



I Scream, You Scream

We All
Scream
For
Ice Cream



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4-H STEM

Dairy Sciences

Breeds

There are 6 different breeds of dairy cows. Holstein(most common), Jersey, Brown Swiss, Guernsey, Ayrshire and Milking Shorthorn. Feel free to visit this website for more information and pictures of dairy cattle breeds!

Milk is good for you!

Milk is a high source of calcium which is good for building bone strength, enabling blood to clot, muscles to contract and the heart to beat. Did you know that, 99% of the calcium in our bodies is in our bones and teeth?

Today's Technology and Milking

Milking process for dairy cows has changed with all the new technologies we have today. We no longer need to go sit out and milk every cow by hand. Today's dairy producers bring all cows in the parlor. Watch our STEM-ist video on flipgrid to see how dairy farmer's milk cows!



Experiment

Tools needed: Whole milk, cream, sugar, vanilla extract, small zip-close bag, large zip-close bag, ice, rock salt

Steps: Make your own ice cream in five minutes!!

Step 1: Add 1/2 cup whole milk, 1/2 cup cream, 1/4 cup sugar, and 1/2 teaspoon vanilla extract to a mixing cup and stir until well combined.

Step 2: Add the mixture to a small zipper bag.

Step 3: Now to create the ice cream maker. You just need another zipper bag, one that is much larger than the bag with your ice cream mix in it. And you want to fill that bag with a couple handfuls of ice and about half of the rock salt.

Step 4: Now place the smaller bag inside the larger bag. Cover it with more ice and rock salt.

Step 5: Shake for 5 minutes.

Step 6: Eat and enjoy!!

Try this short fun experiment to understand how cows were milked before we had this new technology.

Tools needed: rubber glove, thumb tack or push pin, water or milk, bowl or something to catch water/milk when “milking”

Step 1. Get a rubber glove and a thumb tack or push pin and poke a small hole in the fingertips of all fingers except the thumb.

Step 2. Add water to the glove filling it like would a water balloon.

Step 3. Now place a bowl under the glove and you can practice milking by hand like farmers had to before machinery became a mainstay.

