



DALLAS ARBORETUM
Education

Garden STEM at Home
Butter Investigation



WE GROW MINDS, TOO.

BUTTER INVESTIGATION



OBJECTIVE:

KIDS WILL PREDICT HOW MUCH BUTTER CAN BE MADE FROM DIFFERENT TYPES OF MILK.

SOURCE

Growing Minds Farm to School

BACKGROUND

In all likelihood, butter was an accidental invention some 8000 years ago when a nomadic traveler was carrying a bag of fresh milk in a sheepskin or stomach sack. This discovery quickly became a staple food of peoples working with ruminant animals - cows, goats, sheep, reindeer, camels and water buffalo all provided milk that could become butter.

While modern industrial dairies have perfected sweet cream butter, all dairy milks contain fat and can produce butter. This activity allows kids to experience firsthand what it takes - and which types of dairy work best.

INSTRUCTIONS

1. Prepare one cup each of different milk varieties: cream, half and half, whole and 2%. Optional: if other milks are available, such as goat, you may also include those.
2. Using the data table linked below as a guide, ask kids to predict how long it will take for butter to first form for each type of milk and how much will be created from 1 cup of milk.
3. Follow the instructions linked below to complete the investigation.
4. Questions for discussion: Can you form butter from all types of dairy milk? Which are best for forming butter? How does salt affect the taste of butter?

ADDITIONAL RESOURCES

Growing Minds Farm to School Butter Investigation

<https://growing-minds.org/documents/butter-investigation-3-5-lesson-plan.pdf/>

American Butter Institute:

<http://www.butterinstitute.org/>

Butter: A Rich History by Elaine Khosrova; ISBN: 1616207396