Mad Millie FAQs

General:

How do you make cheese?

Making cheese is an ancient craft dating back to preindustrial times when animals were first domesticated. All cheeses are made from souring milk through either the addition of an acid (i.e. vinegar, or lemon juice), or more commonly, the addition of certain bacterial cultures. The result of souring the milk causes the milk to separate into a solid (curd) and liquid (whey). Most cheese is then made from the curds. These can be cooked, pressed, moulded, salted and matured in different ways to create different cheeses.

How much milk do I need to make cheese?

Yields depend on the type of cheese that you are making and also the type of milk that you are making the cheese from.

Typically 10 L of cow's milk is needed to make 1 kg of hard cheese.
4 L of milk makes approx. 500 - 700 g of feta or mozzarella (fresh cheese).
2 L of milk will make approx. 500 g of cream cheese.

As you can see it all depends on the type of cheese and how much moisture is left in the cheese. Typically the yield of cheese is higher for sheep's milk and lower for goat's milk. Cow's milk sits in the middle of sheep's and goats milk.

What are the cost savings when making your own cheese?

The main ingredient in cheese is milk. Therefore, the cheaper you can get your milk, the more money you will save when making cheese. If you are in a country where it is legal to purchase raw milk straight from a cow, it is wise to look around your local area and see if there are any farms which are willing to sell you their milk at a cheaper price than at your supermarket.

Otherwise, generally there is greater cost savings with the fresh, soft cheeses. This is because they require less milk to make more cheese (more of the moisture is left in the cheese). In general you can make approx. 500 to 700 g of fresh mozzarella or feta from 4 L of milk. Approx. 2 L of milk is needed to make approx. 500 g of cream cheese and 10 L of milk is needed to make 1 kg of hard cheese.

How can I divide up a culture sachet?

Each sachet is sufficient for approx. 8 – 16 L of milk, depending on the cheese. If you want to divide up the sachet content evenly, simply open the sachet and empty all the contents out onto a piece of tin foil. Use a sterilised credit card or something to divide the culture in half (or whatever division you prefer). Use one half, and wrap the other half tightly in the foil and store in the freezer in a sterile pottle (available from our online store).

Can I use expired cultures?

Culture loses activity over time. You may therefore find you need to use more culture to compensate for the loss of activity. However, the problem with this is that you will have no idea how much extra to add to get the desired amount for the cheese you are making. Because of this, you may find it is easiest to invest in some new culture.

How long do the cultures last out of the freezer?

The Mesophilic culture lasts 10 months at room temperature but will be extended for an additional year when stored in the freezer.

Can I use expired rennet?

Over time rennet loses its activity and you may find that it takes longer for it to set the milk. Adding more rennet to get the milk to set may make the cheese taste bitter. It may therefore be best to invest in some new rennet. The expiry date of the rennet is shown on the packaging.

What is the difference between calf rennet and vegetable rennet?
Calf rennet is made from enzymes taken from a calf's stomach which helped it to digest the mother's milk. Mad Millie Vegetarian Rennet on the other hand is suitable for vegetarians. This is a microbial rennet made from special moulds which are able to coagulate milk.

When should I add calcium chloride to the milk?
If the milk you are using for cheese making has been processed, either through pasteurisation or homogenisation, the calcium content in the milk may have been affected. This may result in a weaker curd than would be the case with using raw milk. Adding calcium chloride can compensate for this loss of calcium in the milk, and help form a stronger, tighter curd.

Do I need to sterilise my butter muslin/cheese cloth?
Yes you should sterilise your butter muslin/cheese cloth. After use, soak it in warm water to get rid of any milk residue and then soak this in water that contains some steriliser. If you want to use your butter muslin/cheese cloth again straight away, just squeeze out any excess water, it does not need to be completely dry before using again (obviously it will have to be dry if not using straight away). Remember to re-sterilise this before use.

What is the best milk for cheese making?
It is best to use unhomogenised milk for cheese making. There are some brands of unhomogenised milk available at supermarkets (i.e. Waitrose), however, you may also like to purchase it directly from local farms. This guarantees you the freshest milk which will result in the highest yield.

Can I use UHT or Ultra Pasteurised milk for cheese making?
You can use UHT milk for simple cheeses that do not contain rennet such as ricotta, quark and yoghurt. It is good to use UHT milk in quark and yoghurt because ultra heat treated milk denatures more proteins than normal milk, which results in a better consistency.

When must I pasteurise my milk?
If you are using raw milk from a farm, you should pasteurise your milk before making your cheese for health safety reasons.

There are two methods of pasteurising milk in order to kill off harmful bacteria:

Method 1) Heat the milk to 68 degrees Celsius (150 degrees Fahrenheit) and hold for 2 minutes.
Method 2) Heat the milk to 63 degrees Celsius (150 degrees Fahrenheit) and hold for 30 minutes.

Can I use homogenised milk for cheese making?
Using homogenised milk is fine, however not ideal. When making cheese from homogenised milk you may experience a softer curd which can be broken very easily. To help firm up this curd it is recommended that you add calcium chloride to your milk (homogenised milk with the addition of calcium chloride can not be used for mozzarella).

Can I make cheese from soy milk?
Soy cheeses can be made from any cheese recipe that does not contain rennet. This includes fresh style cheeses such as quark, ricotta and yoghurt cheese.

Can I use fresh goat's milk to make cheese?
Yes you can use fresh goat's milk to make any of the Mad Millie cheeses. However, goat's milk curds tend to be more delicate so they will need to be handled more gently. When adding rennet to goat's milk you may have to reduce the temperature of the milk to 5 degrees lower than what is stated in your recipe.

Can I use fresh sheep's milk to make cheese?
Yes you can use fresh sheep's milk to make any of the Mad Millie cheeses. However, when using sheep's milk for cheese making you will need to use about 3-5 times less rennet than stated in your recipe. You should also cut the curd into larger cubes to prevent the cheese from becoming too dry.

How can I keep the humidity up when maturing cheeses?

This can be difficult, especially if you are maturing cheeses in a large fridge which can dry the cheese out. For the small scale cheese maker, the best way to keep up the humidity is by using a Mad Millie Maturing Box. These are air tight containers with a rack at the bottom that ensure the humidity stays high while allowing air to circulate around the cheese while it matures.

How do I keep my cheese at the correct temperature while it is maturing?
The temperatures that are stated in the Mad Millie recipes are very much approximate measurements. Approximately what the temperature the recipe states is fine. If you have a spare fridge in which you can change the temperature you can use this or even in your garage or basement. If you find that mould does not start to grow try putting it in a slightly warmer place.

Can I use herbs to flavour my cheese or will this affect the ageing process?
Yes you can add herbs to your cheese and it will not affect the ageing process. However, if you are ageing your cheese, we recommend that you use dried herbs. Fresh herbs may be carrying harmful microbes that grow in your cheese as it ages.

Is it possible to make smaller/larger quantities of the cheeses?
Yes, you can halve or double the quantities of ingredients in each recipe to suit. However, if you want to make half of the recipe of mozzarella, use the same amount of rennet as you would for 4 L of milk, otherwise you may find that your milk will not set.

Why is my milk not setting?
There are number of reasons why your milk has not set, here are some reasons:

1. Too little rennet was used.
2. Your Rennet is expired or has deteriorated due to incorrect storing conditions.
3. Your thermometer is faulty; milk temperature is too low or too high.
4. Rennet activity was destroyed by diluting the rennet with warm water or with chlorinated water - use non-chlorinated, cool water.

Why is my cheese excessively dry?
There are a number of reasons why this is the case. Some of the reasons are:

1. An insufficient amount of rennet was added.
2. The curd was cut into cubes that were too small.
3. The curd was overly agitated.

Why is my cheese becoming oily when air drying?
One reason is that your cheese is being air dried at too high a temperature. Move your cheese to a cooler room; the temperature should not exceed 18 degrees Celsius (65 degrees Fahrenheit). Another reason may be that you stirred your curd too vigorously; the curd needs to be handled very gently.

Can I contact other Mad Millie cheese makers?
Yes we have both a Twitter and Facebook page so you can communicate with other cheese makers.

Can I make organic cheese?
Cheese is mainly milk with only a very tiny amount of culture and rennet. If you use organic milk, you will be able to make organic cheese.

Can I use low fat milk for making cheese?
In most recipes you can also use a low fat milk, however, you will get less yield and the texture of your cheese may be slightly drier and more crumby. If you are using un-homogenised milk, you can reduce some of the fat by simply skimming off the cream which sits on the surface of the milk.

Italian Kit related:
How do I store my mozzarella?
To stop your mozzarella from going slimy, you can put it in 500 ml of whey and a 1/4 tsp of citric acid. You can

also store it in the freezer or in an airtight container in the fridge.

Why is my mozzarella hard?
This can happen when the mozzarella is stretched too much. Try and stretch your mozzarella as little as possible and then form into a ball. It is a good idea to see the mozzarella making video on YouTube to learn the best techniques for stretching the curd.

Why am I not achieving a stretchy curd?
After you have cut the curd and are heating the curd back up to 42 degrees Celsius (100 degrees Fahrenheit), what you want to achieve is a springy curd. Make sure the heat is very low and if by the time it gets to 42 degrees Celsius (100 degrees Fahrenheit) the curds are still very soft and look like they will disintegrate, take off the heat until the curds are springy to touch and look a little shiny. They will not hold the shape of a cube, but will almost form one mass in the pot.
How do I store my ricotta salata during the ageing process?
Store on a sterile rack in the fridge. Make sure it is kept away from other food. You may like to cover it with a food mesh cloth or something similar