Making Farmer's Cheese

Edible Schoolyard Pittsburgh

GROW PITTSBURGH

Winter

January

MATERIALS

- Measuring spoons, liquid measure
- Large saucepot (can hold at least 6 cups)
- Large fine mesh strainer
- Induction burner
- Plates
- Placemats
- 1 large bowl, 2 small bowls
- Wisk, serving spoon

PREPARATION

- Gather all cooking materials
- Establish a cooking table (near electrical outlet) with teacher before class begins.

PROCEDURE

Farmer's Cheese

Serves 25 a taste
20 minutes

Ingredients:
4 cups whole milk
2 cups buttermilk
1 tablespoon assorted fresh herbs (rosemary, thyme, basil)
½ teaspoon salt
Dash of pepper

Procedure:

1. In a large saucepot, on medium, heat the milk.
2. When the milk starts to bubble around the edges, turn heat off and slowly pour in the buttermilk while stirring. Continue to stir for a few minutes.
3. Let the milk and buttermilk sit on the stove (with no heat) for 5 minutes to let the curds completely gather.
4. Using fine mesh strainer, strain the curds from the liquid.
5. Let the curds rest in strainer to completely drain – you do not need to stir them.
6. Remove and store or you can use them

Making Farmer's Cheese

Patterns & Preparation

OBJECTIVES

- Students will be able to read a recipe.
- Students will work together in groups.
- Students will practice table manners such as grace and courtesy.

ENGAGE

How many of you like cheese? What kind of cheeses do you like?
How are they similar? How are they different?
What are some of the ways we can describe different cheeses? (Soft, hard, stinky, color?)

There are many different kinds of cheeses from around the world; most of them taste specific to regions where they were developed.

EXPLAIN

Pasteurization vs. raw milk

- **Pasteurization** is the process of heating dairy products to at least 161.5˚ F and holding them at that temperature for at least 15 seconds. The goal of this process is to kill potential pathogens in the milk. Self-life is also prolonged by this process. Heating any food diminishes its nutritional content.
- **Louis Pasteur**, a French macrobiologist, developed the process of pasteurization, in the late 18th century in response to an outbreak of deaths from raw dairy products that were contaminated from cows living in unsanitary and confined conditions. Today, pasteurization is widespread as a practice, complimenting large scale industrial agriculture and factory farming where animal health and living conditions are not priorities.
- **Raw (unpasteurized) milk** is illegal for purchase for humans in 21 states in the US; Pennsylvania is the only state where you can buy raw milk in the store without a special license. Ironically, nearly all food poisoning from dairy products in recent history have come from pasteurized products.

Curdling, curds, and whey

- To make cheese, you must **curdle** milk by adding an acid to get solid **curds**. This acid can be lemon juice or buttermilk (for farmer's cheese) or, most often, rennet, which is an enzyme from a calf's first stomach. **Whey** is the liquid byproduct of making curds. Cheese curds are then manipulated in different processes (from immersing in brine to make feta, to introducing different mold bacterium to make blue cheeses).

ADDITIONAL CONTENT INTEGRATION *(see previous page)*

ADDITIONAL MATERIALS

- 1 lemon
- Science journals

The farmer's cheese recipe can be made with lemon juice in place of cultured buttermilk as the acid to curdle the milk.
Step 1: Have students write a hypothesis in their science journals about how they think the two cheeses will differ in taste, texture, etc. **Step 2:** Try this recipe with the juice of one lemon instead and compare the taste and texture of the two cheeses with a Venn diagram as a class. Then have students write a response to their hypothesis.

EVALUATE

Journal Prompt: Illustrate the farmer's cheese making process in garden journals.