

*“May he fill your lap with emmer while I sweeten miniature cheeses for you,
those cheeses that are the healer of mankind”
— an ancient Sumerian lullaby*



Die Landleut
Heluetiæ habed dreyerley gewerb/etlich den Acker-
bauw/ vnd das ist der grösste teil: die anderen bau-
wend den weyn: die dritten / deren auch gar vil ist/
vmb alle gebirg erneerend sich allein des vuchs/des
sy so vil habend / das nit die weyber allein / sonder
starcke menner vnd knecht die kÿ melckend/kÿß vñ
ziger machend. Die werdend genennet Semmen / ire
wohnungen vnd werckstatt Senhütten/2c. Her am
der mertheil kÿß vñ schmalz zubereitet werdéd/dar
zü kein frauwen hand kumpt/2c.

EASY CHEESE MAKING

ACID-COAGULATED SOFT CHEESES
IN YOUR OWN KITCHEN

Wendi Dunlap

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Easy Cheese Making

You don't need fancy equipment

If you've thought about making cheese before, you probably thought that it would require fancy equipment, special ingredients, lots of work, and lots of time to age the cheese. All of those things can be used to make cheese, but the truth is, anyone can make a very simple cheese with nothing but milk, vinegar or lemon juice, a piece of cloth, and a few utensils that everyone has around the house.

A 30-second introduction

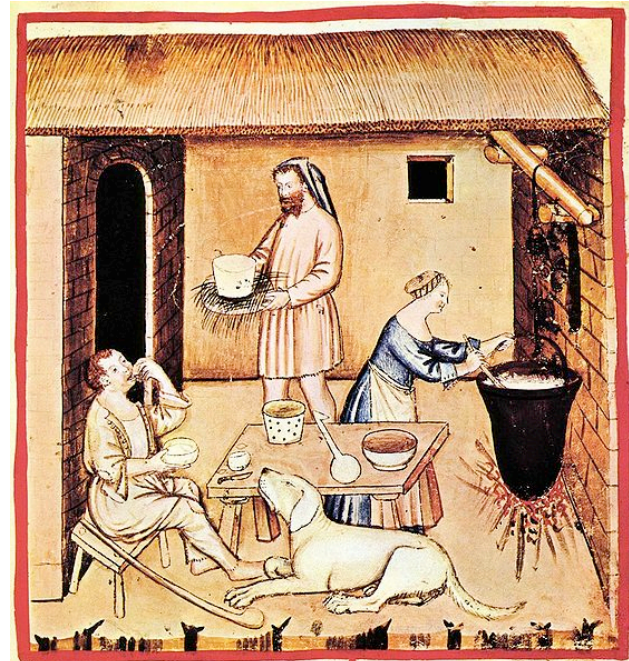
According to Ricki Carroll in *Home Cheese Making*, cheese is one of the oldest foods made that is still eaten by people, and dates back to the earliest domestication of animals, in at least 9000 B.C.E. The Sumerians, 5,000 years later, mentioned cheese in cuneiform tablets. (They also had beer. They were a civilized people.)¹²

Cheese is basically what happens when acid (either produced by bacteria or specifically added to the mix) and/or rennet act on milk to cause the milk fat and protein to separate from the liquid whey, leaving a solid substance that we call cheese.³ It bears some similarities to making butter; when churning butter, you also start with some amount of milk, and end up with a thick substance of fat (the butter) separated from the remaining liquid (in this case, buttermilk). The method and result, however, are different from those used in making cheese.

Cheese is one way to keep milk and its nutritional value around for a relatively long time. Milk itself would sour quickly without refrigeration, so making cheese (or butter) from the milk made it possible to make use of the milk's nutritional value over a longer period.

Soft cheese, hard cheese, fresh cheese, aged cheese

Cheese comes in many types, with many preparations. Most modern cheeses are made by using a starter culture to begin acidification, followed by rennet to curdle the milk. Rennet is a substance that contains enzymes which separate the milk into curds and whey. Animal rennet is made from part of a calf's stomach, but vegetarians, have no fear



¹ Carroll, p. 2.

² Dalby,, p. 216.

³ Conrad.

— vegetable rennet is also available, as is kosher rennet.⁴ Some cheeses, however, do not use rennet, and are simply curdled by a combination of heat and added acid, such as vinegar or lemon juice.⁵

Once the cheese has curdled, the following steps vary depending on the type of cheese that is being made. A soft, fresh cheese might be drained at this point, and eaten immediately. A hard cheese might be heated further to remove moisture, pressed into a mold, and then aged to develop a characteristic intense flavor. Some cheeses are stretched (such as mozzarella), washed (in water or more interesting beverages such as porter or stout), or inoculated with molds to give additional flavor.

Cheeses may also vary in the type of milk used; cows' milk is common, but the milk of sheep and goats is also found.

The cheese we'll be making in this workshop is a soft, fresh cheese, made from cows' milk, and using *no* rennet. It is essentially the same as *paneer* in Indian cuisine, or the Mexican *queso fresco*.

In days gone by

Cheese made by combining heated milk with acid is a very old recipe. In the seventh century C.E., Cassianus Bassus wrote a recipe for *Melca*, or curds:

*"The best method for making what are known as curds is to pour sharp vinegar into new earthenware pots and then to put these pots on a slow fire. When the vinegar begins to boil, take it off the flame so it does not bubble over and pour milk into the pots. Place the pots in a store or some other place where they will not be disturbed. The next day you will have curds that are much better than those made with a great deal of fuss."*⁶

Recipes using vinegar, alcohol, or citrus to curdle milk may be found later in medieval and Renaissance recipes. Examples include recipes for possets of milk curdled with ale, then seasoned with honey and spices or rosewater. Most of the medieval recipes season the cheese with spices or herbs⁷. A slightly later recipe from 1653 is of this type, and, like many other medieval curd dishes, includes egg whites:

"To make a fresh Cheese

*Take a pint of fresh cream set it on the fire, then take the white of six eggs, beat them very well, and wring in the juyce of a good Lemon into the whites, when the cream seeths up, put in the whites, and stir it about till it be turned, and then take it off, and put it into the cheesecloth, and let the whay be drawn from it, then take the curd and pound it in a Stone mortar with a little Rose water and Sugar, then put it into an earthen Cullender, and so let it stand till you send it to table, then put it into a dish, and put a little sweet cream to it, and so serve it in."*⁸

⁴ Carroll, p. 16-18.

⁵ Mendelson, pp. 68, 106. Mendelson calls acid + heat cheeses such as *paneer* and *queso fresco* "non-cheese cheeses," but most people don't have a problem calling them cheese.

⁶ Grant, p. 76.

⁷ "14th to 15th Century Soft Cheese", by an unknown author, collects several of these recipes.

⁸ *A True Gentlewomans Delight*, collected in *A Booke of Gode Cookery: 17th Century English Recipes*, <http://www.godecookery.com/engrec/engrec75.html>

The recipe

Ingredients:

- 1/2 gallon whole milk—*not Ultra-Pasteurized!* Regular pasteurized is fine. Check the label! In Western Washington, Smith Brothers milk works well, as do the milks from smaller dairies such as Twin Brook.
- 1/8 cup of either vinegar or lemon juice.

Equipment:

- Large saucepan
- Piece of clean muslin, at least a couple of feet long, and some string or twine to tie it with
- Large bowl to drain whey into; optionally, a colander or strainer
- Instant-read thermometer (optional once you've gained some experience with this)

Pour your milk into the saucepan. Heat it to 190 degrees Fahrenheit, stirring frequently to prevent scorching.

When the milk reaches 190F, remove it from the heat and slowly add the vinegar or lemon juice until you see the curds and whey begin to separate. Then let the curds and whey sit for about 10 minutes.

After the 10 minutes are up, lay the muslin across the top of a bowl (sometimes using an additional colander at this point to sit on the bowl and hold your muslin makes it easier to handle) and pour the curds and whey into the muslin. The whey will run through the muslin and the colander, into the bowl. The whey should be yellow (see Figure 1). If the whey is white, it means you have not extracted enough of the milk solids from the whey, and you won't get much cheese. Reheat the whey, add more vinegar or lemon, and try again.

Pull the corners of the muslin together, tie it closed into a bag, and hang the bag of cheese to drain (Figure 1). Optionally, you can press the cheese instead, by placing the bag under weights such as a flat plate weighted by soup cans or bricks. If you do this, make sure the whey that is pressed out has somewhere to drain to.

Leave the cheese to drain until the texture is as you like it. If you want it more creamy, you will drain it for a shorter time; if a more dry and crumbly cheese is preferred, for a longer time. Be aware that this cheese does not keep for a terribly long time; also, unlike most cheeses, it does not melt.



Figure 1: Draining the cheese



Figure 2: Drained cheese



Figure 3: Fresh cheese!

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