

# Keepin' It Fresh

## Key Vocabulary

**Udder:** The mammary gland of the cow where she produces and stores the milk.

**Teat:** The projections on the bottom of the udder with openings for the milk to be removed from the udder.

**Inspector:** Someone who represents the state or the U.S. Department of Agriculture who evaluates dairy barns, cows and equipment to make sure they are kept clean and properly maintained.

**Pasteurization:** The process of heating milk to high temperatures (at least 145°F) for a short period of time. It ensures milk and dairy products are safe to drink and eat.

**Sanitize:** The process of cleaning something to ensure any dirt or harmful residues are removed.

**Milking Equipment:** What is used to gently remove the milk from the cow's udder during the milking process.

**Milk Tank:** A refrigerated tank where milk is cooled to below 40°F and stored until it is delivered to the dairy plant.

**Transport Truck:** An insulated tanker truck that transports the milk from the farm to the dairy plant.

**Dairy Plant:** The place where milk is pasteurized and bottled for fluid milk or made into dairy products.

**Antibiotic:** Medicine given to a cow to treat her when she is sick — much like a doctor prescribes an antibiotic for people who are sick.

**Regulators:** Organizations representing the state and the U.S. who make sure farms and processing plants do their



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## Guided Reading Pamphlet



Discover Dairy is an initiative of the American Dairy Association North East, Center for Dairy Excellence, Midwest Dairy Council and the Pennsylvania Dairy Promotion Program, and, funded in part by the Center for Dairy Excellence Foundation of Pennsylvania.

# From Farm to You



Have you ever thought about how milk from the cow becomes dairy products that we eat? There are eight important steps that go into making sure milk and the dairy foods we buy at our local grocery are safe and wholesome.



The last step in making sure milk is safe is our job. Dairy farmers and others do many things to ensure the safety and wholesomeness of the milk we drink. However, once we get it home, it is up to us to keep it safe and pure.

Think of our job as the three Cs:

- ◆ Keep milk **cold**
- ◆ Keep milk **covered**
- ◆ Keep milk **clean**



Pasteurization is a very important step in ensuring milk safety. It is the process of heating milk to high temperatures (at least 145°F) for a short period of time. Pasteurization ensures milk and dairy products are safe to drink and eat.

Continuous testing is also an important step. Every load of milk shipped from every dairy farm in the U.S. is tested and re-tested for safety and quality — up to 17 times throughout the process. Any milk that does not meet safety standards is thrown away.



The first step in milk safety is the farmer's job of keeping cows healthy and the barns where they live clean. Barns must be clean and well kept, and cows must be clean, comfortable and well care for. Healthy cows produce quality milk.

Step 2 is inspections. Dairy farms are regularly inspected by state sanitation inspectors to make sure the milking equipment, barn and cows are clean.



The milking process is step 3 in providing a safe milk supply. Cows like to be milked. They respond best to regular routines and kind handling.

Before milking, the cows' udders (where they store the milk) are cleaned to make sure the milk stays clean. The milking equipment gently squeezes the milk out of the udder. The process takes about 8 minutes.



The fourth step in the process is cooling the milk. The milk from the cows flows through sanitized pipelines to the large milk tank. Here the milk is cooled quickly to 40°F or lower to keep it fresh.

The next step is transporting the milk to the dairy. The milk is picked up by an insulated transport truck every one or two days and transported to the processing plant. On average the milk arriving at the processing plant is less than two days old.