Adventures Making Cheese

Nancy Doernhoefer, UCCE Master Food Preserver of El Dorado County

Draft for Mountain Democrat June 2, 2021 Publication

As a new student in the UC Master Food Preserver Program, I was excited to learn we teach how to make soft cheese . Several types of cheese can be made at home, but be wary of where you get your information and instructions! There are recipes online for Ricotta, Mozzarella, Burrata, Queso Fresca, Queso Blanco, Neufchatel, cream cheese and other foods, but they may be untested and some can be downright dangerous! Master Food Preservers use and recommend safe and tested recipes. Check out our collection of videos, publications and recipes from various state universities at http://mfp.ucanr.edu.

UC Master Food Preservers training supplied me with plenty of available support, a mentor, a huge data base of information and my (wonderful) class teacher, so there is no explanation for why, before starting, I watched a lot of videos on how to make cheese. Each detailed a successful and seemingly simple process, but each one was different. My first foray into solo cheese making was, of course, Mozzarella. Mozzarella is named after its specific production process. In Italian, the verb *mozzare* refers to the way the curd is hand-stretched in strips and then cut into balls.

The recipe first appears in an Italian cookbook dated 1570 but became popular in the 18th century after buffalo milk was commonly used in Southern Italy. In the U.S. this cheese is generally made with cow's milk in one of two versions. Low moisture, part skim mozzarella is known for its browning and stretching properties, usually best on pizzas or pasta, and fresh Mozzarella. Tthe alternative has a high moisture content and is best eaten cold.

One of our UC Master Food Preserver mantras is "follow the recipe." If I had only done that. Using the recipe below, my successful cheese happened only after three failed attempts, each one wasting a gallon of organic milk and some expensive liquid rennet (which can be purchased online, or from a local health food store.) Rennet is a substance used to break the solid particles in milk away from the water content in order to form a solid mass. Traditionally, rennet is made from the stomach lining of young ruminants, but there are other ingredients that can mimic this chemical reaction. What I did not think through was the idea that if you start a recipe be sure not to panic and make any additions or subtractions learned from other recipes. Follow the recipe to the letter after reading it through thoroughly before starting. If the cheese is not ready to work according to the recipe, DO NOT toss it into the microwave to heat rather than back into the warm whey. Whey is one of the two main proteins in milk. It is the cloudy, yellowish liquid expelled from cheese curds during the cheese-making process. Use a reputable recipe, follow instructions to the letter, and maybe DO NOT use 4 different thermometers "just to be sure", because the cheese will overcook before you can read all four ! Do you notice a pattern in my lesson learned? Follow the recipe.

Eaten cold, the cheese is quite delicious. It is the designated cheese for Neapolitan and Margherita pizza, for sandwiches and for marinating in olive oil and herbs. I plan to use it as currency to swap for tomatoes this summer.

Mozzarella
Yield: approximately ¾ pound
1/8 tsp double-strength ~OR~ 1/4 tsp single-strength liquid rennet ~OR~ 1/4 tsp ground tablet rennet
1 1/2 tsp citric acid
1 1/4 cups cool chlorine-free water, divided
1 gallon pasteurized milk
1 tsp non-iodized salt (optional)

Note: Use a calibrated thermometer to test all temperatures.

1. Mix rennet with ¼ cup water. Stir and set aside. (Use within 30 minutes.)
2. Dissolve the citric acid in the remaining 1 cup water.
3. Pour the citric acid solution into a large pot, add milk and stir.
4. Heat slowly to 90°F while stirring.
5. Remove from heat. Add rennet solution while slowly stirring top to bottom ("folding") for approximately 30 seconds.
6. Cover pot; leave undisturbed for 5 minutes or longer.
7. Check curd, which should look like custard with a clear separation between the curd and the whey. If it's too soft or milky looking, wait longer.
8. Cut curd in a 1-inch checkerboard pattern.
9. Return pot to heat and bring to 105°F while stirring **gently**.
10. Remove from heat and stir slowly for 2 – 5 minutes.
11. Scoop and press curds into a colander using a slotted spoon. Keep the whey.
12. Put curds in a bowl. Strain any small curds with dampened cheesecloth and add to the larger curds in the bowl.
13. Microwave on HIGH for 15 seconds. Drain whey. Add the salt if using. Gently knead the curds. Repeat process until cheese reaches 135°F.
14. Pull/stretch the cheese until it is smooth and shiny.
15. Drop cheese balls into ice water to cool.
16. Refrigerate and use within several days.

Source: Clemson Cooperative Extension

Tested and reputable recipes recommended by UC Master Food Preservers of El Dorado County are easily located at: https://ucanr.edu/sites/mfp_of_cs/Recipes/Archived_Recipes/. The recipes are well-written and frequently point out where a creative cook can add or subtract safely, usually seasonings and spices. They are not, however, general guidelines, and as I begin to help with public classes, I can share my lessons learned.

UCCE Master Food Preservers are available to answer home food preservation questions; leave a message on our helpline at (530) 621-5506. For more information about our public education classes and activities or to make a donation, go to the UCCE Master Food Preservers of El Dorado County website at http://ucanr.edu/edmfp. Sign up to receive our E-Newsletter at http://ucanr.edu/mfpcsenews.

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