



CULTURES
for HEALTH

Mozzarella & Ricotta Kit

Let's Make Cheese!

Welcome to cheese making! We are excited to join you on this journey. Inside this kit you will find the supplies and recipes you need to make both Mozzarella and Ricotta cheese. Cheesemaking is fun and we are always here for support.

—The Cultures for Health Team

This Kit Contains

- Citric Acid (store in dry, cool place)
- Vegetable Rennet Tablets (store in the freezer)
- Cheese Salt (store in dry, cool place)
- Thermometer
- Butter Muslin (fine-weave cheesecloth)
- Recipe Booklet

**Have a question? Need a supply refill?
We are always here to help!**

Cultures for Health
807 N. Helen Avenue, Sioux Falls SD 57104
800-962-1959
customersupport@culturesforhealth.com
www.culturesforhealth.com

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BEFORE YOU START

Check the contents of this cheese kit.

Your kit includes citric acid, rennet tablets, salt, a thermometer, and butter muslin. Please contact us if anything is missing or open.

Prepare your milk. You will need 1 gallon of milk.

With this kit you can use cow milk or goat milk, whole or reduced-fat. Ultra-pasteurized or UHT milk will not work well. Or you can use dry milk powder.

If you use liquid milk, all you need to do is measure it. If you use powdered milk, mix it with water.

Prepare your utensils and containers.

Use stainless steel, glass, or enamel containers and utensils. Everything must be perfectly clean, with no soap or food residues.

When you clean the containers and utensils after making cheese, rinse them first in cold water to remove all the milk particles, then wash and rinse as usual.

Read all the instructions.

There are some special differences in the instructions depending on what kind of milk you're using, and whether you are going to use a microwave or not for some of the steps. Make sure you understand where you will have to make choices, so you can follow the appropriate steps. If you get lost or confused by any of the instructions, please call our customer support representatives. We are always happy to help!

MAKING MOZZARELLA WITH FRESH MILK

Makes about 3/4 pound of cheese. Takes about 30 minutes to make.

Ingredients:

- 1 teaspoon cheese salt (optional)
- One gallon of cow or goat milk
- 1-1/4 cup cool, chlorine-free water
- 1-1/2 teaspoon citric acid
- 1/4 rennet tablet



Supplies:

- A pot big enough to hold one gallon of milk
- Thermometer
- Colander
- Slotted spoon (not plastic)
- Long knife
- *Microwaveable bowl* (if you're using a microwave to stretch the curd) or *a small pot* (if you're using a stovetop method to stretch the curd)
- Rubber gloves (optional)
- *Large bowl of water*, placed in the refrigerator when you start and *large bowl of water*, placed in the freezer when you start.

1. **Dissolve 1/4 rennet tablet in 1/4 cup water.** Wrap the rest of the tablet in plastic and store it in the freezer.
2. **Mix 1-1/2 teaspoons citric acid into 1 cup water and stir until the citric acid is dissolved.** Pour this into the big pot.
3. **Pour 1 gallon of milk into the pot and stir vigorously with the slotted spoon, while heating the milk.** If you're using raw milk, heat it to 88°F. If you're using pasteurized milk, heat it to 90°F.
4. **Add the rennet.**
5. **Take the pot off the burner. Slowly stir in the rennet with an up-and-down motion of the slotted spoon for approximately 30 seconds.**
6. **Cover the pot and let it sit undisturbed for 5 minutes. If you're using raw milk, let it sit for 10 minutes.** Check the curd at this point. It should look like custard, with a clear separation between the curd (solid) and the whey (liquid), If the curd is too soft or the whey is too milky, let it sit for a few more minutes. Be sure not to disturb the milk while the curd is forming.



Step 6: Checking the Curd

7. **Cut the curd with a knife that reaches to the bottom of the pot.**
8. **Put the pot back on the stove and slowly heat it up while stirring the curds around with the slotted spoon.**



- If you're using raw milk, heat it to 90°F.
- If you're using pasteurized milk, and you're going to use the microwave to stretch the curds, heat it to 105°F.
- If you're using pasteurized milk, and you're going to use the stovetop to stretch the curds, heat it to 110°F.

9. **Take the pot off the burner and stir slowly for 2 to 5 minutes.**
More stirring will make a firmer cheese.
10. **Pour off the floating whey.**



Step 8: Heating the Curd

USING THE STOVETOP (WATERBATH) TO STRETCH THE CURDS

- 11a. **Heat a pot of water to 185°F. Ladle the curds into a colander**, folding them together gently toward the center and draining off the whey as you go.
- 11c. **Dip the colander with the curds in it carefully into the hot water a few times**, then use the slotted spoon to fold the curds back into the center of the colander until they become stretchy. This will happen when the curds reach 160° to 170°F.
- 11d. **Remove the curd from the colander and stretch it like taffy**. If it does not stretch easily, return it to the pot. At this point you can add cheese salt, if you like. Then stretch the curd by pulling it like taffy until it is soft and shiny. The more you work with the cheese, the firmer it will be.



Ladling the Curd



Heating in a Waterbath



Stretching the Curd



Forming the Cheese Ball

USING A MICROWAVE TO STRETCH THE CURDS

- 11a. **Ladle the curds into a large microwavable bowl and drain off the whey.** Use rubber gloves if you like. Don't press too much.
 - 11b. **Microwave for one minute, then fold the curds gently into the center of the bowl, draining off more whey.** Add 1 teaspoon salt (optional).
 - 11c. **Microwave for another 30 seconds.** The curd should be 160° to 170°F now. If it isn't, microwave it for another 30 seconds.
 - 11d. **Stretch the curd by pulling it like taffy until it is soft and shiny.** The more you work the cheese, the firmer it will be.
12. **Form the cheese.** You can make the stretched curd into a large ball, or a collection of small balls. You can braid it, or make it into a log, or roll it into a number of sticks. Be creative!
 13. **Cool the cheese** by submerging it in the bowl of refrigerated water. Leave it there for 15 minutes, then put it in the bowl of ice water. This cooling step is important to keep the cheese from becoming grainy.

MAKING MOZZARELLA WITH DRY MILK

Makes about 3/4 pound of cheese. Takes about 30 minutes to make.

Ingredients:

- 1 teaspoon cheese salt (optional)
- Microwaveable bowl (if you're using a microwave to stretch the curd)
- One gallon of milk (see step 2)
- One cup of heavy cream
- 1-1/4 cup cool, chlorine-free water
- 2 teaspoons citric acid
- 1/4 rennet tablet (or 1/4 teaspoon liquid rennet)

Supplies:

- A pot big enough to hold one gallon of milk
- Thermometer
- Colander
- Slotted spoon (not plastic)
- Long knife
- Small pot (if you're using a stovetop/waterbath method to stretch the curd)
- Rubber gloves (optional)
- Large bowl of water, placed in the refrigerator when you start and taken out when you need it.
- Large bowl of water, placed in the freezer when you start and taken out when you need it.

1. **Mix up one gallon of milk** according to the instructions on the milk package, and let it sit in the refrigerator for 6 to 12 hours. Pour off one cup and drink it or discard it.
2. **Dissolve 2 teaspoons citric acid in 1 cup of cool, chlorine-free water.**
3. **Dissolve 1/4 rennet tablet in 1/4 cup of cool, chlorine-free water** and set it aside. Wrap up the rest of the rennet in plastic wrap and store it in the freezer.
4. **Put the milk into a large pot and add 1 cup of heavy cream.** Stir well for at least a minute.
5. **While stirring, add the citric acid solution.**
6. **Heat the milk to 90°F.** Now go to Step 5 (page 3) of the fresh milk method (adding the rennet), and follow that set of instructions to the end.

Did you know...

Mozzarella is the only type of cheese that can be made using dry powdered milk? Dry milk can be a great option when fresh milk isn't readily available.

MAKING WHOLE MILK RICOTTA

Makes 1-3/4 to 2 pounds of cheese. Takes about 30 minutes, plus 30 minutes or more for draining.

Ingredients:

- 1 gallon milk
- 1 teaspoon citric acid (more if using raw milk)
- 1 teaspoon cheese salt (optional)

Supplies:

- A pot big enough to hold 1 gallon of milk (stainless steel or other non-reactive material)
- A large spoon for stirring
- Cooking thermometer
- Colander
- Ladle
- Butter muslin
- Large bowl
- Rubber band or twist-tie
- Twine



1. **Pour the milk into the large pot.**
2. **Add the citric acid** (and the salt, if you're using it). Stir to combine.
3. **Heat the milk to 195°F.** Stir often to avoid scorching.
4. **When the milk starts to curdle noticeably, turn off the heat.** Let the milk sit for 5 minutes.
5. **Line the colander with the butter muslin.** Place the colander over a large bowl.
6. **Ladle the curdled milk gently into the lined colander.** When it's all in the colander, bring the corners of the muslin together and tie them up with a rubber band or twist-tie. Use twine to hang this bag of muslin containing the cheese off of a cabinet handle with the large bowl underneath to catch the whey. Let the cheese drain for 30 minutes or more. When the cheese is drained to your taste, you can refrigerate it. It will keep for up to two weeks, covered. You may also freeze it.

Did you know...

While traditional ricotta cheese is made using whey left over from making some cheese varieties (not mozzarella), whole-milk Ricotta is much more sweet and creamy.

TROUBLESHOOTING

Q. The mozzarella curd never formed a solid mass. It just looks like ricotta. What do I do?

A. There are two primary causes. First, it is important to be sure the curd was allowed to sit and fully form before cutting the curd. Be sure to not disturb the milk at all while the curd is forming. Second, using high-temperature pasteurized milk can cause this issue. Be sure to check the label. When in doubt, try a new brand of milk—preferably a local brand since those brands are generally less processed.

Q. The curd disintegrated while heating. What did I do wrong?

A. There are two primary causes. First, be sure the curd was fully formed (see above). Second, occasionally a brand of milk is more acidic than other brands and requires a small recipe adjustment. Start over and reduce the citric acid to 1 teaspoon.

Q. My mozzarella curd isn't stretching after I microwaved it. Can I fix it?

A. Your microwave may not be hot enough. Try putting the curd back in the microwave up to three more times at 30 seconds each to warm the curd sufficiently.

Q. My mozzarella curd is very hot and still isn't stretching. What do I do?

A. Due to structural differences between brands of milk (including how processed the milk is), sometimes you'll need to adjust the ingredients. In this case, start over with a new batch and increase the citric acid to 1-3/4 to 2 teaspoons. It may take several adjustments to find the correct amount of citric acid for the milk you are working with. Cheesemaking is a bit of an art form.

Q. My mozzarella is very dry. How do I make it more moist?

A. Next time, skip the step where you heat the curd to 105°/110° or decrease the amount of citric acid to 1-1/4 teaspoons or take care not to stretch the mozzarella as much and cover it immediately with cold water once you are finished with the stretching process.

Have more questions? We are here to help! Check out our online resources or contact us for one-on-one assistance.

Expert Advice Articles, Recipes, and How-to-Videos
<http://www.culturesforhealth.com/cheese>

Cultures for Health Customer Support
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MARINATED MOZZARELLA APPETIZER

This always disappears quickly at parties. Serve with fancy toothpicks.

- 1 batch 30-minute Mozzarella cheese, cooled and cut into 1/2-inch cubes
- 1/2 cup extra virgin olive oil
- 2 tablespoons chopped sun-dried tomatoes (not necessary to reconstitute first)
- 1 large clove garlic, minced fine
- 1 tablespoon chopped fresh parsley
- 1 tablespoon finely chopped fresh basil (can substitute 1 teaspoon dried)
- 1 teaspoon chopped fresh thyme (or slightly less than 1/2 teaspoon dried)
- Salt to taste if mozzarella is not salty



Combine all ingredients and refrigerate for 3 to 4 hours up to overnight. Let come to room temperature before serving. Olive oil may congeal overnight in refrigerator, but will liquefy again at room temperature.

Why Cultures for Health?

- ***We love our products and stand behind them.*** These are the items we use to make food for our own families and are proud to offer to your family.
- ***We are committed to providing the best customer support.*** Have a question about how to make yogurt? Looking for a new cultured food your family might enjoy? Want to know what you will need to make cheese? Need assistance ordering? We are here to help! We have assembled a talented and knowledgeable group of customer support representatives, with lots of experience culturing, fermenting, and making real food for their own families. Customer support is available via phone, email, website chat, our blog, and various social media outlets including Facebook, Pinterest, Twitter, Google+ and more.
- ***We strive to have the best available information*** including expert advice articles, recipes, and how-to videos. Your success is our success! We are continually updating our website with new recipes and helpful tips, and we incorporate advice from our customers too.
- ***We want you to be happy and successful with your food projects.*** We are always here to support our products, answer questions, troubleshoot, and more. Not happy with something you bought? Have a suggestion for some products we can offer? Let us know: we will do what we can to make it right. We value a long-term relationship with our customers.