Dairy Trivia

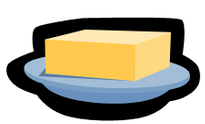
- Dolly Madison served ice cream at the 2nd Inaugural Ball at the White House in 1812.
- A dairy cow's udder can hold 25-50 pounds of milk.
- Male dairy cattle are called bulls and do not produce milk.
- A cow gives almost 200,000 glasses of milk in her lifetime. That's enough to fill the average classroom two feet deep with milk!
- Dairy cows produce 90 percent of the world's milk. Water buffalo, camels, sheep, goats, and reindeer produce the remaining 10 percent.

Jokes

A. Why did the farmer feed his cow money?
B. What do you get from a nervous cow?
C. What do you get from an Alaskan cow?

Farm Facts

In one day, a cow can produce…



2.9 pounds of butter

OR 6.0 pounds of cheese

OR

7 gallons of milk!

Joke Answers

A. He wanted rich milk.
B. A milk shake!
C. Ice cream

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From FARM to TABLE

Cows-Milk-Cream-Butter

Did You Know?

Dairy cows spend six hours eating each day. Cows eat 20 pounds of grain and concentrated feed as well as 35 pounds of hay and/or silage each day. (Silage is fermented corn, wheat, or hay with the stalks and leaves.) Dairy cows drink about 35 gallons of water each day. A dairy cow turns this food and water into over 100 glasses of milk a day. Cows spend an additional eight hours chewing their cud, or ruminating. Most cows chew at least 50 times per minute.

With eating all this food, the typical dairy cow weighs about 1,400 pounds.

The average American eats about 4 pounds of food a day. If people ate and drank as much as cows, they would have to eat about 360 cheeseburgers and drink 400-800 glasses of water each day!

Colorful Cows

Dairy cows come in many colors. They can be black and white, tan, brownish gray, reddish brown, or shades of these colors. However, one of the easiest to recognize is the Holstein with its black and white spots. A Holstein's spots are like a fingerprint or snowflake - no two cows have the same pattern of spots. Ninety-five percent of the dairy cows in the United States are Holsteins. Other dairy breeds are Jerseys, Brown Swiss, Guernsey, Ayrshires, and Milking Shorthorns.

Which Cow to Raise?

Some breeds produce a lot of milk and some breeds produce milk with a lot of butterfat. Farmers consider this when choosing which type of dairy cow to raise. Farmers can choose to raise cows that produce more milk, or cows that have a higher butterfat content in their milk, or a combination of several breeds of cows.

Moovin' Along

Long ago when people traveled and wanted milk, they had to take their cows with them. Today, thanks to refrigerated trucks and tanks, milk and milk products are available almost everywhere.

In 1884, people began to store milk in glass bottles. Before that, they used jars, pails, and cans. People would leave their glass bottles on the porch with a note letting the milkman know how many bottles of milk they wanted delivered. The glass bottles were returned to the dairy, cleaned, and reused.

Paper containers for milk are now so commonplace that it is hard to imagine a time when we didn't have them. John Van Wormer is responsible for paper milk cartons. He got the idea for paper milk cartons after dropping a glass milk bottle one morning. The bottle broke, the milk went everywhere, and he found it an annoying way to start the day. After much hard work, Wormer got a patent for a paper carton. Paper cartons were introduced in 1906. It wasn't until 1964 that plastic jugs were used.

Do the Math!!

1. How many hours a **week**, does a cow spend eating? _____
2. How many **pounds of dry food** does a cow eat in **one day**? _____
3. How many **gallons of water** does a cow drink in **one week**? _____
4. How many gallons of water would 100 cows drink **in a day**? _____
5. If an average child weighs 50 pounds, how many children would it take to **equal the weight** of one cow? _____
6. How many **more pounds** of food does a cow eat in one day than an average American? _____
8. Number the containers for holding milk in the proper chronological order. (#1 is the oldest.)

Plastic jug ____ Pail _____ Glass bottle _____ Paper Carton _____

Milk, Butter and Now Ice Cream

You were able to explore the states of matter when you took the liquid milk and turned it into solid butter. Now explore the states of matter again by making **ice cream**!

Matter is anything that has mass and takes up space (volume). Typically, matter is found in one of three states – solid, liquid, or gas. In this science investigation, you will be changing matter from one state to another!

Materials you will need:

- One pint zipper bag
- One gallon zipper bag
- ½ cup of whole milk or half & half
- 2 tsp. of sugar
- ¼ tsp. of vanilla
- Ice cubes
- 2 Tbs. of rock salt

Procedure:

1. Place the milk, sugar, and vanilla in the pint bag.
2. Carefully seal the bag.
3. Place 3 cups of ice cubes and 2 Tbs. of rock salt in the larger gallon bag.
4. Place the smaller bag into the larger bag. Seal carefully.
5. Shake the bag for about 10 minutes, until you see the ice cream form.
6. Carefully remove the small bag from the large bag.
7. Get a spoon and enjoy your treat!

States of matter…

1. How would you describe the ice cream mixture in the bag before shaking – solid, liquid, or gas?
2. How would you describe the ice cream when it is finished – solid, liquid, or gas?
3. How do you think the mixture was able to change from a liquid to a solid?
4. What will happen to the ice cream as it warms up?