

14th to 15th Century Soft Cheese

Many of us have fond memories of the little red headed girl who said “I didn’t leave him cookies, I left him cheese.” And it is not just in modern times that cheese has had a powerful influence. Emperor Charlemagne, when having tried his first taste of brie commended the bishop who served it to him and then demanded two cartloads of it to be delivered to him a year for taxes (Tannahill). Behold the [buying] power of cheese! The entered cheese represents the entrant’s experimentation with cheese making and the redaction of a producible recipe for medieval style cheese.

History of Cheese – Cheese is a wonderful staple food, high in fat, protein and calcium; it is a part of everyday life for most people. It is believed that cheese making started around the time of the domestication of sheep approximately 8000 to 3000 BCE (Tannahill, Wilson). Folklore tells of a tale of a nomad carrying milk across the desert in a sack made from an animal stomach and when he stopped for a drink he found that the milk had separated into curds¹ and whey². (Matterer) The first archeological evidence of cheese making is on Egyptian tombs from 2300 BCE with the knowledge spreading through the Mediterranean over time and then flourishing with Rome. Roman writer, Columella, in his treatise *De Re Rustica*, wrote much on cheese making, including the use of rennet³ to separate the curds and whey (Matterer). Cheese production in Europe probably began with the Roman occupation and continued to modern

¹ Curds -the thick casein-rich part of coagulated milk (M-W)

² Whey - the watery part of milk that is separated from the coagulable part or curd especially in the process of making cheese and that is rich in lactose, minerals, and vitamins and contains lactalbumin and traces of fat (M-W)

³ Rennet - the lining membrane of a stomach or one of its compartments (as the fourth of a ruminant) used for curdling milk (M-W)

day from early spring to early fall following the lactation of the milch⁴ cows. Wilson comments that the most flavorful and sought after cheeses were those that were made at the end of the season since they were high in solids and fat and produced strongly textured cheeses; this was the time of year when soft cheese was at its best.

Modern Process of Making Soft Cheese – With the addition of modern technology to make standardized cultures and starters the making of soft cheese is pretty basic. The guesswork of amounts of ingredients and the volume of product produced are consistent. Most of the modern soft cheese recipes follow a process similar to: heat milk, add starter culture, add diluted rennet, separate curds and whey by draining and pressing, salt & herb the cheese (if desired) and serve (Carroll). The starter causes the ripening process where milk sugar is converted to lactic acid. The increase in the acid aids the separation of curds and whey. The rennet causes the protein portion of the milk to precipitate out of solution. This precipitate is the curds which are then pressed to finish the separation (Brown). Modern conveniences of gas or electric stoves for heating, stainless steel pots for cooking, digital probe thermometers for accuracy and milk available by the gallon at the grocery do make this process even easier for the amateur to attempt.

Medieval Process of Making Soft Cheese – The medieval process is not really that different from the modern process except that bacterial cultures/rennets were not available from your local grocer, well, they were but not in the form we see in modern cheese making. Plus they would have used fire for heating, copper kettles for cooking, finger tests for temperature and milk from their own animal.

⁴ Milch - Old English *melcan* to milk (M-W)

The medieval process follows this pattern: leave milk out to sit over night to sour, heat soured milk, add ale or vinegar, add cheese/cream from previous day, separate curds and whey by draining and/or pressing, salt & herb the cheese (if desired) and serve. By adding ale or vinegar the milk is being further ripened by increasing the acid content. The use of cream or cheese from a previous day adds in the local bacteria cultures needed to further the coagulation of the curds since at some point rennet would have been used to start the first batch of cheese.

Recreation of Period Soft Cheese or Experimentations #1-5 – The entrant started out making a Neufchâtel, which is a style of farmer's cheese that comes from the town of Neufchâtel, France. This style of cheese is purported to be from approximately 1543 (Stradley). The recipe was modern and followed the modern steps from above (see the recipe section). This first experiment was under taken to see how the process of cheese making worked, since this was the entrant's first time attempting cheese and to help the entrant proof out other recipe's processes. The milk and heavy cream were heated to 80°F using a hot water bath and then starter and rennet were added. The mixture was kept at about 72°F for 12hours while the curds formed. The curds were then moved to yard square sheet of normal sewing muslin and let drain for 12 hours. This is where the difference between sewing muslin and butter muslin became very apparent. The whey drained very slowly since the weave was too tight and it was very hard to hang the bundle, though this was accomplished by using a bungee cord attached to the cabinet above the kitchen sink.

After the curds had drained the bag was placed in a colander over a pot with a plate placed atop the bag. A few cans of soup were placed on the plate for weight (approx 3-1/2 pounds) and was refrigerated for at least 12 hours. The

intense process made the entrant research and purchase real butter muslin from Ms. Carroll's website⁵ so that the next experiments were using the correct equipment. Following the medieval practices the batch was herbed with powdered ginger. Taste tests, with the entrant's mundane co-workers, gaming group and a few folks in the SCA, showed that many liked the smooth texture and most enjoyed the ginger though they felt that a balance with honey would make the flavor even better. The honey had been omitted during experiment #1 since research had not been done on the type of honey that was used during the time.

Experiment #2, the Queso Blanco recipe (see recipe section), followed a modern but completely plausible for a medieval recipe where one gallon of milk was heated and ¼ cup of apple cider vinegar was added. The trying of this recipe was to test the use of other means than modern rennets/starters, to curdle the milk and it tested the use of direct heating of the milk versus a hot water bath. The curds formed almost immediately upon the vinegar being added and the cheese was ready for tasting within a few hours. The entrant used the butter muslin and the draining of the curds and whey was much easier with the correct amount of yardage (2 yards square versus the 1 yard used in experiment #1) and consistency of weave. This batch was flavored with honey and powdered ginger as were all of the medieval recipes. Unfortunately, or fortunately, the entrant forgot to salt the cheese and that did have a large impact on the flavor. The taste testers again liked the result but most liked the consistency of experiment #1 better than experiment #2 since #2 had a very grainy texture. It was so grainy, that it would not spread nicely on a cracker. The entrant believed that since the milk did not have the extra fat from the heavy cream as used in #1 then the

⁵ New England Cheese Making Supply www.cheesemaking.com

cheese came out crumbly and that more fat was the key to getting a smother texture in the cheese.

Next was a try at a medieval recipe. Experiments #3 and #4 involved a period recipe which called for ale⁶ to curdle the milk:

Harleian MS. 279 Potage Dyvers (Anderson, Renfrow)

A pottage on fishday. Take and Make a stiff Posset of Milk and Ale' then take & draw the curds through a strainer with white Sweet Wine, or else Rochelle Wine, & make it somewhat running and somewhat standing, & put Sugar and a good quantity thereto, or honey, but not too much; then heat a little, & serve it forth all about in the dishes; and strew on Cinnamon, & Ginger, and if [though] have White powder, strew on and keep it as white a[s] it maybe, & then serve f[orth]

Renfrow's redaction of the cheese making portion of *Pottage Dyvers* seemed the easiest and most sanitary (no raw eggs involved) of the recipes to try. She comments that the yield is low and the entrant was not surprised by the results. Her redaction is:

1 Cup Milk
½ Cup Ale
2 Tablespoons white wine or sherry
½ teaspoon sugar or honey
Dash of Cinnamon powder
Dash of Ginger Powder
Optional: dash White Powder (Cinnamon, ginger, nutmeg and sugar mix)
Scald Milk in 2-quart pot over medium-high heat. Add the all at once. Heat until the mixture rises up. Do not stir it. Remove the pot from the heat and allow it to cool completely. (*Optional:* adding a few drops of vinegar will make the curd form more quickly. Strain Mixture thought cheesecloth to gather the curds. Discard the liquid. Strain the curds through a strainer into a small pot with the sweet wine or sherry. Add sugar. Heat until warm

⁶ Ale – Beer brewed with spices (gruet) but not with hops.

and pour into a serving dish. Garnish with cinnamon and ginger powder. Yield 1/4 cup.

The milk did curdle quite quickly with the ale but it did not produce very much curd. This was expected considering Renfrow's commentary and that ale is not a very acidic compound compared to vinegar. Even when experiment #4 was left over night to sit it did not produce any more cheese than #3 which was strained just after curdling. The flavors of the cheese were intensely ale flavored which is not surprising and the male contingents of the taste testers thought it was lovely but it was not what any of us thought of when we thought "fresh cheese." Thus the experimentation continued with experiment #5.

Experiment #5 combined the elements that were learned from the previous experiments. The entrant and taste testers all like the consistency of the Neufchâtel cheese and they liked the flavor of the vinegar-ripened cheese. The ale cheese was very disappointing in yield but interesting in taste and all of the medieval recipes used ginger and honey to flavor the batch. So, how to make the best of all of the findings? The created recipe goes as follows:

Soft Cheese Redaction

1 Gallon Whole Pasteurized Milk	2 tsp. of Kosher Salt
1 pint Heavy Pasteurized Cream	2 Tbsp. of Powdered Ginger
1/4 to 1/3 cup Apple Cider Vinegar	2 Tbsp. of Orange Blossom Honey

1. Heat Milk and cream in a large non-reactive pot, stirring frequently until the mixture reaches 190 °F, turn off heat.
2. Slowly add vinegar to heated mixture only stirring the top inch of the mixture. This helps with curd formation. Also, only use as much vinegar as makes the curds form well; this is a trial and error and dependent on age of milk and the vinegar.
3. Let sit a 5 minutes once precipitation has started.

4. Pour curds and whey into a butter muslin lined colander
5. Tie the corners of the muslin together and hang to drain for 2-3 hours.
6. Place muslin bag in a colander over a pot, place plate on top of bag and place a few cans of soup for weight (approx 3-1/2 pounds), refrigerate for at least 12 hours.
7. Put cheese in large bowl and add salt, ginger and honey.
8. Mix with hands (vinyl gloves make this easy) until everything is mixed well.
9. Separate the batch into three and make small paddies. (Yields 1.5 to 2 pounds)
10. Wrap paddies in Wax paper and then in plastic wrap and store in fridge for up to 2 weeks.

The result was exactly what was hoped for in the start of the experiment: a soft, flavorful cheese. The few taste tasters that tasted the final batch all agreed that the flavor was well balanced and the texture much more to their liking than Experiment #2.

In this recreation of cheese the entrant researched medieval and modern recipes and was able to see how the processes over the centuries have not changed much except for the use of modern technology (starters, rennets and cooking equipment). Taking the elements from the medieval recipes and applying the science of the modern age the entrant was able to redact a plausible medieval recipe were the curdling of the milk was set by vinegar, a common item in the medieval recipes and in the medieval home. It could have been brewed in house or purchased from the brewers/vintners guilds of the time. The process was simple and not labor intensive (quantity wise) as cheese in the dairies probably have been and it is completely plausible that this type of cheese would have been made in the home.

Please enjoy the cheese plain or on a cracker and take a recipe card if you have a desire to make your own.

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Medieval Recipes

Harleian MS. 279 Potage Dyvers (Anderson, Renfrow)

A pottage on fishday. Take and Make a stiff Posset of Milk and Ale' then take & draw the curds through a strainer with white Sweet Wine, or else Rochelle Wine, & make it somewhat running and somewhat standing, & put Sugar and a good quantity thereto, or honey, but not too much; then heat a little, & serve it forth all about in the dishes; and strew on Cinnamon, & Ginger, and if [though] have White powder, strew on and keep it as white a[s] it maybe, & then serve f[orth].

Redaction from Renfrow:

1 Cup Milk

Dash of Cinnamon powder

½ Cup Ale

Dash of Ginger Powder

2 Tablespoons white wine or sherry

Optional: dash White Powder (Cinnamon, ginger, nutmeg and sugar mix)

½ teaspoon sugar or honey

Scald Milk in 2-quart pot over medium-high heat. Add the all at once. Heat until the mixture rises up. Do not stir it. Remove the pot from the heat and allow it to cool completely. (*Optional:* adding a few drops of vinegar will make the curd form more quickly. Strain Mixture through cheesecloth to gather the curds. Discard the liquid. Strain the curds through a strainer into a small pot with the sweet wine or sherry. Add sugar. Heat until warm and pour into a serving dish. Garnish with cinnamon and ginger powder. Yield 1/4 cup.

Harleian MS. 279 – Leche Vyaundez (Rendrow)

Take cow Mylke, & set it ouer þe fyre, & þrow þer-on Suanderys, & make a styf poshotte of Ale; þan hange þe corddys þer-of in a pynne, in a fayre cloþe, and lat it ourer-renne; þan take it and put hony þer-to, & melle it y-fere; þen feche þe coddys of þe deye and melle hem to gederys, & lay it on a chesefatte or it be torne, fold, in linen coþe & salt it & leche it; and þanne serue it forth.

Redaction from Renfrow

Take cow's milk and set it over the fire and throw there-on sandalwood and make a stiff posset of ale; then hang the curds there-of on a pin, in a fair cloth and let it run over, then take it and & put honey thereto and mix it together; then fetch the curds of the dairy maid and mix them together, and lay in a cheese press before it is turned, three fold or four fold, in linen cloth, salt it and cut it and serve it forth.

Good Housewife's Jewell - To Mark Fresh Cheese and Cream (Dawson)

Take a gallon of milk from the cow, and seethe it, and when it doth seethe put thereunto a quart or tow of morning milk in fair cleansing pans, in such a place as no dust may fall therein. This is for your clotted cream. The next morning take a quart of morning milk, and seethe it, and put in a quart of cream thereunto, and when it doth seethe, take it off the fire. Put it in a fair earthen pan, and let it stand until it be somewhat blood warm. But first over night put a good quantity of ginger, with rose water, and stir it together. Let it settle all night. The next day put it into your said blood warm milk to make your cheese come. Then put the curds in a fair cloth, with a little good rose water, fine powder of ginger and a little sugar. So lash great soft rolls together with a thread and crush out the whey with your clotted cream. Mix it with fine powder of ginger, and sugar, and so sprinkle it with rose water, and put your cheese in a fair dish. And put these clots round about it. Then take a pint of raw milk or cream and put it in a pot, and all to shake it until it be gathered into a froth like snow. And ever as it cometh, take it off with a spoon and put it into a colander. The put it upon your fresh cheese and prick it with wagers and so serve it.

A Fifteenth Century Cookry Boke(Anderson)

Let Lory

Take Mylke, an sette it ouer þe fyre; take Salt and Safroun, and cast þer-to; take Eyroun, þe 3olke and þe Whyte y-strained a lyte, & caste it þer-to; whan þe Mulke his scalding hote, cast þe stuff þer-to, an þenne stere yt tyll it crodde; and 3if þou wolt haue it a-forsyd with ly3t coste, Teke Myulke , & make it skaldying hot & cast þer-to Raw 3olkes of Eyrouns, Sugre, pouder Gyngere, Clowes, Maces, an let not fully boyle; & so hote, dress it forth an ley it on þe crodde.

14th-15th Century Soft Cheese
Modern Recipes

Home Cheese Making

Neufchâtel

1 Gallon Pasteurized Whole Milk

1 Pint Pasteurized Heavy Cream

1 Packet Direct-Set Mesophilic Starter

3 Drops Liquid Rennet, diluted in 1/3 cup cool, un-chlorinated water

Salt and Herbs to Taste

1. Combine the milk and cream, heat to 80°F by water bath method.
2. Add starter and mix thoroughly.
3. Add 1 teaspoon of the diluted rennet. Stir gently with an up and down motion.
4. Cover and let mixture set at a room temperature of at least 72°F for 12-18 hours, or until a thick curd has formed.
5. Pour the curd into a colander lined with butter muslin. Tie the corners into a knot and hang the bag to drain for 6-12 hours.
6. Put bag into colander lined with butter muslin and place the colander in a pot. Put a plate on the bag and place weight on plate. Cover pot and refrigerate for 13 hours.
7. Remove the cheese from the bag and put it in a bowl. Add salt and herbs to taste and mix thoroughly. Knead the cheese briefly by hand until it holds together, then divide into four rounds.
8. Shape into patties and wrap each one separately in cheese wrap.

Queso Blanco

1 Gallon Pasteurized Whole Milk

¼ Cup Vinegar (apple cider)

1. In a large pot, directly heat the milk to between 185° and 190°F, stirring often to prevent scorching.
2. Slowly add the vinegar, a little at a time, until the curds separate from the whey.
3. Pour the curds and whey into a colander lined with butter muslin. Tie the corners of the muslin into a knot and hang the bag to drain for several hours.
4. Remove the cheese from the muslin and store in a covered container.