a butter churn. A typical butter churn consisted of a container to hold cream, which was then stirred briskly using a stick or paddle. The cream thickened as it was stirred, resulting in butter and buttermilk (the remaining liquid).

## Materials Needed:

- Jar (pint-sized). Can be glass or plastic. 2-ounce cups with lids also work well.
- Heavy whipping cream, preferably at room temperature.
- Salt
- Crackers

## Procedure:

1. Fill jar or cup 2/3 full with whipping cream. Firmly secure lid. Be sure to leave some space in the container.
2. Shake container briskly for 5-10 minutes (the more cream in the container, the longer it will take). Continue shaking until the butter is a solid lump in the jar. Once the butter has formed, open the jar and pour off the buttermilk.
3. To make salted butter, add salt after the butter is formed.
4. Spread butter on crackers and enjoy!

## Variations:

- For an experiment, try salting before shaking.
- Experiment by having students record the temperature of cream when beginning, length of time, and number of shakes it takes for butter to form.
- Instead of using heavy whipping cream (44% cream), try using light cream (18% cream), regular milk (3.5% cream), and 2% milk (2% cream). Have students compare the results.