

Butter Cheese

Make notes by Danbo February 11 2015

24 liters	Pasteurized organic milk (3,5%)
3 liters	Cold boiled water
1 g	Lysozyme powder Optional - can prevent late blowing
1,5 g (3,75 ml)	Thermophilic culture: 1,3 g Choozit TA60 0,2 g Choozit LH100
5 ml	Calcium Chloride 30%
6 ml-9ml	Bioren Classic liquid calf rennet Amount depending on milk, rennet age etc.
5 liters	20% brine
1	20 cm mould Cheese wax or vacuum bag

09:00 (PH 6,70)

Start heating milk slowly to 39°C.

Add diluted Lysozyme (optional). Measure culture.

10:20 (PH 6,69)

Milk is now 39°C - maintain this temperature.

Sprinkle culture over milk.

Let it rehydrate for 5 minutes.

Mix in the culture for 2 minutes using a skimmer.

10:27

Let the milk ripen for 45 minutes.

11:05

Measure calcium chloride and mix with a glass of water.

Measure Rennet and mix with another glass of water.

11:12 (PH 6,64)

Mix calcium chloride with milk for 2 minutes.

Mix rennet with milk for 1 minute.

11:15

Start the flocculation test by placing a bowl on the milk surface and start the timer.

Note the floc. time when the bowl doesn't move freely anymore (and keep the timer running).

Calculate the time to cut:

Floc. time: 10,5 mins

Floc. factor: 3,5

Time to cut: 37 mins (goal coagulation time is 45 minutes)

11:52

Cut the curds in 1-1,5 cm cubes (if there is a clean break).

Rest for 10 mins.

11:55

Prepare 4 liters of 65°C water by mixing some boiling water with some cool boiled water.

12:05

Stir slowly for 10 mins.

12:15 (PH 6,49)

Rest for 5 mins.

12:20

Remove 4 liters of whey.

Pour in the 4 liters of 65°C water (over 2 mins.). Whey temperature will be 40-41°C.

Stir at medium speed for 10 mins.

12:32 (PH 6,52)

Rest for 10 mins.

12:42

Pour 2 liters of whey over mould, follower and cheese cloth to warm, lubricate and remove any chemical cleaner residues.

12:44

Drain the whey and put the curd in the mould. Press with hands to make it fit.

12:50

First press 30 mins. at 1 psi (50 kg for a 20 cm diameter mould)*.

13:30 (PH 5,97)

Second press 30 mins. at 2 psi (100 kg for a 20 cm diameter mould) *.

14:10 (PH 5,55)

Third press 1 hour at 4 psi (200 kg for a 20 cm diameter mould) *.

15:15

Fourth press 3,5 hours at 7 psi (350 kg for a 20 cm diameter mould) *. Cheese cloth can be omitted the last 30 minutes of this press to remove cheese cloth marks.

18:50 (PH 5,35)

Place cheese in 20% brine for 9 hours for this size of cheese (sprinkle some salt over the cheese).

04:00

Flip cheese in brine and leave it there for another 9 hours for this size of cheese (sprinkle some salt over the cheese).

13:00

Remove the cheese from the brine.

Let the cheese dry for 2-4 days in cave or at room temperature until surface is dry.

Wax the cheese or vacuum pack.

Age the cheese at 13°C for 1 month. If sign of water under vacuum plastic take the cheese out to dry a day or two and repack.

*** IMPORTANT!**

Next time I will use less pressing force – perhaps 1/3 the weights above:

Pressing schedule	Force	8" / 20 cm mould	4" / 10 cm mould
First press	0,3 psi	15 kg	4 kg
Second press	0,7 psi	35 kg	9 kg
Third press	1,3 psi	65 kg	16 kg
Fourth press	2,3 psi	115 kg	29 kg



Kitchen cleaned and ready for action



The vat was cleaned in the dishwasher at 70°C, sanitized using StarSan and finally flushed using boiling water



24 liters of milk



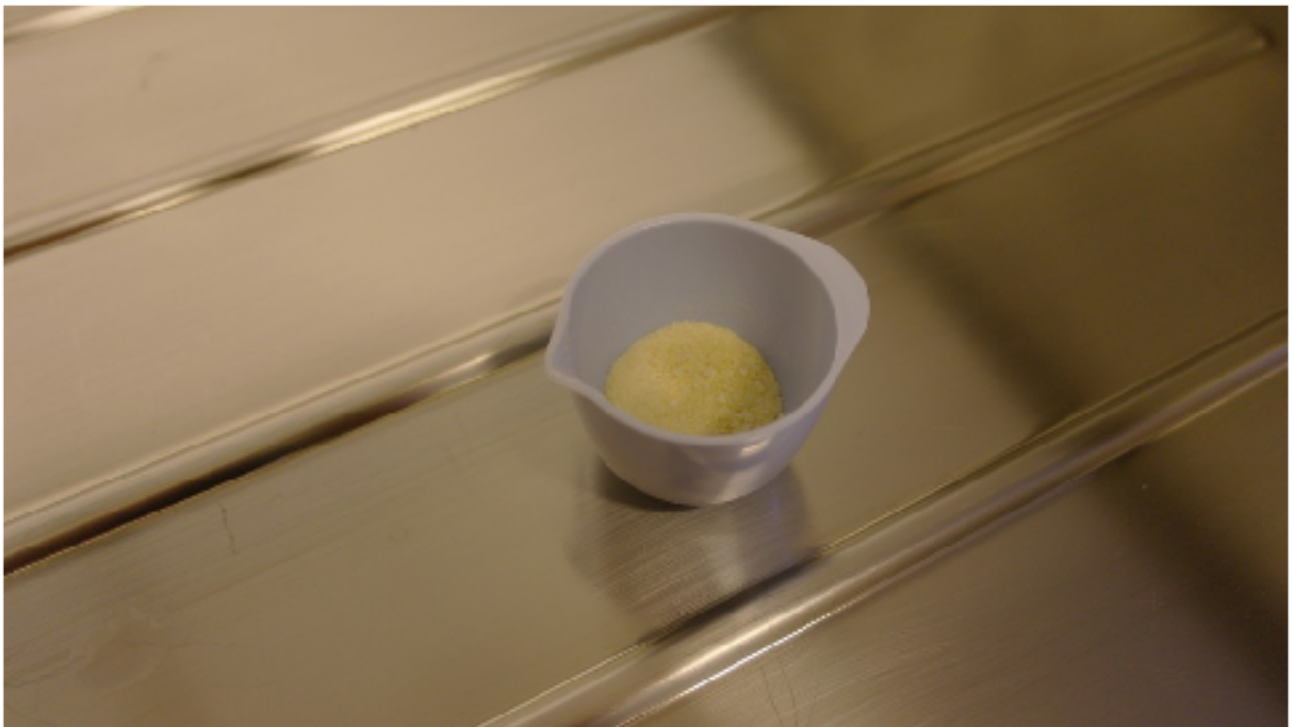
The water bath is being prepared



The PH-meter is being calibrated



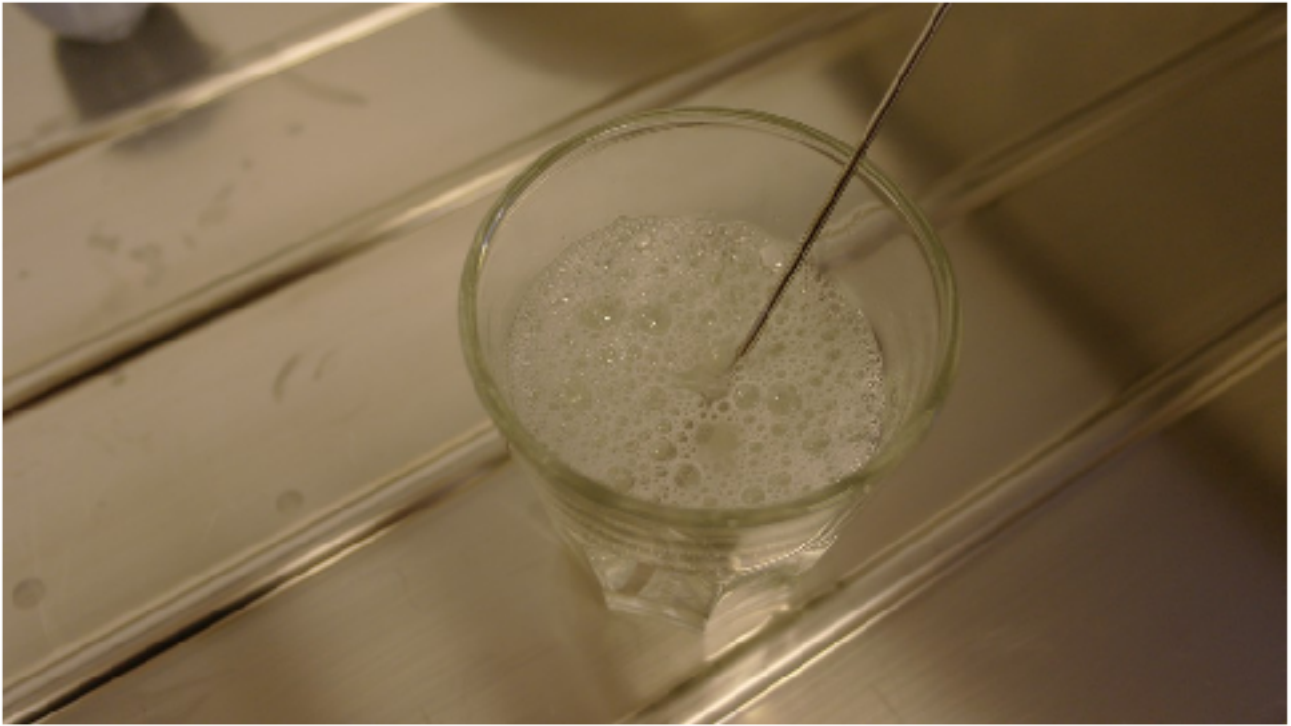
Milk start PH



Culture is ready



Lysozyme is being measured



Lysozyme mixture



Pouring the Lysozyme over the milk using the skimmer to spread it



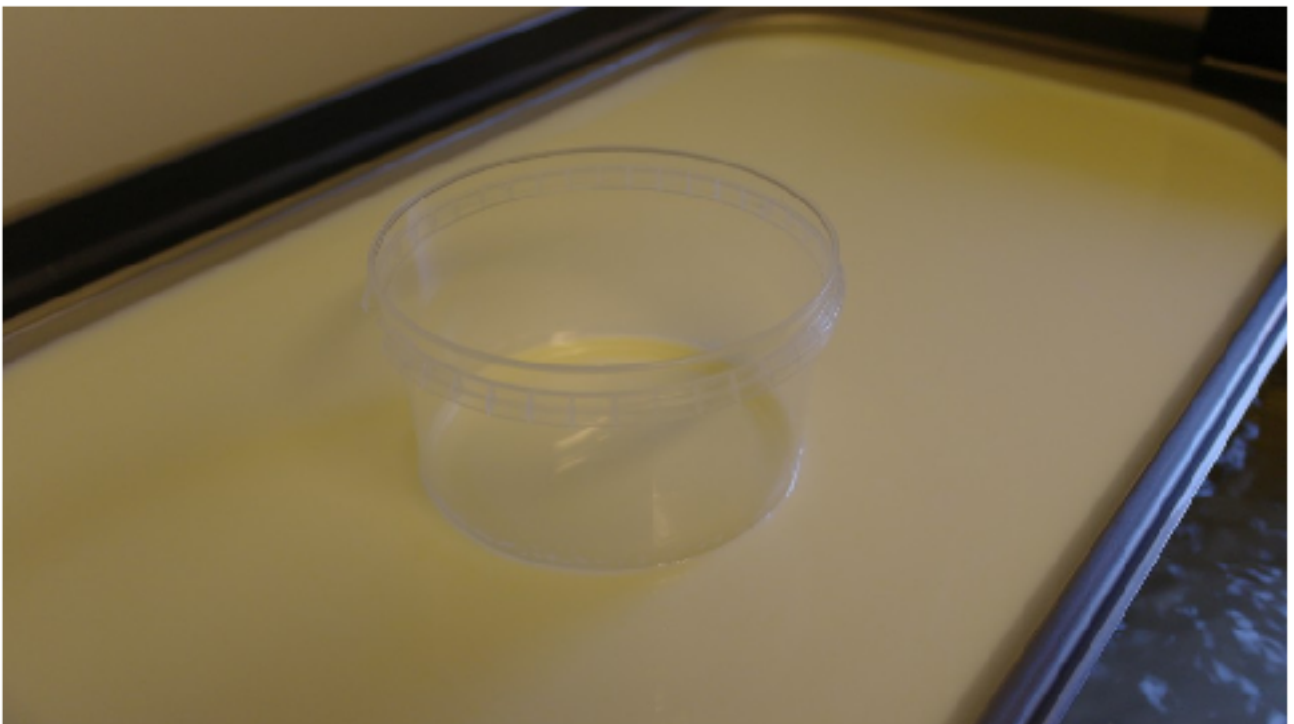
Boiling water



Springling culture over milk



Mixing in the culture using the skimmer



Spinning bowl test (flocculation test)



Checking for a clean break



Stirring



Ready to drain whey



Flushing the Mould, follower and cheesecloth with whey



Pouring off the whey



Curds ready for mould



Mould packed with curds



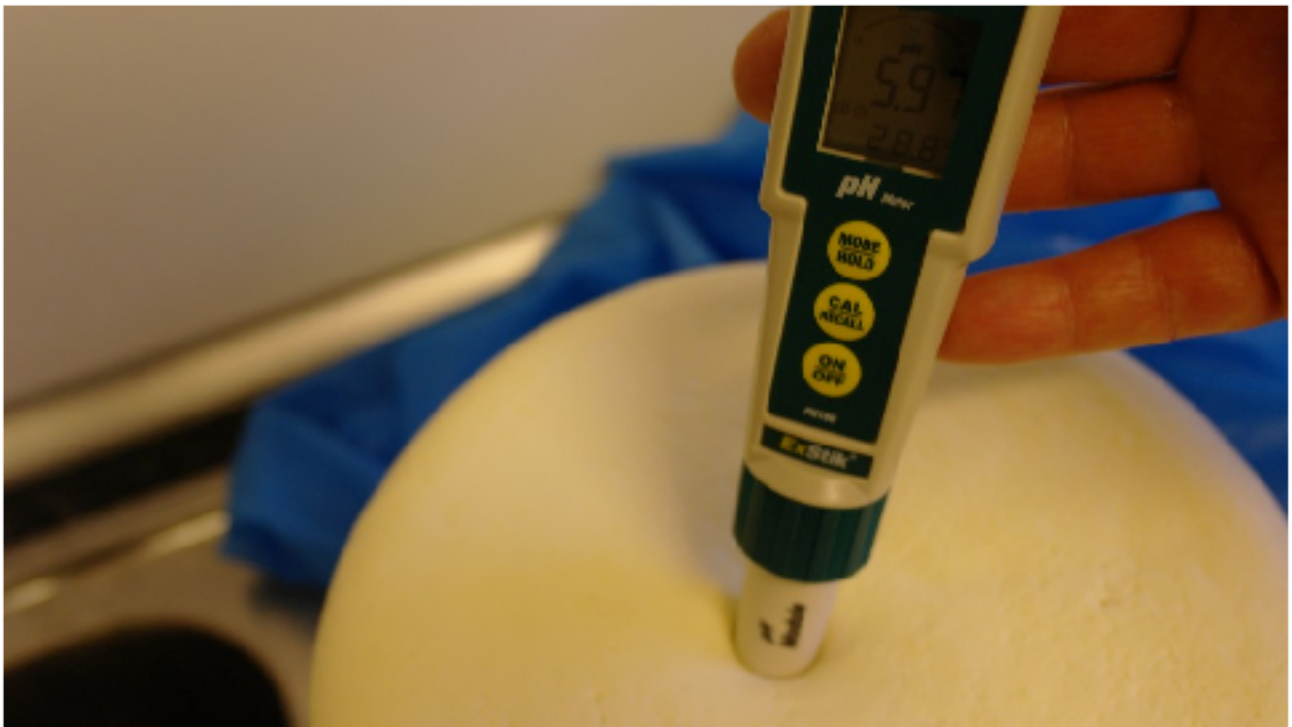
Mould ready for press



In press



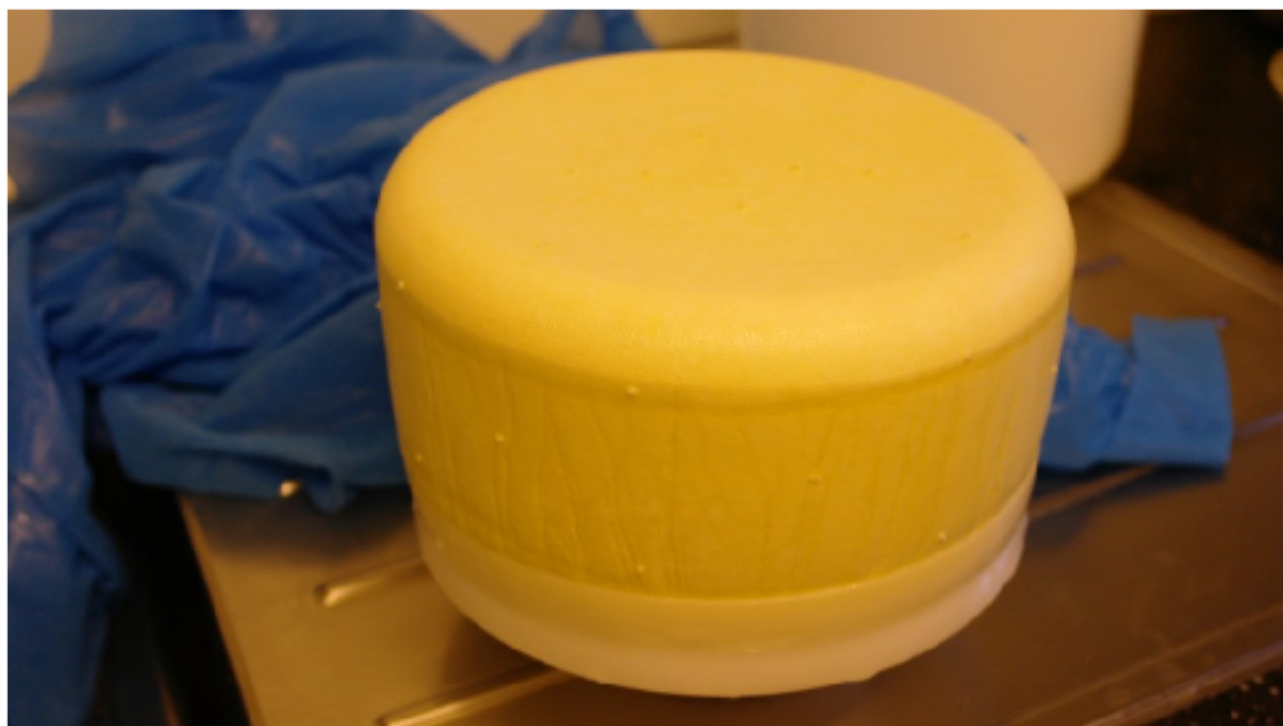
After first press



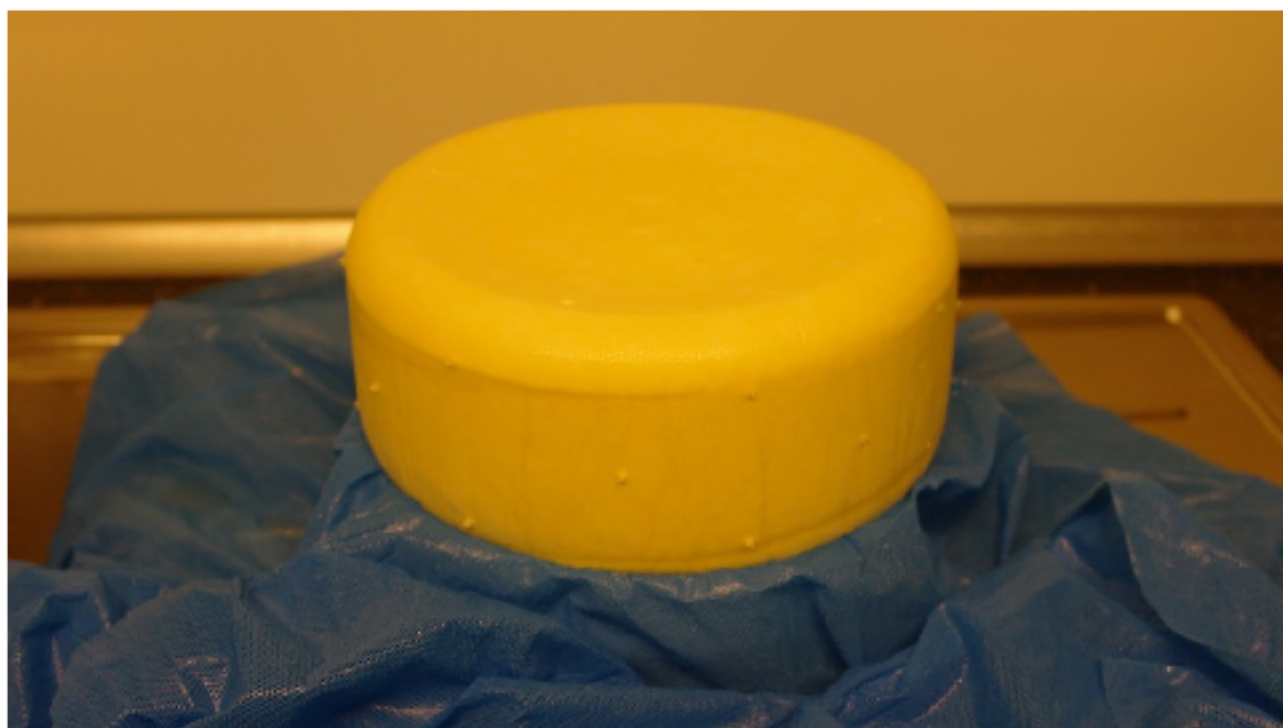
Measuring the cheese/curd PH



After second press



After third press



After fourth press



In brine