

## Making Butter

### Overview

Students will try their hand at one of the most important chores of the spring season: making butter! Using the simple method, you will create some creamy, delicious butter and get an arm workout, too.

### Dairying in the 1830s

At the Village, the Freeman Farm represents a middling farm from the 1830s. A middling farm like this one might have been 75 to 100 acres and had four to seven cows. Each cow would produce enough milk to make 100 pounds of butter and 150 pounds of cheese a year. Cows can only produce milk after having a calf, which usually happens in March or April.

Butter and cheese were important both for the family to eat throughout the year and for sale both in town and abroad. Since people in the 1830s had no way to refrigerate lots of milk and keep it fresh, women on the farm worked hard to make long-lasting butter and cheese. Spring and fall were the most common times for butter, when the weather was cool and milk left out unlikely to spoil. Women left the milk out overnight to allow the cream to rise to the top. That cream would be gently skimmed off the milk, collected and sometimes left out for another day or two to ripen before churning.



Here is how churning works: Milk is a fat-in-water emulsion. Butter is a water-in-fat emulsion. The milk has a bunch of tiny fat globules that have a membrane around them. When you churn the butter, you agitate the fat globules until the membranes break. The fat can then begin to clump together. The cream will first become very thick, if we stopped here and added sugar that would be whipped cream! Continuing to churn will cause the fats to keep coming together until two new substances are formed, butter and buttermilk.

After churning, women removed the buttermilk from the butter. To do this they worked clear water through the butter, commonly with a wooden paddle, changing the water over and over until the water stayed clear. That sweet cream butter could then be used fresh or mixed with salt to help preserve it. The salty butter was then packed into a very salty brine so it would last

throughout the year. Salt is a preservative, and was used to keep many foods good in the 1830s as well as today.

At the Village, you will usually see people making butter with a churn made from pottery or wood with a wooden dasher. Other churns existed at the time--you can see some of them in the basement of the Towne House.

### **Supplies**

- 1 cup heavy cream (cold, if possible)
- 1 large glass jar with lid
- Clean water to wash butter
- Bowl and spoon
- Optional: clean marble to act as an agitator

### **Directions**

1. Put your heavy cream in the jar (making sure to only fill the jar half way). If using the marble, put that in the jar, too.
2. Make sure the lid is on the jar, tightly.
3. Start shaking! This will get tiring, so make sure to share your shaking duties if you can.
4. The cream will first look frothy and then get thicker, like whipped cream. After some time (anywhere from 5 to 10 minutes), the cream will start to separate. The fat will appear as a yellow blob. It will be surrounded by a thin liquid, which is the buttermilk.
5. Keep shaking until you have a solid mass of butter. If you stop shaking too early, it will be more like wet, whipped butter.
6. Drain the buttermilk from the jar.
7. Place the lump of fresh butter in a dish. Pour cold water over the butter and squish it with your hands or the back of a spoon. You are trying to draw out as much buttermilk as you can.
8. Discard the water and do step 7 two more times.
9. Butter! You can add salt, herbs, fruit, and more to have flavored butters.

### **Questions**

1. We will store our butter in the refrigerator. What are some other ways that we preserve food today?
2. What are some other foods you could try making at home that your family usually purchases at the store?