

Cheddar - adapted from recipes by Peter Dickson

Ingredients:

- 1/2 teaspoon of MA011 starter culture
[(LL) Lactococcus lactis subsp. lactis, (LLC) Lactococcus lactis subsp. cremoris]
- 1/2 teaspoon double strength vegetable rennet
- 25 drops Annatto
- 3 tablespoons flaked salt

Procedure:

- Heat milk to 88° F
- 25 drops Annatto
- Add 1/2 teaspoon MA11 starter culture



1. Add culture and ripen for 1 1/2 hours.
2. Add 1/2 teaspoon double strength vegetable rennet.
3. Check for the curdling time and multiply this times 3 to get the time from adding rennet to cutting the curd, e.g. 12 min. x 3 = 36 min.
4. Cut into 3/8" cubes (pea-sized particles)
5. Settle curds after cutting for 5 minutes
6. Stir and heat curds to 95 °F in 30 minutes (1° F every 4 minutes)
7. Continue stirring and heating to 102° F in 15 minutes (1° F every 2 minutes)
8. Cook at 102° F for 45-60 minutes until the curds bounce off your hand and feel like pellets and are springy when squeezed. Whey pH 6.1-6.2
9. Settle curds under the whey for 15 minutes.
10. Move curds slowly to the back of the vat to form a pack that is 8 inches deep.
11. Drain off the whey and form a trench in the middle of the pack to let the whey escape from the curds. When you are finished draining, there should be two packs of curds on either side of the back of the vat with an 8-10 inch wide trench down the middle. The pack should be

about 4 inches deep.

Whey pH 5.9-6.0 by the time the pack is formed and most of the whey is drained.

Cheddaring Process:

Wait ten minutes and cut the pack into slabs that are 6 inches wide.

Turn the slabs over after 15 minutes. Turn again after 15 minutes.

Cut the slabs to half their length and pile them 2 high.

Turn the slabs over and pile 3 high after 15 minutes,

Continue to turn and pile the slabs every 15 minutes up to 7 high if you need to keep moisture in the curds or 4-5 high if you need less moisture.

Maintain the temperature at 95-100° F during the cheddaring process. This can be checked by sticking a thermometer into the slabs of curd.

When the whey is pH 5.3-5.4 (acidity of 55-75 degrees), mill the slabs of curd into pieces 1 inch x 2 inches.

Time from adding culture to milling is around 6-6 1/2 hours.

Wait ten minutes and add salt. Use coarse flaked salt or Kosher salt. The amount will vary with size of the cheese. Just give it a taste. Cheddar cheese curds are great!

Add the salt in 3 portions and wait 5-10 minutes between each addition. The idea is to let enough salt dissolve into the curds before hooping the curds and pressing them into blocks or wheels. However for smaller batches, two applications will be enough.

Gather the curds into the forms (blocks or hoops) lined with cheese cloth and move to the press. Keep curds around 90°F between salting on pressing. The keeps fat from solidifying on the outside of the curds causing poorly knit cheeses.

Press with enough pressure to create a smooth rind by the next morning. I use about 5 pounds to start, turning every 15 minutes for the first hour. After an hour I use about 10 pounds and tighten the cheese cloths around the cheese. Before bed I increase the pressure to 20 pounds for the rest of the night.

Age for a minimum of 3 months. A good sharp cheddar will need at 6 to 24 months.