

# Introduction to Cheesemaking

## Resources:

New England  
Cheesemaking Supply:  
[www.cheesesupply.com](http://www.cheesesupply.com)

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*This fact sheet is an adaptation from Hurst, Janet. **Homemade Cheese.** Minneapolis, MN. Voyageur Press, 2011.*

To make cheese at home you need a dairy thermometer, cheesecloth, vegetarian rennet (an enzyme that, when added to milk, makes it coagulate forming curds and whey), citric acid, non-iodized salt and directions. You will also need a pair of rubber gloves, a colander, a slotted spoon or ladle, and a heavy 4-5 quart cooking pot. A microwave is optional, but a glass microwave-proof bowl is required.

Once you learn this technique, you can take your supplies and a gallon of milk and make cheese for all your friends. It's that easy!



Before you begin, here are some words of caution as you heat the curd. Read all directions thoroughly before you begin making cheese.

The curd will become very hot. Keep a bowl of ice water nearby. If the curd begins to burn your hands, simply place the curd back in the bowl; then plunge your hands into the cold water. If you are making cheese with children, adults should do the stretching (working with the hot cheese), so as not to burn small hands.

There are two steps to making cheese. Part I is to pasturize raw milk. Part II is to make mozzarella or ricotta.

## Part I – Pasteurization of Raw Milk

This recipe will work with farm-fresh (raw) goat's or cow's milk or with processed (pasteurized + homogenized) whole milk from the grocery store.

Federal regulations require the pasteuriza-

tion of raw milk for making cheese that will be aged for less than 60 days. Always remember the warnings for children, pregnant women, the elderly, and those with compromised immune systems eating raw milk products. NOTE: You can pasteurize milk ahead of time or just before making the cheese.

Equipment needed to pasteurize milk: Dairy thermometer; a double boiler or two nesting pots.

1. Pour milk into the bottom of the double boiler (or the smaller of the two pots). Add three inches of water to the bottom of the double boiler (or to the larger pot). Place the small bowl or pot inside the larger one.

2. Slowly heat the milk to 145 degrees F and hold that temperature for 30 minutes. To ensure even heating, stir the milk gently throughout the process.

3. Remove milk from the heat source and place it in a sink filled with ice to decrease the temperature as quickly as possible. If you plan to make mozzarella cheese now, bring the temperature down to 55 degrees F and begin. If the milk is to be stored for making cheese at a later time, bring the temperature down to 40 degrees F and refrigerate until use.



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Whenever you make cheese, your cooking area, as well as your pots and utensils, must be sanitized. Pre-wash your pots and utensils in warm water with a capful of bleach. Rinse thoroughly after bleaching.

## Part II – Recipes

### Quick Mozzarella

- 1/2 gallon whole milk (pasteurized)
- 3/4 teaspoon citric acid, dissolved in 1/2 cup cool (approximately 60 degrees F) tap water
- 1/8 tablet vegetarian rennet, dissolved in 1/4 cup cool (approximately 60 degrees F) non-chlorinated water
- 1 and 1/2 teaspoons non-iodized salt

#### *Before you check the starting temperature of the milk:*

1. Dissolve citric acid in water and set aside.
2. Dissolve rennet in water and set aside.
3. Place milk in pan, heating over medium heat until milk reaches 55 degrees F. This temperature comes quickly!
4. When the milk reaches 55 degrees F, stir in the citric acid/water mix.
5. Continue heating the milk over medium heat, stirring once or twice until it reaches 90 degrees F.
6. When the milk reaches 90 degrees F, add the rennet/water mix, and stir gently for about 30 seconds.
7. Stop stirring to let the curd form. Continue to heat the milk until it reaches 105 degrees F. Then, turn off the heat, and remove the pan from

the burner. Wait five minutes and the curd will start pulling away from the side of the pan. The curd will look like thick yogurt.

8. Scoop out the curds with a large spoon, and put them into the cheesecloth-lined colander. If you do not have a microwave oven, you will need to reserve the whey. Also, if you plan to make ricotta, you will need to work over a large clean bowl to capture the whey. Work over your sink or a bucket, rolling the curd mass back and forth for about two minutes. This separates the liquid whey from the solid curd.

9. Remove the curd mass from the colander and place in the glass (microwave-safe) bowl.

If you have a microwave oven, continue below through step 15. If not, skip to step 16.

10. Microwave bowl for 1 minute. Cheese is hot, so wear rubber gloves. Have ice water ready to cool off your hands. Gently fold the cheese over with your hand or a spoon. Drain off resulting whey.

11. Microwave again for 35 seconds, and add salt. Knead the curd for 30 seconds. Pour off whey.

12. Microwave again for 35 seconds and knead the curd for 30 seconds. Drain off whey.

13. Cheese will be the consistency of taffy. Give it a good stretch. It should be smooth and shiny.

14. Roll it into a ball and eat while still warm.

15. To save the cheese to eat later, place it in a bowl of ice water for 30 minutes to decrease the inside temperature rapidly. Store in a zipper

bag in the refrigerator, forcing out as much air as possible.

16. If you do not have a microwave, have rubber gloves or heavy silicon gloves ready. Heat the reserved whey to at least 175 degrees F. While still on the burner, add 1/4 cup non-iodized salt to the whey. Shape the cheese into one or more balls. Put them in a ladle or strainer, and dip them into the hot whey for several seconds. Knead the curds between each dip, and repeat this process several times until the curds are smooth and pliable. Return to Step 13 to complete the recipe.

### Ricotta Made from Whey

- 2 gallons fresh whey, reserved from making mozzarella
- 2 cups cow's or goat's milk (pasteurized)
- 1/4 cup apple cider vinegar
- 1/2 teaspoon non-iodized salt

Add milk to the whey, and heat to 190 degrees F, stirring frequently to prevent scorching. At 190 degrees F, turn off the heat, and add the vinegar. Small curds will now form. Ladle the curds into a cheesecloth-lined\* colander. Allow to drain several hours; then salt and refrigerate. This cheese will keep about a week.

Yield: Approximately 1/4–1/2 cup

\*NOTE: If you do not have cheesecloth, use a no-nap dish towel (made of flour-sack material such as linen or cotton) to capture the tiny curds. Bleach the towel before and after use. Simply line the colander, ladle in the curd, and allow whey to drain. Add salt when finished draining.