

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 Greek Style Feta.



This kit contains:

1 mtr Butter Muslin
1 Square Feta Basket
10ml Rennet
10g MA11 Mesophilic Culture
10g Lipase
10ml Calcium Chloride
100g Cheese Salt
250ml Liquid Sanitiser

You will also need:

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



Greek Feta (makes approx. 500g)

- 4 Litres Full Cream Milk
- 1 ml Calcium Chloride dissolved in ¼ cup cool water
- ½ teaspoon MA11 Mesophilic culture
- 1/4 teaspoon Lipase Powder dissolved in 1/4 cup cool water.(optional if using goat's milk)
- 1 ml Rennet dissolved in ¼ cup cooled boiled water
- 2 4 teaspoons Salt
- 1/3 cup Salt for brine (optional)

- . The day before cheese making, prepare a Mesophilic starter as described in the "Cheese Making Basics" section above.
- 2. Heat the milk to 30°C. Add the Calcium Chloride solution, then the prepared starter and the Lipase solution and mix thoroughly. Cover and let ripen for 60 minutes.
- 3. Gently stir in the diluted Rennet with an up and down motion for at least 1 min. Cover and allow setting for 60 mins.
- 4. Cut the curds into 13mm cubes then allow to stand for 10 mins.
- 5. Gently stir the curds every 5 minutes for 20 mins
- 6. Pour the curds into a Feta Basket or Colander lined with cheesecloth. Tie the corners of the cloth into a knot and hang the bag to drain for 4 hours.
- 7. Untie the bag and cut the curds into 25mm slices, then cut into 25mm cubes.
- 8. Sprinkle the cubes with Salt to taste. Place in a covered bowl and allow to age for 4-5 days in the fridge.

FOR A STRONGER FLAVOUR:

9. Make a brine solution by combining 1/3 cup of Salt to 1.5 litres of water. Place the cheese in the brine and store in the fridge for 30 days. (Do not use this method if using store bought goat's milk as it tends to disintegrate in brine.)

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



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%	3.4%
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.
- Proprioni 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.

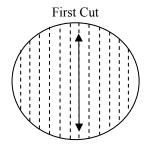
RENNET – Rennet is used to coagulate or set milk. It contains enzymes that react with milk protein (casein), which separates the milk into curds (solids) and whey (liquid). When using rennet, always dilute it in 10 times its volume of cooled boiled water before adding to your milk

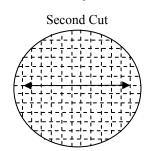
TESTING FOR A CLEAN BREAK

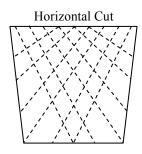
- The curds are ready to cut when it shows a clean break.
- Slide your knife into the curd at an angle and lift some on the side of the blade.
- If the curd breaks cleanly around the knife and whey runs into the crack that is made, you have a "clean break."

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

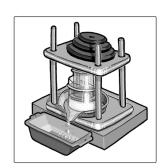
- After the curds are cut, the temperature is increased, causing more whey to be expelled.
- Heating should be gradual and no greater than 2°C every 5 minutes.
- Target temperature will depend on the specific recipe.

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