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Making Cottage Cheese at Home

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Cottage cheese is a concentration of the milk protein or curd portion of milk and is very high in nutritive value. It can be enjoyed as fresh cheese or as a component of other foods, and can easily be made at home. High quality raw skim milk is necessary to make a good cottage cheese and can be obtained from family cows or other supply.

Equipment

The following equipment is necessary to prepare cottage cheese in small amounts in the home:

- Eight-quart kettle (preferably stainless steel)
- A larger kettle to be used as a double boiler in cooking the curd
- Long stainless steel spatula or knife
- Large, long-handled spoon
- Accurate Fahrenheit thermometer
- Cheesecloth or draining bag
- Rack or some device for draining the whey from the curd

Ingredients

To make cottage cheese of good quality, the skim milk must be of good quality; that is, it must have low bacterial count, no extraneous debris, no off-odors or flavors, and no antibiotic residues. Undesirable flavors present in the skim milk will probably be present in the cheese. Skim milk from a retail store can not be used because of the heat treatment given during pasteurization.

This recipe, using 2 gallons of milk, produces 2.5 lb of curd.

Two gallons raw skim milk
1 1/2 cups buttermilk or sour cream
(or 1/2 cup for the overnight method)
1 teaspoon salt
1 1/2 cups half-and-half or light cream
(or homogenized milk for low-fat cottage cheese)

Pasteurizing and Setting the Milk

Raw skim milk must be pasteurized by bringing it to 145°F and holding at that temperature for 30 minutes. Pasteurization can be accomplished by placing the milk in a microwaveable container and heating with the temperature probe in place. Another way to pasteurize is to place the skim milk in a double boiler and bring to temperature. Pasteurized skim milk should then be cooled to 70 to 75°F.

Next, inoculate the skim milk with 1 1/2 cups (5% level) of buttermilk or sour cream, used as "starter" if you want the curd to set within five hours. Use only 1/2 cup if you want to set the curd over night. In this case it is most convenient to add the starter in the afternoon so that the curd will be formed and ready to be cut by the following morning.

Cutting the Curd

The proper time for cutting the curd is determined by the condition of the curd. If the curd breaks cleanly away from the sides of the vessel when depressed slightly with a spoon, the proper cut time has been reached.

The curd should then be cut (not broken) into cubes approximately 3/8 inch in each dimension. Do this by cutting horizontally with a spatula or knife, then rolling the strands gently over so that they may be cut crosswise. At this time the whey will be expelled from the curd. Dry cheese will result if curds are cut too small.

Heating the Curd

Heat or cook the curd by placing the vessel containing the cut curd in a larger vessel containing water at a temperature of 140°F. The curd should be stirred **gently** with a large spoon while bringing the temperature to 120 to 125°F. Hold at this temperature for about half an hour, stirring gently from time to time.

One of the common mistakes in making home-made cottage cheese is heating at too high a temperature and for too long. High temperature causes the pieces of curd to contract, squeezing out too much whey and making the cheese too dry.

To determine when the cooking is done, place about 1 tablespoon of curds in ice water for 3 minutes, then squeeze them in the palm of the hand. A rubbery texture indicates that cooking should be ended.

Draining the Whey

Pour or drain off the whey. Wash the curd (with about the same amount of ice water as there was whey) by filling the kettle with ice water and pouring it off 3 times. This will wash a good deal of the acid from the cheese so that it will not taste so sour, and at the same time it will cool the cheese to about 70°F.

The last water may be drained away either by placing the cheese in a small cheesecloth bag or on a piece of cheesecloth spread on a rack or colander. Draining may be hastened by changing the position of the cheese in the bag or on the cheesecloth.

Working, Seasoning, and Creaming the Cheese

After nearly all the water has been drained away, or at least stopped running in a steady stream, the cheese should be removed to a clean dish and worked to an even texture with a spoon. Salt may be added to suit the taste. Usually salt at a level of 1% of the weight of the curd and cream is appropriate (about a half ounce or 1 tablespoon).

About 1 1/2 cups of half and half cream (approx 12% fat) or light cream (approx 20% fat) will improve the taste of the cheese a great deal, although it is not necessary. If light cream is added at this level (about 1/3 the weight of the curd) a creamed cottage cheese of about 4% fat content will be produced. For a low-fat cottage cheese add 1 1/2 cups of pasteurized/homogenized milk. The cottage cheese thickens after about 20 hours of refrigeration.

Storage

Cottage cheese is rather perishable, and therefore should be made often and eaten while fresh. Shelf-life can be prolonged by meticulous attention to sanitation from the milking room to creaming of the curd.

Place the finished cottage cheese in a clean, scalded glass or plastic container, cover, and refrigerate. Yields about 3 lb. Use within 5 to 7 days.

Source

Kosikowski, F.V. (1977). In: *Cheese and Fermented Milk Foods.* 2nd ed. F.V. Kosikowski and Associates. Brooktondale, NY.

Acknowledgement

This publication is based on the Kentucky Cooperative Extension Service Leaflet 125, *Making Cottage Cheese at Home*, by H.B. Morrison (1950).

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