

Mad Millie
AS FRESH AS CAN BE

PREMIUM • HANDCRAFTED



ARTISAN CHEESE KIT

BEGINNERS

Approx. time

1-5 HOURS per recipe

(not including draining and aging time)

Cheeses:

- Cheddar, Monterey Jack, Pepper Jack, Colby, Feta, Halloumi,
- Cottage Cheese, Light Cream Cheese, Cream Cheese, Chèvre
- Frais, Goats Feta, Quark, Mozzarella, Ricotta, Mascarpone,
- Ricotta Salata and Farmhouse Futtler.

CHECK US OUT ON



Mad Millie kits and equipment are designed to make it fast and simple for you to create beautiful, artisan food in your own home. For more kits and consumables, along with some helpful tips and how-to videos, visit

www.madmillie.com

DESIGNED IN NEW ZEALAND

Mad Millie

Perfect for Beginners!

Creamy feta, fresh mozzarella, delicious cheddar and more straight from your own kitchen! Just add your choice of fresh milk. The ultimate kit for cheese lovers, this Artisan's Kit has everything you need to create fresh artisan cheeses, like feta, halloumi, cream cheese, cottage cheese, ricotta and mozzarella as well as hard cheese like cheddar, colby and monterey jack. All you need is fresh milk.

You will find in-depth information on the basic cheese making process on our website.

www.madmillie.com



Broadcast Yourself™

Watch our YouTube video if possible before starting.
They say a picture is worth a thousand words!

Your Artisan Cheese Kit



YOUR KIT CONTAINS

Shelf Stable Mesophilic Culture

20 Vegetarian Rennet Tablets

Hard Cheese Press

Cheese Wax and Melting Bowl

Cheese Mat

2 Square Feta Molds

Small Ricotta Basket with Container

Pipette

Thermometer

Artisan's Cheese Sall

Calcium Chloride

Cheese Cloth

Citric Acid

Curd Knife

Measuring Spoons

Draining Spoon

Annatto Cheese Colorant

Instructions and Recipes

PIPETTE

Used to measure small quantities of calcium chloride.

CURD KNIFE

A long blade knife used for cutting the curd.

CULTURE & ENZYME MEASURING SPOONS

These tiny measuring spoons are great for measuring out small amounts of culture and enzymes. Tad is approx. 1/4 tsp, Dash is approx. 1/8 tsp. Pinch is approx. 1/16 tsp. Smidgen is approx. 1/32 tsp. Drop is approx. 1/64 tsp.

CHEESE CLOTH

Cheese cloth is used to help separate the curds from the whey. It is often used to line colanders and cheese molds to ensure that no curds escape and are wasted.

Hygiene tip CHEESE CLOTH

Cheese cloth can be re-used. Soak your used cheese cloth in warm water to rinse out any left over milk residue, then sterilize by boiling for 5 minutes.

Specialized Cheese Making Equipment

CHEESE MAT

Used to keep cheese elevated from whey while the curds are draining inside the cheese mold.

THERMOMETER

The thermometer will ensure accurate monitoring of the milk temperature.

How to... USE YOUR THERMOMETER

When measuring the temperature make sure that the two indentation points found on the lower half of the thermometer probe are fully submerged in the liquid. If they're not, you will not obtain an accurate temperature reading.

SQUARE FEITA MOLDS

Square Feita cheese molds are used to drain whey from the cheese and to create the square feita shape.

If your mold is warped, simply immerse it in warm water (22 - 140 F or 50 - 60 C) for 10 minutes to soften plastic before reshaping it with your hands and allowing to cool.

RICOTTA BASKET & CONTAINER

Provides a mold to shape the ricotta and let the whey drain from the ricotta curds. The container collects the whey and is great to store the ricotta in.

DRAINING SPOON

A large serving spoon with holes for stirring and spooning out curds into a mold or colander.

MESOPHILIC STARTER CULTURE

These are the bacterial starter cultures which acidify the milk and cause it to curdle. This process leaves you with solids (curds) and liquid (whey). The curds are what forms your fresh cheese. These cultures are living organisms. Although shelf stable at room temperature, to prolong their life and milk acidification ability, please store in the freezer. The cooler you are able to store them, the longer they will remain active.

VEGETARIAN RENNET

Rennet is used to speed up the process of forming curds and whey. It also aids in forming a tighter curd. The rennet supplied in this kit is suitable for vegetarians. Half used rennet tablets must be stored in an airtight container or wrapped in cling film. Rennet tablets are shelf stable for approximately 3 years from manufacture when stored at dry ambient temperatures.

CALCIUM CHLORIDE

The pasteurization and homogenization process which store bought milk must go through is responsible for lowering the calcium content naturally present in milk.

Adding calcium chloride helps to restore some of the lost calcium and helps ensure you get a good, strong curd and a higher yield of cheese.

CITRIC ACID

This is used to acidify the milk and causes the separation of the solids (curds) from the liquid (whey).

ARTISAN'S CHEESE SALT

Cheese salt is salt which contains no iodine. Iodine may disable your bacterial starter cultures and prevent them from working.

ANNATTO

Natural colorant used to add a yellow/orange color to your hard cheese.

CHEESE PRESS

Used to press your cheese.

Additional kitchen equipment you will need:

COLANDER

Used for draining whey from curds. A colander with feet works best so that the curds are elevated and not sitting in whey.

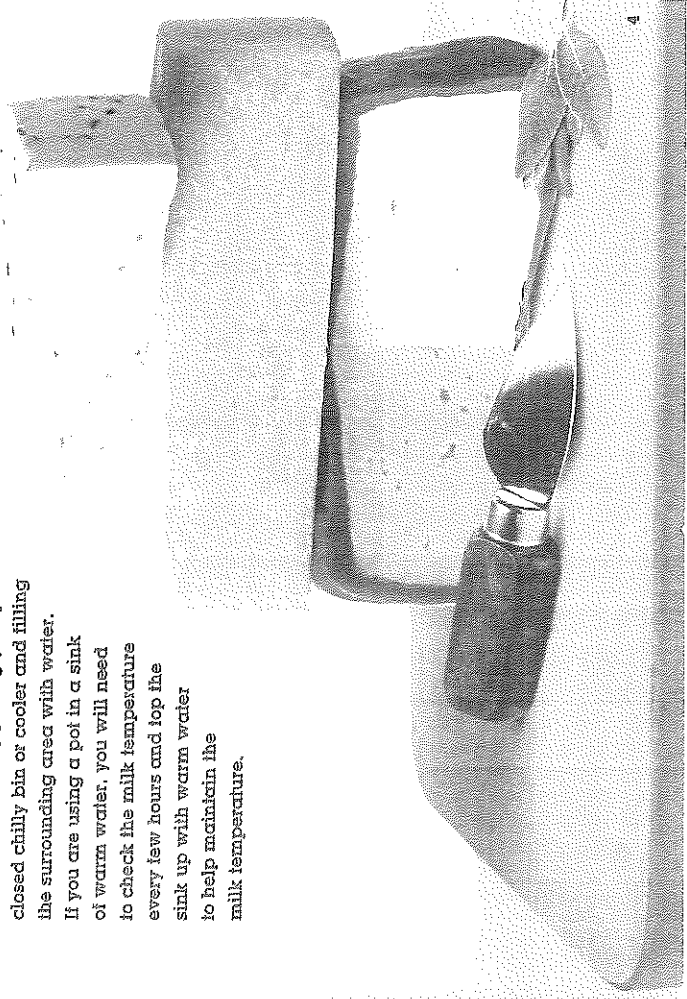
GOOD QUALITY POT

This should be large enough in order to hold the amount of milk your recipe calls for. Pots used should have a thick base to prevent the milk from scalding or sticking to the bottom of the pot.

WATER BATH

You will need a way to keep your milk at the correct temperature over several hours. This can be done by leaving the pot on a warm, turned off stove or putting your pot of milk into a sink and surrounding it with warm water (slightly higher than the milk temperature). Or by putting your pot into a closed chilly bin or cooler and filling the surrounding area with water.

If you are using a pot in a sink of warm water, you will need to check the milk temperature every few hours and top the sink up with warm water to help maintain the milk temperature.



Important Steps



Cheese Press

All hard cheeses must be pressed. This process compacts the cheese and helps to get rid of the moisture, causing the cheese to develop the harder, dryer texture which hard cheeses are known for.

USING YOUR MAD MILLIE CHEESE PRESS

STEP 1

Scoop your cheese curds into the mold component of the cheese press (you may need to line the mold with cheese cloth).

STEP 2

Place the disk on top of the curds, flat side down with the indent for the press to the top. Fold the cheese cloth on top of the disk, making sure it is clear of the screw.

STEP 3

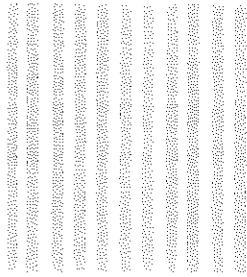
Place the top of the press on top of the mold. Twist the lid so that the lid locks into the mold.

STEP 4

Start screwing the knob in order to get the metal rod to put pressure on the pressing disk. The scale will pop up and indicate how much pressure is being applied to the cheese. Refer to your recipe for the amount of pressure that needs to be applied. The amount of pressure varies between recipes.

READING YOUR SCALE

The scale starts at 0 and goes up in increments of 1 up to 20.



NOTE: While the cheese is being pressed, the pressure may need to be readjusted to account for the cheese reducing in size.

Brining a Cheese

Many hard cheeses must also be soaked in a brine solution after they have been pressed. This adds flavor, preserves the cheese and also draws out some additional moisture.

RECIPE FOR SATURATED

BRINE SOLUTION 25%:

Bring 1.5 qt (1.5L) of water to the boil before stirring in 13.2 oz (375g) of cheese salt.

Once cool, stir in 1.5 tsp of white vinegar to balance the pH.

Always brine your cheese with the brine and cheese being at room temperature.

Brine can be kept and re-used, just boil and allow to cool before re-using.

Waxing a Cheese

Many hard cheeses must be waxed prior to aging. This process helps to retain the moisture within the cheese, and protect it from external mold while the cheese is aged.

Wax should be both melted and stored in the wax bowl provided in this kit.

STEPS IN WAXING CHEESE

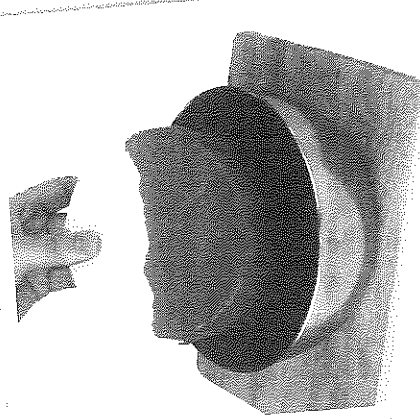
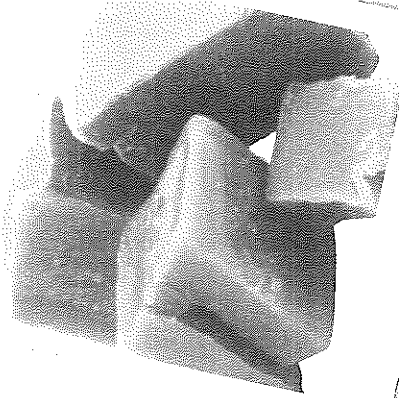
Place the metal bowl full of wax in a pot with boiling water to melt the wax.

Once the wax has melted, allow the wax to heat a little longer so that you get the wax as hot as possible. This will ensure that the wax is sterile, and also kills any bacteria which may be present on the surface of the cheese.

Dip the cheese halfway into the wax for 5 seconds before removing.

Wait a few seconds for the wax to cool, then, turn cheese around and dip the other side into the wax.

Repeat until the cheese is covered in wax, leaving no holes. This should take approximately 2 - 3 dips.



Quark

Makes approx: 11oz (310g)

Quark is a quick and easy cheese to make which is loved for its nutritional values.

Quark is a high protein and low fat food with lots of versatility. It is particularly popular in northern parts of Europe where they eat it with fruit for breakfast or dessert, herb and spread on grain bread for lunch and then use it as a low fat creamy sauce option on potatoes for dinner!

Difficulty: Very easy

INGREDIENTS

- 1 quart (1L) of full fat, homogenized milk
- A few grains (approximately 1/64 tsp, or 1 drop tsp) of Mesophilic Starter Culture

EQUIPMENT

- Pot
- Thermometer
- Cheese cloth
- Colander
- Draining spoon



Find these recipes on YouTube.com

METHOD:

STEP 1: INOCULATING THE MILK

Thoroughly sterilize all equipment with boiling water before beginning. Pour milk into a pot and heat on a stove to 86°F (30°C) before adding the starter culture. Ensure the two indentation points on the lower half of your thermometer are fully submerged in the milk when reading the temperature. Leave over night (12 - 24 hours) to thicken at 68 - 86°F (20 - 30°C).

STEP 2: DRAINING

After 12 - 24 hours, drain the cheese in a cheese cloth lined colander until the thickness is to your liking. This could be as thick as Greek style yoghurt, or until it is firm and spreadable like cream cheese.

STEP 3: FLAVORING

Add chopped herbs for a savory spread, or mix with milk for a creamy, yoghurt texture which can be eaten with fruit for breakfast and/or dessert. Quark is great for using in baking and is also the main ingredient used in German baked cheese cakes.

Hygiene tip

Sterilizing all your equipment is vital with cheese making. Sterilize your cheese cloth, pots, draining spoon and anything else that comes in contact with the milk by boiling for 5 minutes just before using. Wipe down and keep bench surfaces extremely clean by using an antibacterial cleaning product before getting started.



French Style Cream Cheese

Makes approx: 14oz (400g)

This is a soft cream cheese which is great with added herbs and salt.

Difficulty: Very easy

INGREDIENTS

- 2 cups of heavy cream (at least 40% fat)
- 2 cups of full fat, homogenized milk
- A few grains (approximately 1/64 tsp or 1 drop tsp) of Mesophilic Starter Culture
- 1/2 tablet of rennet dissolved in 1/8 cup of cool, non-chlorinated water.

NOTE: Rennet will not dissolve fully.

Stir just before adding to the milk.

0.5 ml of calcium chloride. Measure

using your pipette.

Cheese salt (to taste)

Herbs (to taste)

EQUIPMENT

- Pot
- Large draining spoon
- Cheese cloth
- Pipette
- Colander
- Thermometer

METHOD:

STEP 1: INOCULATING THE MILK

Thoroughly sterilize all equipment with boiling water before beginning. In a pot, combine milk and cream. Warm to 72°F (22°C) using the stove.

Ensure the two indentation points on the lower half of your thermometer are fully submerged in the milk when reading the temperature.

Stir in 0.5 ml of calcium chloride.

Add the starter culture and rennet.

Mix thoroughly and allow to set at

approx 68°F (20°C) for 24 hours.

STEP 2: DRAINING

With the draining spoon, scoop the curds into a cheese cloth lined colander. Tie the corners of the cheese cloth into a knot and hang the bag to drain for 6 hours, or until the curds stop dripping.

STEP 3: FLAVORING

Place the curds into a bowl and mix into a paste like consistency. Add the salt and fresh or dried herbs to taste.

Light Cream Cheese

Makes approx: 1lb (450g)

This is a simple low fat cream cheese which can be used in any recipe or dish requiring cream cheese. It is much lower in fat than traditional cream cheese and contains no cream. It has an equally creamy texture and consistency as the real deal with fewer calories!

Difficulty: Very easy

INGREDIENTS

- 1/2 US Gal. (2L) of full fat, homogenized milk
 - 1/64 tsp (1 drop tsp) of Mesophilic Starter Culture
 - 1/2 tablet of rennet diluted in 1/8 cup of cool, non-chlorinated water.
- NOTE:** Rennet will not dissolve fully. Stir just before adding to the milk.
- 1 ml of calcium chloride. Measure using your pipette
 - Cheese salt (to taste)
 - Herbs (optional, to taste)

EQUIPMENT

- Pot
- Thermometer
- Draining spoon
- Whisk
- Cheese cloth
- Colander
- Pipette



METHOD:

STEP 1: INOCULATING THE MILK

Thoroughly sterilize all equipment with boiling water before beginning. Pour the milk into the pot. Stir in calcium chloride.

Slowly heat milk to 72°F (22°C) using a pot on the stove. Ensure the two indentation points on the lower half of your thermometer are fully submerged in the milk when reaching the temperature. Add the starter culture. Add diluted rennet and stir for 30 seconds using your draining spoon. Cover and put in a warm place. Leave to set for 24 hours at 68°F (20°C). (See water bath p.4).

STEP 2: DRAINING

After 24 hours, scoop into a cheese cloth lined colander. Bring the cheese cloth corners together and hang it to drain for a day.

STEP 3: FLAVORING

After the curds have drained, place the curds into a bowl and stir in salt and fresh or dried herbs to taste.

METHOD:

STEP 1: INOCULATING THE MILK

Thoroughly sterilize all equipment with boiling water before beginning. Pour milk into a pot and warm the milk using the stove to 72°F (22°C) before stirring in calcium chloride. Ensure the two indentation points on the lower half of your thermometer are fully submerged in the milk when reaching the temperature. Stir in the Mesophilic Starter Culture. Add diluted rennet and stir in an up and down motion for 1 minute. Cover and leave to set at 72°F (22°C) for 4 - 8 hours, or until milk is set firmly. (See water bath p.4).

STEP 2: CUTTING THE CURD

Using your curd knife, cut the curd into 1 inch (3cm) cubes and allow to sit undisturbed for 10 minutes.

STEP 3: COOKING THE CURD

Slowly increase the heat until the temperature reaches 110°F (43°C). Continue to stir to prevent curds from clumping together. Maintain temperature at 110°F (43°C) for 20 minutes or until the curds have shrunk and are firm enough so that they no longer have a soft interior.

Turn off heat and let the curds settle to the bottom of the pot for 5 minutes.

STEP 4: DRAIN

Pour off whey and pour curds into a cheese cloth lined colander. Tie the corners of the cheese cloth together to form a bag, hang, and leave to drip drain for several minutes. Open bag and put curds into a bowl. Break the curds up and add salt or herbs to taste if desired. For a creamier cottage cheese, add cream, or try adding a few tablespoons of quark for a lower fat version. Can be stored for up to 1 week covered in the fridge.

Cottage Cheese

Makes approx: 10.5oz (300g)

Cottage cheese can be eaten by itself, with fruit, on toast or in salads. The term "cottage cheese" originated because the simple cheese was usually made in cottages from any milk left over from making butter. The unpasteurized milk would sour itself when left in a warm place overnight. Cottage cheese was then made from this soured milk the next day.

Difficulty: Very easy

INGREDIENTS

- 1/2 US Gal. (2L) of full fat, homogenized milk
 - 1/64 tsp (1 drop tsp) of Mesophilic Starter Culture
 - 1/2 tablet of rennet diluted in 1/8 cup of cool, non-chlorinated water.
- NOTE:** Rennet will not dissolve fully. Stir just before adding to the milk.
- 1 ml of calcium chloride. Measure using your pipette
 - Cheese salt (to taste)
 - Herbs (optional, to taste)

EQUIPMENT

- Pot
- Draining spoon
- Thermometer
- Colander
- Cheese cloth
- Pipette

Whole Milk Ricotta

Makes approx: 1.4oz (400g)

Traditionally, ricotta (Italian for re-cooked) is made from the left over whey which is acidified and then "recooked".

Ricotta is the solids which form at the top of the pot. However, this recipe uses whole milk instead of whey. It is more convenient and has a higher yield than ricotta from whey. This ricotta also melts nicely and can be used in lasagne, pasta, or other Italian dishes. Very dry ricotta can be delicious crumbled over salads, while moist ricotta can be used in many desserts such as cakes, cheesecakes, or Cannoli.

Difficulty: Very easy

INGREDIENTS

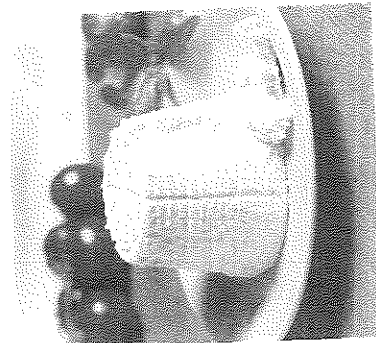
- 1/2 US Gal. (2L) full fat, homogenized milk
- 1 tsp citric acid dissolved in 1/4 cup of cool water
- 1 tsp of salt

EQUIPMENT

- Large pot
- Draining spoon
- Thermometer
- Ricotta basket and container

METHOD:

- Thoroughly sterilize all equipment with boiling water before beginning.
- Pour your milk into a pot and add the salt to the milk.
- Heat milk to 203°F (95°C) while stirring constantly.
- Once you have reached 203°F (95°C), take the pot off the heat. Ensure the two indentation points on the lower half of your thermometer are fully submerged in the milk when reading the temperature.
- Stir in your citric acid solution.
- Ricotta should start to curdle immediately.
- Leave the ricotta to cool for 20 - 30 minutes.
- After 20 - 30 minutes the ricotta should be firm enough for you to scoop into the draining basket. If it is still too soft, leave to cool for another 30 minutes.
- With a draining spoon, carefully layer the ricotta curds on top of each other in the ricotta basket. Leave the full basket to drain in the ricotta container until the desired consistency is obtained (can be eaten either dry and crumbly or moist and creamy).
- Ricotta can be stored for up to a week in the refrigerator.



Ricotta Salata

Makes approx: 3.5oz (100g)

This variation of ricotta is a firm, dry salted cheese originating in the hot, dry island climate of Sicily.

Originally it is made with sheep's milk, however it can also be successfully made with cow's milk. Ricotta Salata is usually aged for at least 1 month and can be used in salads, pasta dishes and is also perfect for grating.

Difficulty: More difficult

INGREDIENTS

- Whole milk ricotta (previous recipe)
- 1/2 tsp of salt

METHOD:

- Thoroughly sterilize all equipment with boiling water before beginning.
- Press the ricotta into a sterilized cheese mold or ricotta basket with a glass of water on top for 1 hour.
- Take the ricotta out of the mold, turn over and press again for 12 hours.
- Take the ricotta out of the mold and place onto a rack. Lightly rub the surface with salt everyday for 1 week. Keep in separate drawer in the refrigerator.
- Age the cheese for 2 - 4 weeks in a refrigerator (at 39 - 45°F or 4 - 7°C).
- If any mold appears in this time, simply rub it off with a clean cloth dampened with salt water.



Mozzarella



We highly recommended you view this video on YouTube before you begin.

Makes approx: 1.3lb (600g)

True Italian mozzarella is made from water buffalo milk, however there are now many varieties made from cow's milk. Mozzarella is not aged like most cheeses and tastes best when freshly made. The curds are cut up and heated in very hot water and then stretched.

Difficulty: More difficult

INGREDIENTS

- 1 US Gal (4L) full fat, un-homogenized milk
- 2 ml calcium chloride. Measure using your pipette
- 2 tsp of citric acid dissolved in 1/4 cup of cool water
- 1 tablet of rennet dissolved in 1/4 cup of cold, non chlorinated water. Note: Rennet will not dissolve fully. Stir just before adding to the milk.
- Salt to taste
- 5 - 10 ice cubes

Note - if halving the recipe use the same amount of rennet for a 1/2 US Gal (2L) batch as you would for a 1 US Gal (4L) batch.

EQUIPMENT

- Large pot
- Cheese cloth
- Draining spoon
- Curd knife
- Thermometer
- Rubber gloves
- Colander
- 2 large bowls

Mozzarella Making Steps

- 1** Pour milk into a pot and heat up to the instructed temperature.
- 2** Add diluted citric acid and rennet to the milk.
- 3** Allow milk to set into a gel like consistency before cutting the curd into cubes.
- 4** Drain curds by scooping them into a cheese cloth lined colander.
- 5** Place a handful of curds into hot water to gently melt before stretching the curds with your hands. Once you have a smooth, elastic texture form these into a smooth ball.
- 6** Place the fresh balls of mozzarella into ice filled cold water for 10 minutes before eating.

Enjoy!

TIP...

If you are having trouble getting your mozzarella to set, and/or the curds to come together and stretch, double the rennet stated in your recipe. Doubling the rennet reduces the chance of your mozzarella failing to stretch caused by inconsistencies found in some batches of milk. Also, remember to always add calcium chloride to the milk before you begin and ensure you are using a measured teaspoon to measure out your citric acid.

METHOD:

STEP 1: INCUBATING THE MILK

Thoroughly sterilize all equipment with boiling water before beginning. Pour milk into a pot and add calcium chloride to the chilled milk. Then stir in diluted citric acid. Heat the milk on the stove to 89°F (32°C) while constantly stirring to prevent scalding the bottom. Ensure the two indentation points on the lower half of your thermometer are fully submerged in the milk when reading the temperature. Once temperature is at 89°F (32°C), remove the pot from the heat and stir in the diluted rennet. Cover the pot and leave to set for 25 - 30 minutes.

STEP 2: CUTTING THE CURD

Check the curd by making a small cut with a knife. It should make a clean cut with a clear division between the curds and whey. If ready, cut the curd with a knife into 1 inch (3cm) cubes.

STEP 3: HEATING AND DRAINING

Place the pot back on the stove and slowly heat curds to 108°F (42°C), while gently stirring. The curds should become firmer and springy to touch. When this happens, transfer them to a cheese cloth lined colander to drain (make sure you save the whey if you wish to store your mozzarella for a few days after making). Do not heat past 108°F (42°C). Leave to drain for 5 minutes. In this time prepare a bowl of salted ice water (approx 9oz (200 - 300g) salt to 2qt (2L) of water) and another of 159°F (70°C) non-salted water.

STEP 4: STRETCHING

Take a handful of mozzarella curd and place onto your draining spoon. Lower the draining spoon and curds into the boiling water and leave there for approx 20 seconds or until the curds appear slightly melted. Now, carefully stretch the piece of curd until it is smooth and flexible. Caution: the curd will be hot so it is advisable to wear rubber gloves. If the curd does not stretch easily, place back into the bowl of hot water for more heating. You may need to do this two or three times before doing a final stretch and molding into a ball.

Note: Don't roll the mozzarella, carefully mold it into a ball, while trying to retain as much moisture in the cheese as possible. The YouTube video helps to show how this is done. If it is still not stretching well, increase the heat of your water. The curd should look like it is melting on the spoon.

Once mozzarella has been molded into a nice round ball, plunge it into the ice cold salt water bowl (this ensures an even texture while cooling). Continue with the rest of the mozzarella curd.

Mozzarella is ready to eat after it has spent 10 minutes in the ice cold salt water. Add extra salt directly to the mozzarella according to taste preferences.

Storing instructions...

You can store your Mozzarella in the fridge in a solution of 2 cups of left over whey with 1/8 tsp of Citric Acid. You can also freeze or refrigerate in an airtight container.

Farmhouse Butter

Makes approx: 6.4oz (180g)

A delicious all-natural creamy butter with a gorgeous authentic taste. Beautiful served with fresh baking or bread.

Difficulty: Easy

INGREDIENTS

- ½ qt (500ml) of heavy cream (at least 40% fat)
- A few grains of Mesophilic culture (approx. ¼ - ½ drop tsp)
- Salt to taste, approx. 2g or a heaped ¼ teaspoon

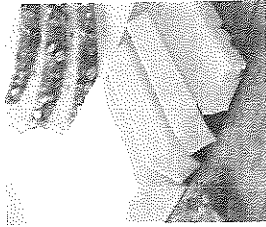
EQUIPMENT

- Sterilized container with lid to hold cream for overnight culturing
- Blender, food processor or hand whisk for churning the cream into butter
- Bowl
- Mixing spoon
- Spatula or butter pat

METHOD:

STEP 1: CULTURING THE CREAM

- Thoroughly sterilize all equipment with boiling water before beginning.
- Warm the cream to 68°F (20°C) and place in a sterilized container with a lid.
- Add the grains of Mesophilic culture, let rehydrate for 10-15 minutes then mix into the cream.
- Leave at room temperature overnight.



STEP 2: CHURNING

- Transfer cultured cream to the blender, food processor or bowl if hand mixing.
- Mix at low speed until butter forms. You will see clumps of butter and buttermilk separating out when it forms.
- Pour off the buttermilk, this can be kept and used to make pancakes and other baking.

STEP 3: FOLDING AND RINSING

- Transfer the butter to a bowl and press and fold the butter using a spoon or spatula to release more buttermilk.
- Pour off the buttermilk as it forms.
- Add some cool fresh water to the butter and work by pressing and folding the butter.
- Pour off the water and add fresh water, repeat 2 - 3 times until the water is just about clear.
- Pour off the final rinse water and continue to knead the butter using the spoon until it forms a ball. Water will be worked out of the butter as you do this and should be poured off as it is released.
- If the butter becomes too soft while working, place in the fridge until it is firmer. Add the salt if desired, and work it through the butter.
- Wrap finished butter in cling film or baking paper or place in an airtight container and store in the fridge.

Monterey Jack Cheese

Makes approx: 1lb (500g)

A semi soft American favorite. This cheese has a high melting point and subtle, buttery flavor making it perfect for melting and cooking. Monterey Jack can also be blended with peppers to make a spicy "Pepper Jack" Cheese.

Difficulty: More Difficult

INGREDIENTS

- 1.5 US Gal. (6L) of full-fat, un-homogenized milk
- ¼ of a packet of Mesophilic starter culture (approx. 1 Smidgen tsp)
- 3 ml calcium chloride. Measure using your pipette
- 2 tablets of rennet diluted in 1/4 cup of non-chlorinated, cooled boiled water
- 1 Tbsp cheese salt
- Cheese wax

EQUIPMENT

- Large pot
- Cheese Press with Cheese Mold
- Colander
- Bowl
- Cheese mat
- Pipeette
- Cheese Cloth
- Curd Knife
- Draining spoon

METHOD:

STEP 1: INOCULATING THE MILK

- Thoroughly sterilize all equipment with boiling water before beginning.
- Heat milk to 90°F (32°C) on the stove, then add calcium chloride followed by the starter culture.
- Cover and let the milk ripen with

- the culture at 90°F (32°C) for 30 minutes.
- Add diluted rennet and stir through thoroughly.
- Cover and allow to set at 90°F (32°C) for 60 minutes on a warm, turned off, stove.
- Use a water bath if making cheese in a cooler climate (see p.4).

STEP 2: CUTTING THE CURD

- Once firmly set, cut into ¼ inch (6 mm) cubes and allow to rest for 5 minutes.
- After 5 minutes raise the temperature to 100°F (38°C) very slowly over 30 minutes while frequently stirring gently to avoid the curd clumping together.
- Once target temperature is reached, maintain this temperature and keep stirring for a further 10 minutes.
- Pour off the whey and allow the curds to rest for a further 20 minutes.

STEP 3: DRAINING AND PRESSING

- Scoop curds into the colander and allow to drain for 10 minutes before transferring the curds into a bowl to be blended with salt.
- Transfer the curds into the cheese-cloth lined cheese press and press with 11 lb (5kg) for 15 minutes. (refer to p.5).
- Remove the cheese, turn it, rewrap it and press with 33lb (15kg) for 30 minutes.

Repeat above and press with 44lb (20kg) for 12 hours, or overnight.

STEP 4: MATURING

After 12 hours, remove the cheese and place it on the cheese mat to air dry. Turn it twice daily until the surface has become dry to touch and a rind has developed (2 - 5 days). Wax the cheese (see p.6) and allow it to ripen for 1 - 3 months at 55°F (13°C) turning weekly.

Pepper Jack Cheese

Use the basic recipe and ingredients from Monterey Jack recipe with the following additional ingredients and steps.

ADDITIONAL INGREDIENTS

- 1 teaspoon hot chili flakes
- ¼ cup water

METHOD:

- Boil pepper flakes in the water for 15 minutes.
- Strain the chili flakes and set aside the water.
- Add the chili water to your milk before beginning to heat your milk and adding the starter culture.
- Add the chili flakes to your curds when you are blending in the salt.

Cheddar

Makes approx: 1lb (500gms)

This cheddar is great to make if you have never made hard cheese before. It takes less time to make than regular cheddar and is ready to eat after only 5 weeks of aging.

Difficulty: More Difficult

INGREDIENTS

- 1.5 US Gal (6L) of full fat, un-homogenized milk
- 2 tablets of rennet (or, 1.5ml of liquid rennet) diluted in ¼ cup of un-chlorinated water
- 3 ml of calcium chloride. Measure using your pipette
- Approximately ¼ of a packet of Mesophilic Starter Culture (1 smidgen tsp)
- 1.5 tsp of cheese salt

CHEESE WAX

EQUIPMENT

- Large pot
- Cheese cloth
- Thermometer
- Pipette
- Draining spoon
- Curd knife
- Cheese Press

METHOD:

STEP 1: INOCULATING THE MILK

- Thoroughly sterilize all equipment with boiling water before beginning.
- In a pot on the stove, heat the milk to 80°F (32°C).
- Add calcium chloride.
- Stir in Mesophilic Starter Culture.
- Cover and leave to ripen for 45 minutes

on your warm, turned off stove (off the hot element). Use a water bath if you are making cheese in a cooler climate (see p.4).

After 45 minutes stir in the diluted rennet.

Cover and leave to set for 60 minutes.

Once firmly set, cut the curd into 1 cm (½ inch) cubes.

At a low heat on the stove, slowly heat the curds to 100°F (38°C) over a 30 minute period.

During this time, gently stir the curds with a draining spoon to keep them from clumping together.

STEP 2: DRAINING AND MILLING THE CURDS

Transfer the curds into a cheese cloth lined colander. Tie the corners into a knot and hang the bag in a warm spot to drain for 1 hour.

After an hour, place the curds into a bowl and break them up into small pieces. With sterilized hands, mix in the salt.

STEP 3: MOLDING AND PRESSING

Pack the curds into the cheese press mold, lined with cheese cloth. Press at 11 lb (5kg) for 10 min (refer to p.5).

With sterilized hands, remove the cheese from the mold. Remove the cheese cloth, turn the cheese over, redress the cheese in the cheese cloth and press again for 10 minutes at 22lb (10kg).

Repeat this process again but press it at 44lb (20kg) for 12 hours.

STEP 6: AGING THE CHEESE

After 12 hours, remove the cheese from the cheese mold and air dry on a cheese mat or rack until the cheese develops a natural dry rind (air drying on the kitchen bench is fine but make sure you cover it with a mesh food cover or something similar). This should take about a week (depending on humidity). While the cheese is air drying, make sure you turn it over regularly to prevent moisture from collecting on the bottom. After the cheese has developed a natural rind, it is ready for waxing (see p.6).

Age the waxed cheese on a cheese mat and keep on the kitchen bench or in a clean cupboard (around 50 - 55°F or 10 - 13°C) for a minimum of 5 weeks.





Makes approx: 1lb (500 gms)

Colby is a cow's milk cheese originating in the United States. It is similar to cheddar cheese, but is slightly moister since it does not go through the cheddaring process. It is a washed curd cheese which gives it its mild creamy taste.

Difficulty: Easy

INGREDIENTS

- 1 US Gals (6L) of full fat, un-homogenized milk
- 1/4 of a sachet of Mesophilic Culture (1 smidgen tsp)
- 1.5 tablets of rennet dissolved in 1/4 cup of un-chlorinated water
- 3 drops of Annatto coloring (optional) diluted in 1 Tbsp of cool water
- Approx. 5 cups of cool water
- 3 ml calcium chloride. Measure using your pipette
- 1.5 tsp of cheese salt
- Cheese wax

EQUIPMENT

- Large pot (Optional; water bath, see p.4)
- Cheese press
- Colander
- Bowl
- Cheese mat
- Pipette
- Cheese cloth
- Thermometer
- Draining spoon
- Curd knife

METHOD:

STEP 1: INOCULATING THE MILK

Thoroughly sterilize all equipment with boiling water before beginning.

In a pot on the stove, heat the milk to 86°F (30°C).

Add calcium chloride and then stir in the Mesophilic Culture.

Cover and leave the milk to rest on the stove (still warm but turned off, not on direct heat) for 60 minutes. Use a water bath if you are making the cheese in a cooler climate (see p.4).

Add in diluted annatto coloring and stir.

Stir in diluted rennet. Continue to stir for 1 minute to ensure the rennet is evenly dispersed through the milk.

Cover and leave the milk to set at 86°F (30°C) on the stove (still warm but turned off, not on direct heat) for 60 minutes. Use a water bath if making cheese in a cooler climate (see p.4).

STEP 2: CUTTING THE CURD

Once the curd has set, cut into 1/2 inch (1cm) cubes.

Leave to rest for 5 minutes.

Heat curds slowly to 39°C (102°F) over 20 minutes, stirring gently and frequently. Once you have reached the target

temperature, keep the curds at this temperature for a further 20 minutes. Keep stirring occasionally to stop the curds from matting.

STEP 3: WASHING THE CURDS

Pour off the whey to the level of the curds. Begin slowly adding the cool water to the curds, while stirring until the temperature reaches 81°F (27°C).

Keep the curds at this temperature for a further 10 minutes and stir frequently to keep the curds from matting.

STEP 4: DRAINING AND PRESSING

Scoop the curds into a cheese cloth lined colander and allow to drain for 10 minutes.

After 10 minutes, place the curds in a bowl and blend the salt through the curds with sterilized hands.

Line the mold part of the cheese press with cheese cloth.

Scoop the curds into the cheese cloth lined pressing mold.

Press the cheese at 22lb (10kg) for 30 minutes (see p.5).

Remove the cheese from the press, flip and redress in the cheese cloth before pressing again at 22lb (10kg) for 30 minutes.

Remove, flip, redress and press again at 33lb (15kg) for 30 minutes.

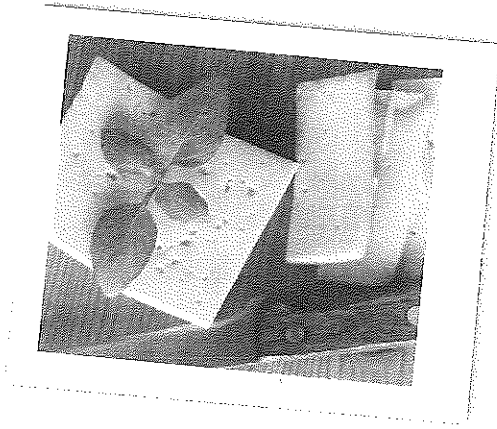
Remove, flip, redress and press again at 44lb (20kg) for 12 hours.

STEP 5: MATURING

After 12 hours, remove the cheese from the press and place on a sterilized cheese mat. Air dry at 50°F (10°C) - 55°F (13°C) until the cheese is dry to touch. Keep the cheese covered with a mesh food cover and turn every 4 hours for the first few days, then once daily, to prevent moisture from collecting at the bottom during this time.

Once the cheese is dry to touch, it is ready for waxing (see p.6).

Once waxed, age the cheese for 2 - 3 months at approx. 50°F (10°C).



Halloumi

Makes approx: 1.3lb (600g)

Halloumi is a cheese originating from Cyprus. Traditionally it is made with either goat's or sheep's milk, but it can also be successfully made from cow's milk. It requires no acid or culture to curdle the milk, making it a very unique cheese. Due to its high melting point, halloumi is mostly eaten grilled. Its salty flavor makes it a good accompaniment to many salads and stir fries.

Difficulty: Easy

INGREDIENTS

- 1 US Gal. (4L) of full fat, (preferably un-homogenized) milk
- 2 tablets of rennet diluted in 1/4 cup of cool, non-chlorinated water

NOTE: Rennet will not dissolve fully. Stir just before adding to the milk.

- 2 ml of calcium chloride. Measure using your pipette
- Salt to flavor

EQUIPMENT

- Pot
- Draining spoon
- Pipette
- Thermometer
- Curd Knife
- Colander
- Cheese cloth

METHOD:

STEP 1: RENNETING THE MILK

Thoroughly sterilize all equipment with boiling water before beginning.

Using a pot on the stove, bring the milk to a temperature of 113°F (45°C) before adding in calcium chloride. Ensure the two indentation points on the lower half of your thermometer are fully submerged in the milk when reading the temperature.

While stirring, add the diluted rennet. Stir thoroughly and allow to set for 45 minutes at 113°F (45°C). Place the pot in the sink and surround with warm water to maintain the milk's temperature.

STEP 2: CUTTING THE CURD

After the 45 minutes, the curd should be in a firm set, if not, leave to set for a further 5-10 minutes. Check also that the water in the sink is still at 113°F (45°C) and add more hot water if necessary. Once the milk has set, cut the curd into 1/2 inch (1cm) cubes, then, gently stir for a further 10 minutes until curds are significantly smaller and slightly springy.

Then, scoop the curds into a cheese cloth lined colander to drain.

STEP 3: PRESSING THE CURD

Press the curds in the cheese cloth lined colander with cheese cloth covering the halloumi and a weight on top (a large bowl of water works well) until the curd is firm and slightly rubbery in texture (about 30 minutes).

Cut the curd into desired size blocks.

STEP 4: BOILING

In a large pot bring some water to boiling point. Place the blocks of halloumi into the hot water. The curd will sink to the bottom. After 5-10 minutes they will come to the surface (you should not have to stir, however make sure the halloumi has not stuck to the bottom of the pot). Once the blocks rise to the surface, they are cooked and you can transfer to a cooling rack.

STEP 5: SALTING

Sprinkle salt all over the cheese and leave them until they are cold.

When cool, wrap in cling film and store in the fridge. Eat within 2 weeks.

STEP 6: COOKING

When ready to eat, gently grill each side until slightly soft and golden.



Makes approx: 1.8lb (816g)

Feta is a delicious cheese that can be made with either goat's or cow's milk. It is lovely crumbled over salad, or can even be eaten on a cheese platter with crackers. Herbs can be added to create more flavor and variety. This recipe makes two large feta cheeses. Recipe can be doubled or halved.

Difficulty: Easy

INGREDIENTS

- 1 US Gal. (4L) of full fat, (preferably un-homogenized) milk
- Approximately 1/64 tsp (1 drop tsp) of Mesophilic Starter Culture
- 1 tablet of rennet diluted in 1/4 cup of cool, non-chlorinated water.
- NOTE:** Rennet will not dissolve fully. Stir just before adding to the milk
- Salt for a 12% brine solution;
- Make 2 cups of brine by diluting 2 oz (60 grams) of salt in 2 cups of boiled water and adding 1/2 tsp of vinegar to adjust pH).
- 2 ml calcium chloride. Measure using your pipette

EQUIPMENT

- Two feta cheese molds
- Large Pot
- Cheese cloth
- Draining spoon
- Thermometer
- Pipette
- Cheese mat
- Curd knife

METHOD:

**STEP 1:
INOCULATING THE MILK**

Thoroughly sterilize all equipment with boiling water before beginning. Pour milk into a large pot, and heat slowly on the stove. Ensure the two indentation points on the lower half of your thermometer are fully submerged in the milk when reading the temperature. Once milk is at the correct temperature, stir in calcium chloride, then, stir in the Mesophilic Starter Culture. Add diluted rennet while stirring the milk. Continue to stir for 1 minute. Place lid back on pot and let the milk set for 90 minutes at 99°F (37°C). This temperature should be maintained by using a water bath, or sitting the pot on a warm (but turned off) stove top. (See water bath p.4)

**STEP 2:
CUTTING THE CURD**

Once milk is in a firm set, cut the curd into 1/2 inch (1.5cm) cubes using your curd knife and leave to rest for a further hour at 99°F (37°C).

**STEP 3:
STIRRING**

After an hour, gently stir the curds every 5 minutes for the next half an hour.

**STEP 4:
DRAINING AND MOLDING**

After half an hour of stirring, the curds are ready to be scooped into the feta molds using the draining spoon. At this point you may also like to add herbs to the curds in the mold.

Once all the curds have been put into the feta molds, place them on the sterilized cheese mat and leave to drain. Make sure you have left your feta to drain in a place where the whey can be collected and cheese can be covered (i.e. a large pot).

After 3 hours, place a piece of cheese cloth over the top of the mold and flip the cheese and mold upside down before placing it back on the cheese mat (this ensures even draining). Leave the cheese in a covered place to drain overnight.

Make up 2 cups of 12 - 15% brine solution by mixing 2 oz (60 grams) of salt in 2 cups of boiled water with 1/2 tsp of vinegar. Pour brine into a large container and leave to cool in the fridge overnight.

**STEP 5:
SALTING**

In the morning remove each feta from the mold. Place cheese in a container and pour over the brine until it is just covering the cheese. Adding too much brine will cause your cheese to be over salty.

The feta should be ready to eat after it has been fully submerged in the brine for at least 5 hours. Feta can be stored in the fridge for up to 1 month when kept in the salty brine solution.



Goat's Feta

Makes approx: 14oz (400g)

Goat Feta is lovely crumbled over salad, or on a cheese platter with crackers. Herbs can be added to create more flavor and variety. This recipe makes two large feta cheeses. Recipe can be doubled or halved.

Difficulty: Easy

INGREDIENTS

- 1 US Gal. (4L) of fresh, pasteurized goat's milk
- 1/64 tsp (1 drop tsp) of Mesophilic Starter Culture
- 2 tablets of rennet diluted in 1/4 cup of cool, non-chlorinated water

NOTE: Rennet will not dissolve fully. Stir just before you add to the milk.

Salt for a 12% brine solution:

- Make 2 cups of brine by diluting 2oz (60 grams) of salt in 2 cups of boiled water and adding 1/2 tsp of vinegar to adjust pH.

- 2 ml calcium chloride. Measure using your pipette

EQUIPMENT

- Two Feta cheese molds
- Large pot
- Cheese cloth
- Draining spoon
- Thermometer
- Pipette
- Cheese mat
- Curd knife

METHOD:

Use the same method as for Feta.

Marinated Feta

INGREDIENTS

- Feta from 1 US Gal. (4L) of Milk
- Herbs - 1/2 tsp dried rosemary, 1/2 tsp dried thyme, 1/2 tsp dried oregano, 1 tsp whole black peppercorns, 1 tsp dried red bell pepper).
- 2 cups canola oil to cover the cheese
- A 1 US qt. (1L) Jar

METHOD

Remove your Feta cheese from the brine. Use a paper towel to pat the cheese dry before cutting it into 1/2 inch (1 cm) cubes and adding them to the jar. Add all the herbs to the jar before covering the cheese with oil and sealing. Marinate the cheese for at least one week in the fridge before sampling. Store marinated cheese in the refrigerator and eat within 1 month.

Goat's Milk Spreadable Cheese

Makes approx: 14oz (400g)

Difficulty: Very easy

This cheese has a very silky, pasty and smooth texture, and is easy to spread. Great on toast, with slices of tomato, basil, salt and pepper, or to replace cream cheese in a soup or a dip.

INGREDIENTS

- 1 quart (1L) of whole UHT goat's milk
- 1/64 tsp (1 drop tsp) of Mesophilic Starter Culture.
- 1/2 tablet rennet dissolved in 1/8 cup of cool, non-chlorinated water

NOTE: Rennet will not dissolve fully. Stir just before adding to the milk.

- 0.5 ml calcium chloride. Measure using your pipette
- Cheese salt to taste

EQUIPMENT

- Pot
- Pipette
- Draining spoon
- Cheese cloth
- Colander
- Thermometer

METHOD:

STEP 1: INOCULATING THE MILK

Thoroughly sterilize all equipment with boiling water before beginning.

Heat up your milk to 72°F (22°C) in a pot on the stove. Ensure the two indentation points on the lower half of your thermometer are fully submerged in the milk when reading the temperature. Add calcium chloride.

Add the Mesophilic Starter Culture and then the diluted rennet to the milk. Stir slowly for 1 minute.

Place the lid on the pot and leave at room temperature overnight (approx. 16 hours) or until the milk is set.

The next day your curds should have formed, there will be a small gap filled with whey between the curds and the pot. Goat's milk curds are very fragile and break easily, so they should be handled carefully.

STEP 2: DRAINING

Place 4 layers of sterilized cheese cloth into a colander.

Using your draining spoon, spoon the curds into your cheese cloth lined colander. Your curds may break a lot during this step and won't be very firm.

Tie the corners of the cheese cloth into a knot and hang the bag to drain for 24 hours, or until the consistency is to your liking. Every couple of hours or at least 3 times during draining, scrape down the surface of the cheese cloth, as the centre of the curds will be moister than the outer.

STEP 3: FLAVORING

Add salt or herbs to taste. Store in an airtight container in the refrigerator and consume within a week.

Chèvre Frais

Makes approx: 3.5oz (100g)

"Chèvre" means goat in French, and is also used to describe this fresh cheese made with goat's milk. It has a subtle flavor, a soft texture and can be seasoned with anything: plain salt, paprika, pepper, mixed herbs. French people enjoy their Chèvre Frais roasted on a fresh baguette, with salad and walnuts.

Difficulty: Easy

INGREDIENTS

- 1 quart (1L) fresh, pasteurized goat's milk
- 1/64 tsp (1 drop isp) of Mesophilic Starter Culture
- 1/2 tablet of rennet dissolved in 1/8 cup of cool, non-chlorinated water.

NOTE: Rennet will not dissolve fully. Stir just before adding to the milk

0.5 ml calcium chloride. Measure using your pipette

Salt and herbs to taste

EQUIPMENT

- Ricotta mold
- Thermometer
- Pot
- Pipette
- Draining spoon
- Cheese cloth
- Cheese mat

METHOD:

STEP 1: INOCULATING THE MILK

Thoroughly sterilize all equipment with boiling water before beginning. Heat your milk to 77°F (25°C) using the a pot on the stove. Ensure the two indentation points on the lower half of your thermometer are fully submerged in the milk when reading the temperature. Add calcium chloride. Add the starter culture and then the dissolved rennet to the milk. Stir slowly for 1 minute. Place the lid on the pot and leave at room temperature overnight (approx. 16 hours) or until the milk is set.

The next day, your curds should have formed, there will be a small gap filled with whey between the curds and the pot. Goat's milk curds are very fragile and break easily, so they should be handled carefully.

STEP 2: DRAINING AND MOLDING

Using your draining spoon, gently transfer your curds in a sterilized cheese mold. Place your mold filled with curds on to a cheese mat and leave to drain for 2 days inside a clean pot covered with

the lid. After one day of draining, place a piece of cheese cloth over the top of the mold and flip the cheese and mold upside down before placing back on the cheese mat (this ensures even draining).

After 2 days of draining remove your cheese from the mold. Your cheese should maintain its shape.

STEP 3: FLAVORING

Add salt or herbs to taste. Wrap in cling film and store in the refrigerator. Consume within a week.

Herbs & Spices

Try rolling your cheese in herbs, pepper, poppy or sesame seeds for a special look and flavor

Mascarpone

Makes approx: 1.5lb (700g)

Mascarpone is a deliciously rich Italian triple cream cheese. It is often used in desserts such as Tiramisu or Cannoli. It can be incredibly expensive to buy and is very easy to make!

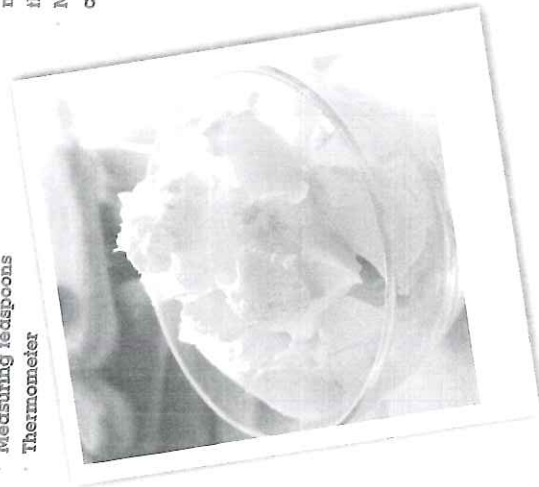
Difficulty: Very easy

INGREDIENTS

- 1 quart (L) of heavy cream (at least 40% fat)
- 1/2 tsp of citric acid dissolved in 2 Tbsp of cool water

EQUIPMENT

- Pot
- Colander
- Cheese cloth
- Draining spoon
- Measuring teaspoons
- Thermometer



METHOD:

- Thoroughly sterilize all equipment with boiling water before beginning.
- Pour cream into the pot and slowly heat on stove until it reaches 185°F (85°C). Ensure the two indentation points on the lower half of your thermometer are fully submerged in the milk when reading the temperature.
- Add the citric acid solution.
- Keep the cream at 185°F (85°C) for 5 more minutes.
- Take off the stove and leave to cool for a few hours or overnight.
- Pour the cream into a cheese cloth lined colander. Leave on your kitchen bench to drain until it has reached your desired thickness (mascarpone is traditionally served at the thickness of greek yoghurt, but be aware, mascarpone will thicken even more once put in the fridge so you may want to drain until slightly runnier than what you desire).
- Mascarpone can be stored in an airtight container in the fridge for up to 4 days.

Whey Ricotta

Makes approx: 1.3lb (600g)

Whey ricotta is a soft, fresh curd cheese which is used very frequently in Italian cooking. Ricotta literally means re-cooked. The high temperatures used to make this cheese, separate the remaining proteins in the whey to make ricotta cheese. The yield is however quite low, and milk is therefore added to help increase it. Whey used for ricotta needs to be fresh whey and best less than 1 hour old.

METHOD:

- Thoroughly sterilize all equipment with boiling water before beginning.
- Heat 1.5 US Gal. (5L) of whey to 140°F (60°C). Stir frequently.
- Add 2 cups of full fat, homogenized milk. Add 1/2 tsp - 1 tsp of salt if you like a salty ricotta.
- Continue to heat the milky whey to 194°F (90°C). Continue to stir.
- At 194°F (90°C) add approximately 2 Tbsp of white vinegar. Stir while slowly adding the vinegar. At the first sign of small specks appearing in the whey, stop adding vinegar.
- Leave to stand on a low heat for 5 - 10 minutes to let the ricotta firm up. Then, gently scoop off the layer of curd that has risen to the surface (this is ricotta) into a ricotta mold (the ricotta mold may need to be lined with cheese cloth).
- Eat straight away or store in the fridge and use within a week.

After making cheese you may wonder what to do with all the left over whey. In this section a few ideas will be given.

Whey which is left after cooking and draining curds is still very nutritious and should not be wasted! It contains milk, sugar, protein and minerals which are great for your health. It is consequently a great substitute for water and other liquids in many foods including:

- Bread or pizza - Whey used in bread or pizza recipes provides a nice subtle flavor and texture to your bread products.
- Used as stock - Make your own stock with whey and add it to soups, curries and other meals.
- Smoothies - Combine with fruit for a delicious, nutritious drink.

Whey can also be sprayed on the garden. It is especially beneficial for acid loving plants. Animals also love whey so you may like to feed it back to your farm animals or pets.

In addition there are a few cheese recipes that can be made from whey. Here is one you may like to try out.