



# Epicurean

slow food solutions

## Mozzarella & Ricotta Cheese Kit

### INSTRUCTION MANUAL

Congratulations on your decision to become a cheese maker! The whole family can enjoy this great hobby!  
Within this starter kit you will find all the basic equipment to enable you to make up to 10 batches of Mozzarella and/or Ricotta.

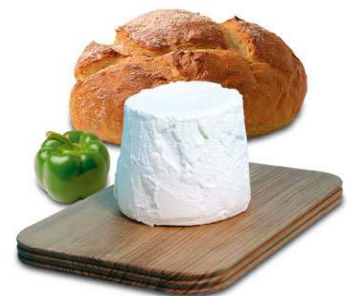
**This kit contains:**

- 1 mtr Butter Muslin**
- 10ml Rennet**
- 10g Lipase Powder**
- 10ml Calcium Chloride**
- 100g Cheese Salt**
- 50g Citric Acid**
- 250ml Liquid Sanitiser**



**You will also need:**

- 10L Pot / Double Boiler (or equivalent)**
- Slotted Serving Spoon**
- Cutting Board**
- Long Bladed Knife**
- Milk Thermometer**
- Microwave Oven (optional)**



## RECIPES

30 Minute Mozzarella .....	- 2 -
Whey Ricotta .....	- 2 -
Whole Milk Ricotta.....	- 2 -

*For more cheese making recipes, we recommend the "Home Cheese Making" book by Ricki Carroll.*

- 1 ½ Level teaspoons Citric Acid dissolved in ½ cup cool water
- 4 litres of Full Cream Milk
- ¼ teaspoon Lipase Powder dissolved in ¼ cup cool water
- ¼ teaspoon Rennet dissolved in ¼ cup cooled boiled water
- 1 teaspoon Salt

## 30 Minute Mozzarella (makes approx. 500g)

1. Heat the milk to 12°C and, while stirring, add the Citric Acid solution, then add the Lipase solution and mix thoroughly.
2. Heat the milk mixture to 32°C over medium to low heat. (The milk will start to curdle.)
3. Gently stir in the diluted Rennet with an up and down motion while heating to 38-41°C. When the curds are pulling away from the pot, they are ready to scoop out (3 to 5 minutes).
4. The curds will look like thick yogurt and have a bit of a shine to them, and the whey will be clear. If whey is still milky white, wait a few more minutes.
5. Scoop out the curds with a slotted spoon into a microwaveable bowl. Press the curds gently with your hands, pouring off as much of the whey as possible.
6. Microwave the curds on HIGH for 1 minute. Drain off the excess whey, then gently fold the cheese over and over (like kneading bread) with your hands or a spoon. This distributes the heat evenly throughout the cheese, which will not stretch until it is too hot to touch (60-65°C).
7. Microwave twice more for 35 seconds each time, adding salt to taste after the second time. After each heating, knead again to distribute the heat.
8. Knead quickly until it is smooth and elastic. When the cheese stretches like taffy, it is ready. If the curds break instead, they are too cool and need reheating.
9. When the cheese is smooth and shiny, roll it into small balls and eat while warm. Alternatively, place the cheese balls in a bowl of ice water for half an hour to rapidly cool the inside, then cover and store in the fridge.



- 7 ½ Litres fresh Whey, no more than 3 hours old
- 1 ½ Ltrs Full Cream for increased yield
- ¼ Cup Cider Vinegar
- ½ teaspoon Cheese Salt (*optional*)
- ½ teaspoon Herbs (*optional*)

## Whey Ricotta (makes 1-2 cups)

1. Pour the whey into a large pot. Add the cream if desired. Heat the mixture to 93°C
2. While stirring, turn off the heat and add the vinegar. You will notice tiny white particles of precipitated albuminous protein.
3. Carefully ladle the curds into a colander lined with cheesecloth. Allow to drain.
4. When the cloth is cool enough to handle, tie the corners into a knot and hang over the sink to drain for several hours.
5. When the cheese has stopped draining, untie the cloth and place the cheese into a bowl. Add the salt to taste or even some herbs (*Optional*).
6. Cover the bowl and refrigerate for up to a week.



- 3½ Litres Full Cream Milk
- 1 teaspoon Citric Acid dissolved in ¼ cup of water
- ½ teaspoon Cheese Salt (*optional*)
- 1-2 tablespoons heavy cream (*optional*)

## Whole Milk Ricotta (makes approx. 900g)

1. Add the citric acid solution and Salt (*optional*) into the milk and mix thoroughly.
2. In a large pot, directly heat the milk to 85-90°C. (Do not boil). Stir often to prevent scorching.
3. As soon as the curds and whey separate, (make sure there is no milky whey), turn off the heat and let it set, undisturbed, for 10 minutes.
4. Line a colander with cheesecloth and carefully ladle the curds in to drain. Tie the corners of the cloth into a knot and hang the bag to drain for 20-30 minutes or until the cheese has reached the desired consistency.
5. The cheese is ready to eat immediately. For a creamier consistency, add the cream at the end and mix thoroughly.
6. Store in a covered container in the fridge for 1-2 weeks.





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## Cheese making Basics

### CHEESE MAKING BASICS

Fundamentally, cheese making is the process of removing water from milk. The volume of water removed will dictate the essential characteristic of the cheese: hard cheese like cheddar retains far less water than a soft cheese like feta. Achieving these different characteristics might only require slight variations from one style to the next. Following are some cheese making basics needed to make the recipes in the Epicurean Cheese kits.

**STERILISING** - The most important step by far. When making cheese, ensure that all your equipment is sterilised thoroughly to eliminate contamination of your milk, which will result in off flavours.

**MILK** – Cheese can be made from any animal milk, with the most common being cow, goat & sheep. Not many have access to a cow for fresh raw milk, but store bought milk still makes excellent cheese. Being pasteurised and homogenised, we recommend the addition of calcium chloride to assist in curd formation.

Average Composition of Milk	Cow	Goat
	Proteins	3.7%
Lactose	4.8%	4.7%
Fat	3.8%	4.1%
Salts	0.7%	0.8%
Water	87%	87%

Do not use UHT milk for anything but making starters as the high temperatures used during the process of making UHT milk, destroys the proteins that contribute to making a firm curd.

To pasteurise RAW milk, heat to 63°C and maintain for 30 minutes. Cool quickly by placing the pot into a sink full of cold water.

**CALCIUM CHLORIDE** – This is a salt solution used to restore the calcium balance of heat treated homogenised milk. It is highly recommended for goat's milk as it is naturally homogenised directly from the animal. Always dilute the Calcium Chloride in 10 times its volume of cooled boiled water. Recommended dose of 2.5 ml per 10 litres of milk.

**STARTER CULTURE** – Added to the milk, these bacteria convert the lactose already present in the milk into lactic acid. The acid assists the rennet to coagulate the milk, aids in expelling the whey, inhibits the growth of pathogens and helps preserve the final cheese. Starters also contribute to the body, flavour, and aroma of cheese. The cultures supplied are as follows:



- Mesophilic MA11 – Used for Cheddar, Colby, Monterey Jack, Fetta, Chevre, etc
- Mesophilic MM100 – Used for Brie, Camembert, Havarti, Gouda, Edam, Fetta, Blue, Chevre, etc.
- Thermophilic TA61 – Used for Parmesan, Romano, Provolone, Mozzarella, Emmental/Swiss
- Helvetic LH100 – Used in conjunction with thermophilic cultures to make Italian cheeses.
- Proprietary Bacteria – Used for the eye formation, aroma, and flavour production in Swiss type cheese.
- Camembert Blend – Used for Camembert and Brie, this blend contains a combination of Flora Danicum providing the creamy consistency and internal flavour and Penicillium Candidum that provides the white skin and earthy flavour of the outer layer.

## PREPARING A STARTER (the day before)

Preparing a starter ensures that your cultures are active. The starter will thicken to the consistency of yoghurt ... if this does not happen, get some fresh culture.

- Boil, then cool 200ml of fresh milk (*or use UHT milk to save the boiling and cooling time*)
- Add ½ tea spoon of Culture and stir well
- Store at 25-30°C covered until it thickens (approx 12-24 hrs.)
- Will store in the fridge for a couple of days until needed.

**LIPASE** – An enzyme added to the milk to give a strong flavour and aroma to Italian style cheeses, such as Parmesan and Feta.

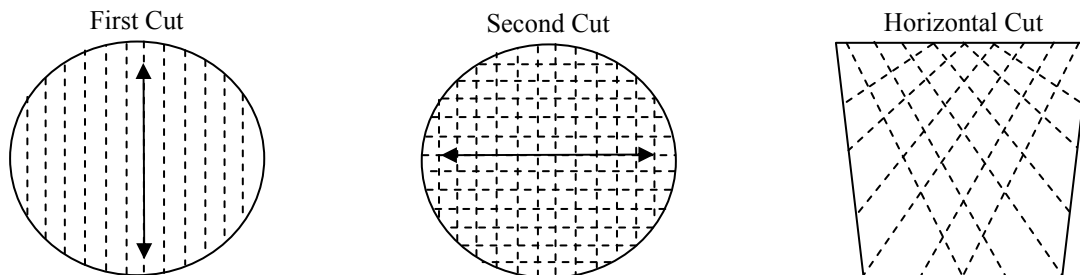
**RENNET** – Rennet is used to coagulate or set milk. It contains enzymes that react with milk protein (casein), which separates the milk into curds (solids) and whey (liquid). When using rennet, always dilute it in 10 times its volume of cooled boiled water before adding to your milk

## TESTING FOR A CLEAN BREAK

- The curds are ready to cut when it shows a clean break.
- Slide your knife into the curd at an angle and lift some on the side of the blade.
- If the curd breaks cleanly around the knife and whey runs into the crack that is made, you have a “clean break.”

## CUTTING THE CURD

- Using a long knife, cut vertically across the curd one way, then again perpendicular to the first cuts. (See diagrams)
- Insert your knife at an angle to make horizontal cuts.
- The width between cuts will depend on the style of cheese you are making.



## COOKING THE CURD

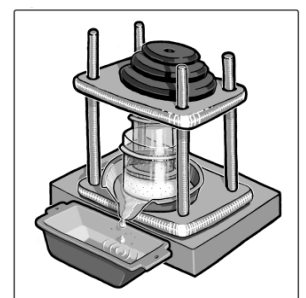
- After the curds are cut, the temperature is increased, causing more whey to be expelled.
- Heating should be gradual and no greater than 2°C every 5 minutes.
- Target temperature will depend on the specific recipe.

## SALTING

Salting enhances the flavour of the cheese, assists in drawing whey from the curd and helps preserve the final cheese. We recommend using a coarse salt free of any additives like Iodine.

## PRESSING

- Line your cheese basket with cheesecloth.
- Place the basket on a drip tray, which will allow the whey to drain into a sink or other container.
- Ladle the curds into the basket with a slotted spoon, cover with a layer of cheesecloth, and insert the follower.
- Once the follower is in, pull on the cheesecloth to eliminate any bunching.
- Place the top board onto the prepared basket and add the appropriate weights.



**\*\*For more in depth cheese making information, we recommend the “Home Cheese Making” book by Ricki Carroll**