

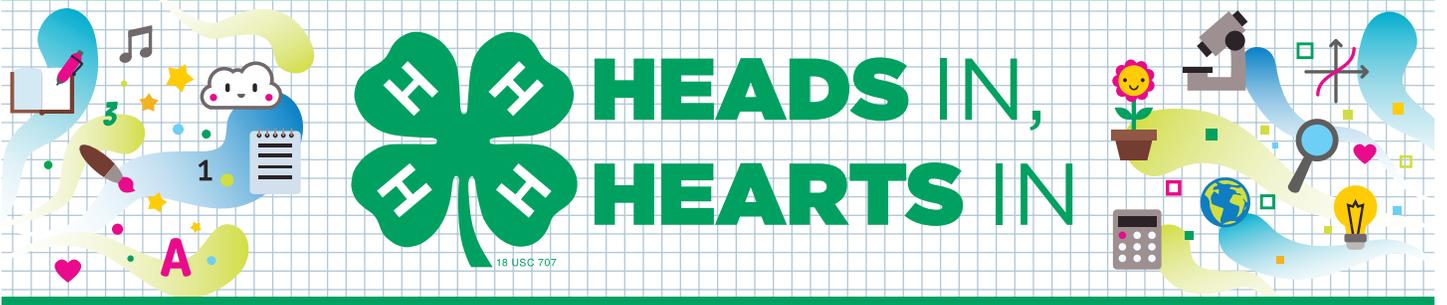
Supplies

- “Guide for Families” handout
- Clear plastic standup display (optional)
- Disposable 3-ounce soufflé cup (1 per participant)
- Disposable 3-ounce soufflé cup lid (1 per participant)
- Heavy whipping cream (about 1½ ounces per participant)
- Cooler with ice to keep heavy whipping cream cold
- Small bucket or pail for buttermilk disposal
- Crackers (2–3 per participant)
- Several plastic knives
- Display table

Activity Preparation

- ▶ Purchase or locate items on the supply list.
- ▶ Print one copy of the “Guide for Families” handout. Laminate or place in a clear plastic standup display to allow participants to see it more readily.
- ▶ Set up the display table with the supplies.





Tubs of Butter Fun!

Guide for Families

Learning Objectives

What you need to know:

To make butter, the cream is **agitated** (stirred up) so that the fat molecules (globules) 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**. The solid that is left is called butter.

What you will do and learn:

You will discover how to make your own butter using heavy whipping cream. You will gain an understanding of how fat molecules in heavy whipping cream can separate by agitation.

Instructions

What do you think will happen when...?

1. Fill a small cup half full with heavy whipping cream and place a lid on the cup. Double-check to be sure the lid is secure.
2. Gently, but vigorously, shake the cup for approximately 2 minutes.
3. Stop shaking the cream and observe. As you shake the cream, a ball of butter will begin to form slowly.
4. Continue shaking until a fully formed ball of butter is present.
5. After the ball of butter has formed, there should be liquid that is separated from the butter. This liquid is known as **buttermilk**. Gently pour out the buttermilk into the small bucket.
6. What is left is butter.
7. Using a plastic knife, spread on a cracker and enjoy.
8. Does it taste different from the butter that you use at home? How?

NOTE: The colder the heavy whipping cream, the quicker it will turn to butter.