
THE MILK MAKERS

Author: Gail Gibbons

Publisher: Macmillan

THEME:

Learning how things, like milk, are made is an essential part of understanding how our world works.

PROGRAM SUMMARY:

It's fresh and cold, foamy and white, and one of nature's most nutritious foods—milk! Viewers learn about this delicious liquid as this book explains how cows produce milk and how it is processed before being delivered to stores. LeVar visits California's dairy country where he receives a lesson on milking a cow by hand as well as an introduction to the modern way of milking and feeding 600 cows. Viewers also get a factory tour to see how cheese is made.

TOPICS FOR DISCUSSION:

Discuss with the class why milk is a healthy food. What reasons for drinking milk have they been given by their parents and other adults?

The students' experiences with cows and dairy farms will vary depending on where they live. Before viewing the program, invite them to share information they have about cows, visits to dairy farms, or even life on a dairy farm.

Discuss other food processes with which students are familiar, such as the making of honey, from the pollination of flowers by bees to the table, or making bread, from planting the wheat to the table. Have students sketch simple flowcharts of these processes during the discussion.

CURRICULUM EXTENSION ACTIVITIES:

Brainstorm a list of milk products, e.g., butter, cheese, ice cream, cottage cheese, buttermilk, cream cheese, sour cream, evaporated milk, whipped cream, yogurt, etc. Have students locate pictures of these items (women's magazines and newspaper grocery ads are a good source) and glue them next to the appropriate words on their chart.

Plan a field trip to a dairy farm. In addition to touring the farm, have the farmer talk about his/her daily activities in running the farm.

Ask parent volunteers to assist with making butter or ice cream in the classroom. Solicit donations of ingredients. Focus on the importance of measuring ingredients correctly and following written directions. Enjoy the results!

Have a cheese tasting party. Sample from some fairly common types, such as Swiss, cheddar, colby, Monterey Jack, provolone, Parmesan, mozzarella, etc. Discuss the textures (soft, hard, creamy) and the differences in appearance and flavor. Graph the students' favorite cheese. Make the graph a circle graph to represent a cheese wheel.

"Milk and cookies" is a popular snack. Discuss other foods that are particularly tasty with milk. On the right side half of a piece of construction paper, have students draw a picture of an item that goes well with milk. On the left side, attach a small lunch milk carton (rinse thoroughly). Caption the pictures with "Milk and _____." Display the pictures on a bulletin board.

Take photographs of the students with milk mustaches. Have each student make a poster advertising milk or the value of drinking milk and display their pictures on the poster. Place the posters in the school cafeteria.

Bring in some milk cartons. Include different sizes as well as different types of milk. Read the information on the cartons with students and discuss the vocabulary associated with milk. For example, explain "homogenized" (the butterfat is broken into tiny bits so that the milk is the same throughout) and "pasteurized" (the milk is heated quickly until almost boiling and then cooled quickly to kill germs). Look at the list of vitamins in milk and discuss which ones are most abundant. Explain the difference between whole milk, 2%, 1%, and skimmed milk. Compare common milk container sizes—half-pint, pint, quart, half gallon, and gallon.

Animals other than cows produce milk. As a class, brainstorm a list of mammals. Display the list in the classroom so that students can add mammal names to it as they learn more about animals throughout the school year.

Have students make "milk" pictures. Use soft, supple plastic gloves. Prick a small hole in the tip of the fingers of the glove. Put white tempera paint (medium consistency) in the glove. Use dark blue or black construction paper and have students "milk" the fingers, squirting paint onto the paper in interesting patterns. (Enlist some parent volunteers to help with this project and use a spacious area that is relatively free of other objects.)

RELATED THEMES:

nutrition
healthy lifestyles
food processes

RELATED READING RAINBOW PROGRAMS:

Program #118 — How To Make An Apple Pie And See The World

Program #36 — The Life Cycle Of The Honey Bee

Program #122 — Bread Is For Eating

ABOUT THE AUTHOR:

Gail Gibbons is the recipient of numerous awards for her contributions to nonfiction literature for children, including the prestigious Washington Post/Children's Book Guild Award. She translates her meticulous research on topics into words and illustrations that children can understand. She is the author/illustrator of **Reading Rainbow** feature book *Sunken Treasure*, and review books, *Check It Out! The Book About Libraries*; *Lights! Camera! Action!*; and *Fill It Up! All About Service Stations*. Gail Gibbons and her husband split their time between a home in Corinth, Vermont, and an island off the coast of Maine.

BOOKS REVIEWED BY CHILDREN:**BABY ANIMALS ON THE FARM**

by Hans-Heinrich Isenbart, photos by Ruth Rau, trans. by Elizabeth D. Crawford (Putnam)

WHALES AND OTHER SEA MAMMALS

by Elsa Posell (Children's Press)

FROM BLOSSOM TO HONEY

A "Start to Finish" Book, by Ali Mitgutsch (Carolrhoda)

SUPPLEMENTARY BOOKLIST:**MILK FROM COW TO CARTON**

by Aiki (HarperCollins)

COWS

by Peter Brady (Bridgestone)

NO MILK!

by Jennifer A. Ericsson, illus. by Ora Eitan (Tambourine)

THE MILKMAN'S BOY

by Donald Hall, illus. by Gred Shed (Walker)

CHEESE

by Linda Illsley, illus. by John Yates (Carolrhoda)

FROM COW TO ICE CREAM

by Bertram T. Knight (Children's Press)

COWS

by Mary Ann McDonald (Child's World)

COWS IN THE PARLOR: A VISIT TO A DAIRY FARM

by Cynthia McFarland (Atheneum)

MILK

by Jillian Powell (Raintree-Steck-Vaughn)

MAKE ME A PEANUT BUTTER SANDWICH AND A GLASS OF MILK

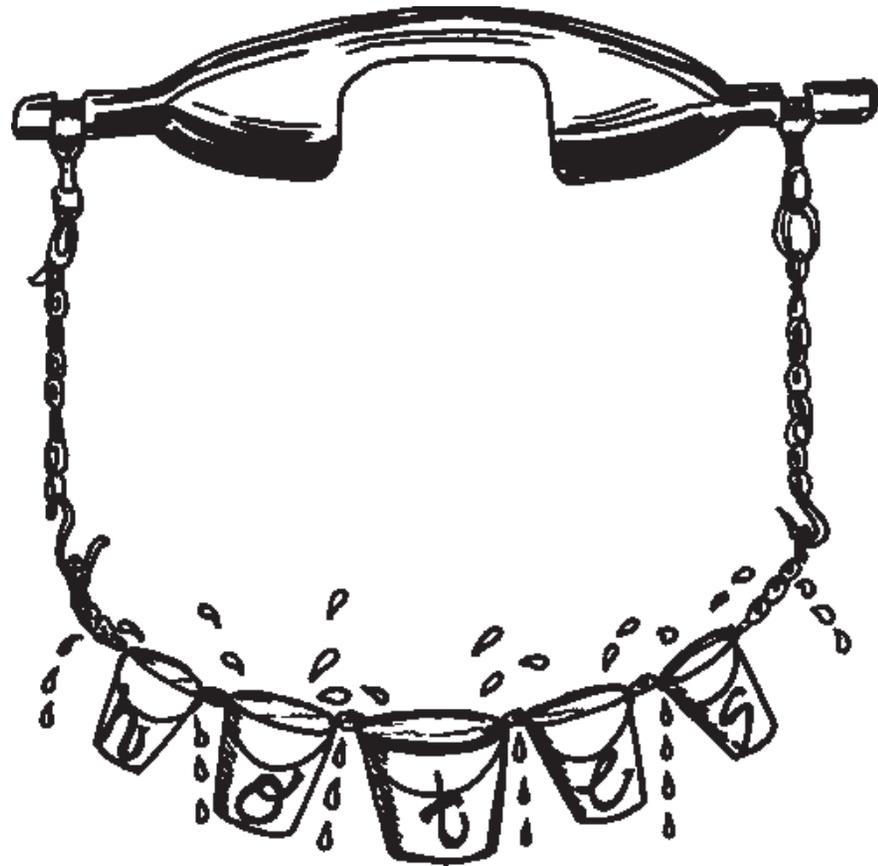
by Ken Robbins (Scholastic)

THE COW

by Angela Royston, illus. by Bob Bampton (Warwick Press)

IT LOOKED LIKE SPILT MILK

by Charles Shaw (HarperCollins)



A soy milk maker is a small kitchen appliance which automatically cooks soy milk, a non-dairy beverage made from soy beans. Soy milk makers work similarly to a combination between a home blender and an automatic coffee maker. Some soy milk makers can also be programmed to make almond milk, rice milk, and other vegetable-based steeped beverages. Homemade soy milk can be made to the drinkers' tastes and nutritional requirements, providing added value. Soy pulp, a by-product of soy milk preparation, can Then load the milk cans on the truck which take them to Milk Processing Plant. Milk is not good without boiling it and processed at Milk Factory, so we've to boil the milk. In the boiling process we'll get Cream and Milk separated. Now fill the Cream Bottle with cream and milk bottles with milk. Pack the bottles into boxes, load them on the truck and deliver to the shops. There is whole process of milk separation to bottle filling so you will enjoy the whole gameplay. There is much more fun and educational knowledge in this game.