

Foodie Friday: Better Butter

CAMP AH-HA! Today's AH-HA project explores the history and science of Butter Making

Who:

- You and your family
- Note: To make butter you will need heavy whipping cream which if you don't have any on hand will mean waiting until you make a trip to the store. You may want to save this activity until then or do one of the extensions first.

what:

- Did you guess what our What's It Wednesday artifact was that we posted on Facebook Wednesday? It's a butter mold. Back 100 years ago and longer, families had to make their own butter. This was due to many things. Can you guess what some of those reasons were?
- Pioneer families lived a long way from stores. It might have taken a day's journey on horseback or with a wagon to reach the nearest General Store or Trading Post to get supplies. Even after there were more stores, butter was not something they would have bought because there was no way to keep it cold in a store. Today we have aisles of frozen food and refrigerated sections of food. There was a time though when we didn't have electric refrigeration. Families had to keep things cold either in cellars dug underground, or in special buildings built over small creeks or springs of water. Called Spring Houses, items like milk and butter were kept in these buildings in containers in the cold water to try to preserve them.
- Early 'refrigerators' were actually more like the big coolers you take camping or on picnics or to sports games. These 'ice boxes' were big boxes with large chunks of ice in the top to keep things cold. (Fun fact: One of your jobs as a young person would have been to empty the drip pan where water collected from the melting ice!).

- Making or 'churning' butter was often the job of children. Cream from the cow would be poured into the churn. The wooden dasher was put in. Then the fun began. You would move the dasher up and down and up and down and up and down until you had butter. It would take a long time. Think how your arm would hurt! Songs were created to help pass the time. We have attached a fun version of "Skip to My Lou" that would be great!
- After churning and churning, the butter would form around the dasher. The next steps were to pour out the solid butter and left-over liquid (called butter milk) into a strainer. The liquid was strained out. You would press and press the butter to squeeze all the liquid out. You might add a little salt or even some finely grated carrots to give the butter a nice yellow color.
- Once the butter was formed into a ball it could be eaten. But often the butter was put into a butter mold. The butter would be packed into the container and then pushed out with the press. The pretty design would be printed on the top of the butter. See our picture below of the butter churn and mold.

How:

- You can make butter at home! All you need is some heavy whipping cream (found near the milk in the grocery store), and a small container with a tight lid (a small Tupperware container works great.) Pour some cream into your container and start shaking! Shake and shake! After a while you will make butter.
- To make a larger amount of butter, you can pour more cream into a stand mixer with the whip attachment or a bowl using a hand mixer. Mix on medium speed. It takes roughly 20 minutes depending on how much cream you use but butter will form around the mixer blades. You get whipped cream before you get the butter! Pour off the liquid and use a spatula to push the butter until you have a smooth ball. This fresh butter is great to eat on bread or crackers!

Tips:

 If you are making butter in a mixer, be patient. It takes longer than you might think. It will make whipped cream first and then that collapses into almost a liquid again before the butter forms. If you are using an electric stand mixer, keep your eye on it or you could have buttermilk flying out once the butter forms!

• You can add a bit of salt to the finished butter if you prefer.

Extensions:

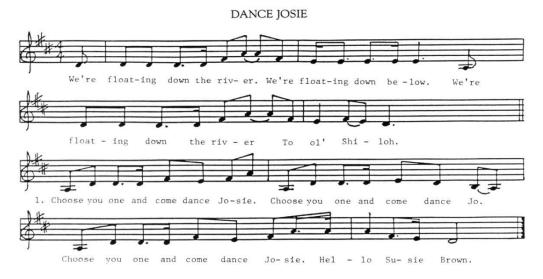
- Did you know that making butter is a science experiment? It is the process of changing the state of matter – in this case turning a liquid into a solid. A simple explanation: When you churn (or mix) the cream, you are adding energy which causes an increase in friction. The fat molecules found in the cream begin to stick together. Once enough molecules have stuck together, you have butter. Think of the fat molecules like a lot of balloons. When you run a balloon on your shirt, you can stick it to your head! That's friction.
- Try this challenge with older children. Try to make butter from the milk you normally drink. Does it work? The clue is in the amount of butter fat in the milk. If you drink whole milk chances are you might eventually make some butter, but if you drink skim milk, you never will because there isn't enough fat.
- When doing the shake method, have the children stop at various stages of the process and record their observations. The cream passes through several stages including whipped cream before it becomes butter.
- What other things are made from milk or cream?
- Try Singing our work songs below as you do other chores around your house.



Above is a butter mold. It is only about 4 inches tall and three inches wide. The stamper (the part with the pretty thistle flower) would be pulled to the top. The butter would then be put into the mold and then pressed out leaving the picture on top.



Above is a butter churn showing the different parts.

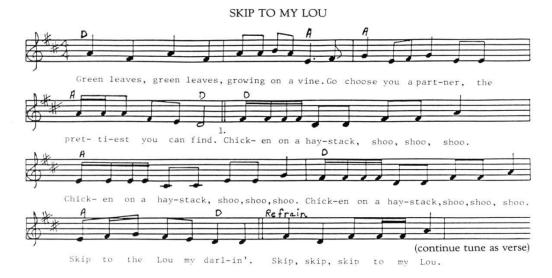


2. Wheel about, whirl about, can't dance Josie.

Two in the middle and I can't dance Josie. 3.

Black cat, yellow cat, can't dance Josie. 4.

- 5. Ride my mule while I dance Josie.
- 6. Chew my tobacco while I dance Josie.



- 2. Lost my partner, what shall I do?
- 3. Get me another one, prettier, too.
- 4. Can't get a pretty girl, an ugly one'll do.
- 5. Little red wagon painted blue.
- 6. Back band broke and traces, too.
- 7. Ma churned butter in Pa's old shoe.
- 8. Pa said, "Ma, that butter won't do."