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Making American-Type Cheese at Home

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Making cheese at home can be an interesting and rewarding experience. Cheese may be made with equipment you already have on hand, especially if you have a container that will hold 1 to 5 gallons of milk. However, unless an economical supply of milk is available, the price of milk may make homemade cheese cost more than commercial cheese.

Milk quality

The quality of the cheese can be no better than the quality of the ingredients. Since milk is the basic component, *good cheese cannot be made from poor milk.*

Good sanitation in milking, handling, and storing of the milk is mandatory. Rapid cooling of the milk is also most important; however, avoid freezing the milk.

Generally, the fresher the milk, the higher the quality of the cheese. Sour or over-ripened milk will usually cause a highly acidic or sour cheese. Cheese made from old or stale milk, or improperly handled milk, is apt to be gassy and have acid, bitter, fruity, unclean, or other undesirable flavors.

Cheesemaking process

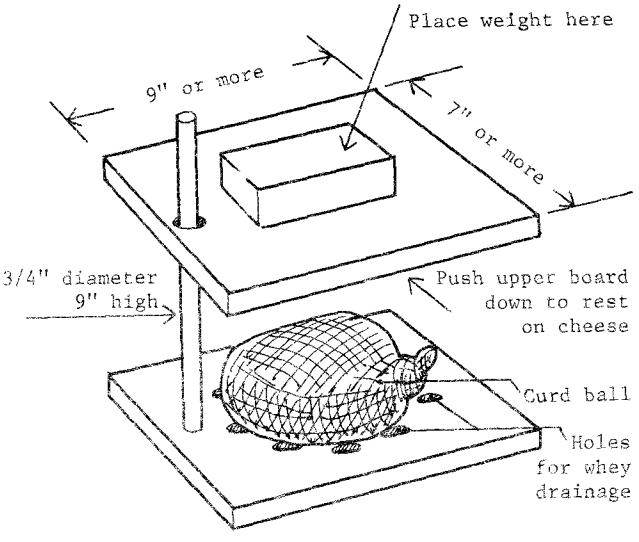
Cheesemaking involves five basic steps:

- Preparing and inoculating the milk with "starter" culture
- Curdling the milk
- Shrinking the curd
- Salting the curd
- Ripening the cheese

Numerous variations of these steps make possible the different types of cheese.

Equipment needed

- Thermometer, preferably stainless steel, dial-type, with a temperature range of 32° to 150°F. An accurate, durable thermometer is essential. Glass thermometers are usable, but extreme care must be taken not to break the thermometer in the cheese.
- A large container, approximately 5 gallons capacity (stainless steel, enameled or tinned metal, or other heatproof utensil). *Do not use a galvanized or aluminum container.*
- Long-handled metal or wooden spoon.
- Spatula (thin bladed) or butcher knife, large enough to reach the bottom of the large container.
- Cheesecloth or muslin (2 or 3 square yards).
- Hoops or forms for holding the cheese during pressing. These can be made from 3-pound coffee or shortening cans. Punch holes in the bottom of the can with an ice pick. Work from the inside out so the cloth liner does not catch on the holes. Use several 2-inch-thick wood discs (followers) to facilitate pressing the cheese in the hoop.



A cheese press distributes weight evenly on the curd ball.

- Weights for pressing the cheese. Bricks are convenient or use water-filled jars. *Optional:* A cheese press or device to apply pressure evenly to the cheese may be constructed (see diagram).
- Packaging material such as plastic film or paraffin.

Ingredients needed

These ingredients make about 3 to 4 pounds of cheese:

5 gallons sweet, *pasteurized* whole milk (Low-fat or non-fat milk will change the flavor, body, and texture, and the curd yield will be reduced.)

2 cups *fresh*, commercial, cultured buttermilk (Obtain directly from a local dairy.)

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½ tablet cheese rennet or 1 tablet junket rennet (may be obtained from some drugstores)

4 tablespoons salt

½ tablet cheese coloring or 1 teaspoon yellow food coloring (optional)

Procedure

Place the 5 gallons of pasteurized whole milk into the large container.

Ripen the milk by stirring in 2 cups of buttermilk.

Gradually heat the mixture to 86°F within 30 minutes.

If you prefer colored cheese, add the coloring at this point. Dissolve ½ cheese-coloring tablet in ¼ cup cold water and stir into the milk, or stir 1 teaspoon yellow food coloring into the milk.

"Set" the milk by dissolving ½ cheese rennet tablet or 1 junket rennet tablet in ¼ cup *cold* water and stirring thoroughly into the milk within 2 or 3 minutes.

Leave the milk undisturbed for about 30 minutes or until a firm gel forms.

Test gel firmness by inserting spatula or handle of wooden spoon into the curd and pulling it out at an angle. The curd is ready to cut when it breaks clean or evenly and clear whey fills the opening.

Cut the gel with the spatula or knife into cubes of approximately 1 inch as shown. Let stand for 3 minutes without stirring.

After the curd has "healed" or firmed slightly, slowly heat to 100° to 102°F. Try to reach this temperature within 30 to 35 minutes. Occasionally stir the mixture to prevent curd lumping.

Maintain the curd and whey at 100° to 102°F for an hour, and stir occasionally. Then test the curd for degree of firmness. An indication of proper firmness is a squeaky sound when you chew some of the curd. Another ½ hour may be required to firm the curd.

Pour the whey and curd through cheesecloth placed over a large pan. Drain and discard the whey. *Note:* Whey may be utilized for its fertilizer value for gardens.

Sprinkle 4 tablespoons of salt over the surface of the curd and mix in thoroughly. (If a low-salt product is preferred, reduce salt to 2 tablespoons, but the cheese flavor will be bland.)

Place the curd on cheesecloth (folded into 3 or 4 thicknesses). Wrap the cheesecloth tightly around the curd and pin it in place. Form the curd into a ball.

Flatten the curd ball to facilitate placement inside the cheese hoop (and add follower) or on the cheese press.

Apply pressure by placing weights on the follower in the hoop or on the top board of the press. Press curd for ½ hour. Since whey will continue to drain, press in the sink or inside a large pan.

Remove cheese from the hoop or press. Cut new cheesecloth to recover the cheese. First cut two circles that will exactly cover the top and bottom of the cheese. Next cut a strip long enough to wrap around the circumference of the cheese and wide enough to exceed the height of the cheese by an inch. Dampen the cheesecloth and apply to the cheese surface. Minimize the number of wrinkles.

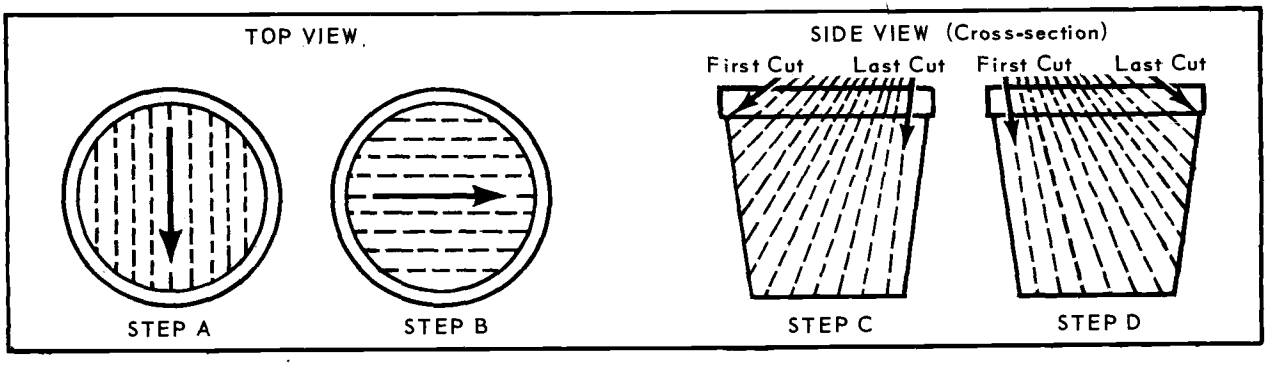
Place the cheese back in the hoop or press.

Return the same weights and press for 8 to 10 hours.

Remove the cheese, set on a board, and store in a cool (50° to 65°F), dry place for 4 to 5 days. Turn the cheese over once or twice a day until it forms a rind. Salt may be rubbed onto the surface several times during the drying period to promote rind formation.

When the surface is dry, the cheese may be covered with paraffin. Heat the paraffin to 220°F. Dip half of the cheese into the hot paraffin for about 10 seconds. After the paraffin becomes firm, dip the other half of the cheese. *Optional:* The cheese may be wrapped in two or three layers of plastic film, but it must be sealed or made airtight.

Cure or ripen the cheese in a dry, clean place at 45° to 55°F for 4 to 6 weeks. The longer the aging period, the more intense the cheese flavor.



Cut the curd with a knife. Top view: make perpendicular cuts 1 inch apart (step A) back to front and (step B) left to right. Side view, steps C and D: follow cuts of step A as closely as possible, holding knife at angles shown.