# Citric Acid Mozzarella

I make a big batch of this recipe, using 6 gallons of milk, and shred and freeze the extras. 1 gallon of good quality whole raw milk, will yield approximately 1 lb. of cheese.

# Equipment

- Stainless Steal Pot with Lid
- Wooden spoon or Heat resistant rubber gloves
- Knife

# Ingredients

- 1- 1.5 tsp citric acid powder (if you are using older raw milk use 1tsp and fresh use 1.5)
- 1 gallon Cows Milk
- 1/4 tsp Calcium Chloride (only if using pasteurized milk)
- 1/4 tsp Liquid Rennet (or if using a different form of rennet, use package directions for coagulating one gallon of milk)
- Salt (See Salting options)

### Instructions

- **Step 1** Thoroughly clean and sterilize all equipment and surfaces.
- **Step 2** Dissolve Citric Acid in a 1/4 cup Luke warm water. In a pot, combine milk and citric acid. Heat to 90F, stirring occasionally to prevent scorching. Turn off heat. *You must add the citric acid before heating or you risk making ricotta instead!*
- **Step 3** Dilute Calcium Chloride in 1/4 cup lukewarm water. Incorporate into milk. (Only if you are using pasteurized milk)

- **Step 4** Dilute Rennet in 1/4 lukewarm water. Incorporate into milk with an up and down stirring motion. Cover pot and let ripen for 30 min 1 hour.
- **Step 5** Check for a Clean break. If you notice that your curd mass has sunk below a layer of whey, your curd has acidified to the stretching stage already! Complete step 6 before moving directly to step Step 11.
- **Step 6** Using a knife, cut curds into 1 inch cubes. Let sit for 5 min between each layer of cuts.
- **Step 7** Turn heat to low, gently start to stir the curds continuously, adjusting heat as necessary to make sure it takes approximately 20 min to reach a temperature of 106F. Turn off heat, and stir curds for 20 more minutes. At this point your curds should be about the size of a kidney bean and when pressed between your fingers they have some firmness. During this stage keep a cup of boiling water beside you. Every 5 min or so, test a curd in the boiling water to see if it will stretch. If it stretches almost indefinitely without breaking off, you know that you can end the stirring stage and move on to the stretching stage.
- **Step 8** Let sit for 5 minutes, until curds have sunk to the bottom of the pot.
- **Step 9** Scoop out about half of the whey, leaving approximately 3 inches of whey above the curds.
- **Step 10** Add salt to the pot (or alternatively skip this step and use the easy shredding technique..... see below for details on how to do that)

**Step 11-** Turn the heat to medium. Using a wooden spoon, gently stir to prevent scorching, start to heat the whey. As the heat of the whey gets higher, pay attention to the curds. When they reach a point where they start to stretch without breaking and have clumped together into a mass, turn off the heat.

**Step 12–** Using a wooden spoon or heat resistant rubber gloves, slowly start to knead the cheese under the hot whey. As soon as it starts stretching you can do 1 of 3 things.

- 1. Pull and fold chunks of cheese into mozzarella balls. Be careful not to overwork these balls. I liken the technique of forming mozzarella balls to making buns. Submerge them in a cold water bath after stretching to keep them round. Make some of them into tiny Bocconcini balls!
- 2. As soon as your cheese begins to stretch, knead the mass of curd a few times before transferring the whole mass to a holed cheese form. Use my easy shredding technique to make this into shreddable mozzarella cheese (see below)
- 3. As soon as the cheese begins to stretch begin folding and pulling the cheese into a long rope. This is string cheese!

### **Step 13**- To salt your cheese you have 3 options.

- 1. Add about 1/2 cup of salt to the whey while you stretch your cheese.
- 2. Use the easy shredding technique! (pg. 64)
- 3. Surface salt your cheese. Sprinkle a small amount of salt onto the surface of your cheese and enjoy right away!



# Easy Shredding Technique

Anyone who has ever tried to shred fresh mozzarella for pizza, knows that it is a nightmare to shred! It breaks off into large chunks and is cause for serious frustration if you are just looking for an easy shreddable cheese.

To complete the easy shredding technique skip the salting of mozzarella during making but instead after your curd is stretched, move onto these steps.

**Step 1**- My favourite way to complete the easy shredding technique, is to transfer my entire curd mass into a holed form. While the cheese is in the form, sprinkle a light dusting of salt onto the surface of the cheese, let it drain for about 10 minutes before flipping it over and doing the same on the other side. This light salting will aid in drainage.

**Step 2**- After an additional 10 minutes, transfer your cheese to your 18% brine. You can brine it at the ratio of 2 hours per pound of cheese. While your cheese is brining let it sit in the refrigerator or a cool area. If you have made multiple cheeses, weigh each cheese separately and calculate brine time for each cheese.

**Step 3-** After you remove your cheese from the brine, place it on a plate in the refrigerator for 12 hours to dry. Your cheese will now be easy to shred and freeze, or to cut up into strips and freeze. I like to cut my cheese into 1 inch by 3 inch strips and freeze them for mozzarella sticks, as well as for stretching into Bocconcini balls at a later date. I also like to freeze my shredded mozzarella flat so that you can pull it from the freezer frozen, and it doesn't take long at all before you are able to handle it for sprinkling on top of pizzas.

To make an 18% brine (also known as a saturated brine.) Mix 1 part fine ground salt to 5 parts water. When using fine ground salt this can be done by weight or by metric measurement as water and fine ground salt weigh the same. An example: 2 cups fine ground salt: 10 cups water.