

Camp Cheese

as taught by
Hildegard filia Vulframn



The Ricotta Eaters, Vincenzo Campi, 1585

General Cheese History

Ah, cheese! A food from the Gods. Literally.

The Greek god Aristaïos, a son of Apollo, was the Greek god of cheese. Homer talked of cheese in the *Odyssey*. Greek historian Xenophon, born in 431 B.C., wrote about a goat cheese that had been around for centuries. Yes, cheese has been around for almost as long as man.

It came in to being in the mists of time. Many stories exist about the creation of cheese. The most famous of which is about a nomad who put his noontime ration of milk into a container made of a sheep bladder and hung it on his horse/camel. At lunch time he discovered that his milk had turned into a solid mass of curds. Being a daring kind of guy, he tried it and from that moment cheese was born. No one can give definitive proof of where cheese was created. We just know it came into being sometime before anyone thought to write it down.

Milk, Chemistry, Good Food

How does milk become cheese? Chemistry! Milk is a combination of water, fats, milk sugars, called lactose, and milk proteins, called casein. The proteins of casein, are what lump together to form the curds when the right conditions are created. The liquid that is left when the protein lumps together is called whey.

When we make cheese, we control the environment as best we can, to control the results. If milk is left out on the heat, it will naturally spoil and begin the curdling process. If left to its own devices, the milk usually turns in to a nasty, smelly mess that is highly acidic. This happens because of the naturally occurring bacteria in the area. Bacteria are what cause the milk sugars to convert into lactic acid. When the acidity of the milk increases, it causes the milk proteins to form into curds. These are the conditions we are artificially creating by adding vinegar or lemon juice to the milk.

Varieties of Milk and How to Handle Them

When I make cheese, I purchase cow's milk from Walmart for around \$2 a gallon. You can use milk from whatever source you can find. Milk from any mammal can be used to make cheese, such as goat, sheep, camel, mare, or water buffalo. If you are lucky enough to be able to get milk fresh from the animal, you must be absolutely sure the animal is disease free. If you cannot be 100% sure about the animal's health, the milk needs to be pasteurized. To pasteurize, heat the milk to 165 degrees Fahrenheit and hold it there for 20 minutes, then rapidly cool it to refrigerator temperature and store chilled until ready to use for cheese. This will kill all the bacteria present in the milk. Yes, it kills the good ones too, but better to be safe than sorry. Food borne illness is very "period" but not something we want to re-create in my opinion. Did you know that tuberculosis can be spread through unpasteurized milk?

Period Recipe for Fresh Cheese

In The Closet of Sir Kenelm Digby Knight Opened, there is a recipe for fresh cheese. It is titled The Cream-Courds. This recipe is the beginnings of just about any type of fresh cheese.

THE CREAM COURDS

Strain your Whey, and set it on the fire: make a clear and gentle fire under the kettle: as they rise, put in whey, so continuing, till they are ready to skim. Then take your skimmer, and put them on the bottom of a hair-seive: so let them drain till they are cold. Then take them off, and put them into a bason, and beat them with three or four spoonfuls of Cream and Sugar.

As an experiment, I have made this cheese. It is tasty. Kind of like a sweet cottage cheese.

Simple Camp Cheese

Ingredients and Equipment

Needed Equipment:

Pot large enough to hold 1 gallon of milk

Large Spoon

Colander/Strainer

Cheesecloth

Small Container with lid

Ingredients:

Milk - 1 gallon

Non iodized Salt 1 tsp.

Vinegar - 1/2 cup approx.

Optional Equipment:

Cooking Thermometer

Ingredients to make it yummy:

Herbs/Spices of your choice.

Simple Camp Cheese

Instructions

When making cheese, sanitation is key. To get consistent results, sterilize all your equipment before each use. There are many ways to do this. One is to boil everything for 10 minutes. Another is to soak everything except the cheese cloth in iodine for 10 minutes. There are a few others. Choose your favorite. Whatever you choose, allow all surfaces to dry before using the equipment. You could kill the “good” bacteria you are trying to use to make the cheese!

That being said, WE ARE IN THE FIELD! You are not going to be able to get things as institutionally clean as you can at home. Fresh cheese is much more forgiving than hard cheese in that it will still curdle most of the time in less than operating room conditions.

Pour the gallon of milk into the pot over medium-low heat. At this point, if you are the type, you would insert the thermometer and monitor the temperature until you reach between 180-195 degrees. Hildegard would not have had a thermometer in her medieval kitchen and we will learn how to tell when the temperature is just right by observing the surface of the milk in the pot. We don't want the milk to boil. Boiled milk is only good for making bread or hot chocolate. A slight steaming rising from the surface is what we are looking for. This should take at least 10-15 minutes depending on the temperature of the milk when we started. Stir every once in a while, but not constantly.

While the milk is heating, prepare your curdling agent. The juice of two lemons should be sufficient to curdle a gallon of milk. A half cup of vinegar will do the trick also. Anything that contains acid may be used as a coagulant. My favorite curdling agent is verjuice. It adds just the right amount of tang. It is expensive though. Please remember that the acid you choose to use will affect the taste of the final cheese. If you use lemon juice, the cheese will have a slight lemon flavor. If you use vinegar, there will be a sharper tang.

At this time we should also prepare our straining device. I find that the whole process goes more smoothly if the cheesecloth is wet when the curds are poured into it. Just get it wet and wring it out. Drape the cheesecloth across the strainer so the edges are hanging over the sides.

When the milk begins steaming, turn the heat to low and pour the vinegar in while

gently stirring. Once the vinegar, or other acid, has been well stirred into the milk, put the spoon down and step away from the pot. Just watch it for a few minutes. There should be some curdling. As the temperature rises, the curdling will increase. Once you see this happening, start to very gently stir the milk. When the right balance between acid and heat is achieved, the milk proteins will clump together rapidly. The liquid that is left will be a greenish yellow.. This is the whey.

If you like, you can stop here and you would have curds and whey, just like Little Miss Muffet.

However, we are making cheese. Gently pour the curds into the cheesecloth lined strainer and let the whey drain out. Pull up the cheesecloth by its four corners, and tie it into a small bag, like a hobo sack. Hang this bag over a container of some kind to catch the whey. Let it hang until it reaches the consistency you like. Less draining time will make a more moist, spreadable cheese, longer draining will result in a drier cheese which will keep a little longer.

When the cheese has finished draining to your liking, untie the knot and scrape the cheese into a sealable container.

Now comes another fun part! Add a small amount of salt. If you don't add salt, the cheese will not have much flavor. After you have added salt to your liking, you can add herbs, spices, sugar, and/or fruit or veggies of your choice! Any combination is good as long as you will eat it. If you can wait, put the lid on and let it sit overnight in the refrigerator, or cooler, to let the flavors meld. If you can't, just spread it on whatever you like and enjoy!

You could also take the fresh cheese you have just made and put it under pressure for a few hours to press out more of the moisture. This will compress the curds and give you a soft but cutable cheese. This is yummy with crackers too.

This kind of cheese does not melt well. It kind of melts in the microwave.

Places to look for more information:

www.florilegium.org/files/FOOD/cheese-msg.html

<http://www.cheesemaking.com>

Home Cheese Making by Ricki Carroll, Storey Publishing 2002

<http://www.goodecookery.com>

The World of Cheese by Evan Jones, Knopf Publishing Inc. 1976

On Food and Cooking: The Science and Lore of the Kitchen by Harold McGee, Simon and Schuster 2004

The Closet if Sir Kenelm Digby Opened, available for free download at <http://www.gutenberg.org>