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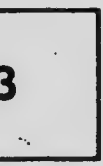

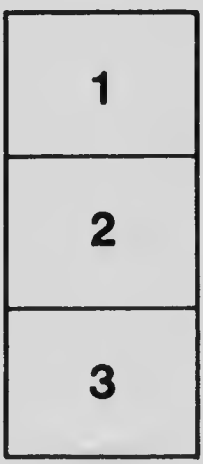

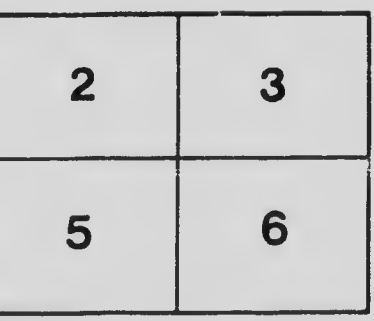

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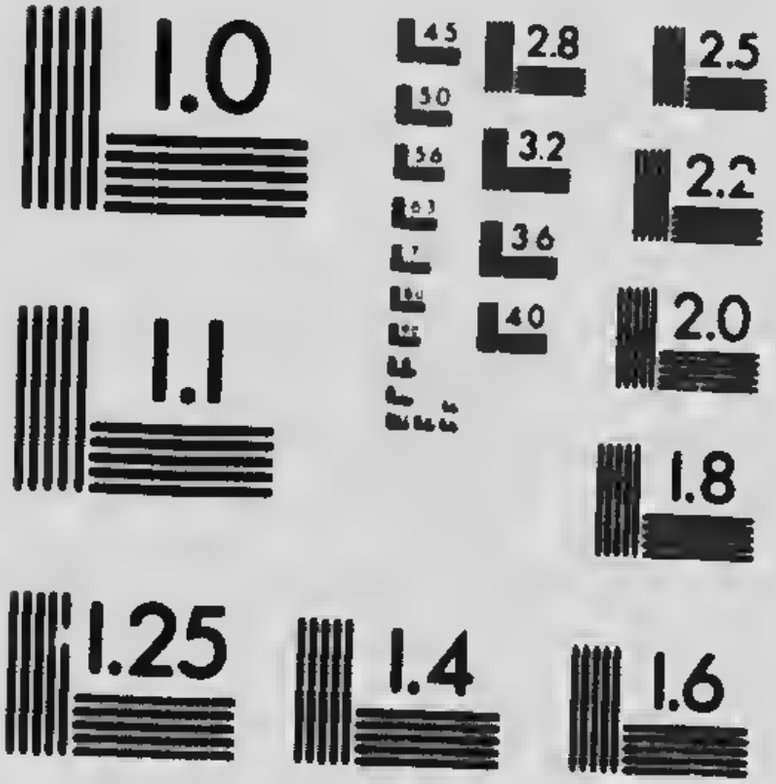

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DOMINION OF CANADA.

DEPARTMENT OF AGRICULTURE.

EXPERIMENTAL FARMS.

J. H. GRISDALE, B.Agr.,
Director.

E. S. ARCHIBALD, B.A., B.S.A.,
Dominion Animal Husbandman.

DIVISION OF ANIMAL HUSBANDRY.

COULOMMIER CHEESE

BY

E. S. ARCHIBALD,
Dominion Animal Husbandman,

AND

J. MEILLEUR,
Dairyman, Central Experimental Farm.

One hundred pounds of milk, testing 4 per cent butter fat, will make twenty Coulommier cheese, which selling at 15 cents each will realize $3 per hundredweight on your milk. The Coulommier cheese is a whole, sweet-milk cheese, which is not at all difficult to manufacture, and the following directions would probably be sufficient to enable anyone possessing a fair amount of intelligence successfully to manufacture the same after a few trials. The demand for this cheese is rapidly increasing in all the cities of Canada where it has been tried, and there is a splendid opening for a limited number of farmers who desire to open up such a local market.

The following are the methods which are used with marked success at the Central Experimental Farm, Ottawa.

ACCOMMODATION FOR MAKING.

A good clean room where good ventilation, sufficient light and fairly even temperature can be maintained is desired for making Coulommier or other soft cheeses. Cleanliness is of utmost importance. Perhaps a clean, dry room off the kitchen would be best, but a good cellar, if dry and free from dust and smells, could be used. The best temperature for the room is from 60 degrees F. to 65 degrees F. Should the room become too hot, the tendency is for the cheese to drain rather too rapidly, with a consequent loss of fat and a hard, dry cheese resulting. Should the room be too cold, the cheese is not drained sufficiently quickly and in consequence both the grain of the cheese and the flavour are bad. Emphasis must be laid on the cleanliness of the room and its absolute freedom from flies, mustiness and dust, as these will also influence the flavour as well as the appearance of the marketable product.

MILK.

This is a whole milk cheese. A skim milk cheese somewhat similar to the Coulommier may be made, but the same is hard, dry and unpalatable. Sour milk also makes a harsh, dry cheese. Sweet, clean, new milk makes the best product.

RENNET.

Rennet may be used in either the extract or the tablet form. The former, however, is preferable, as it is easier handled and as a rule somewhat cheaper.

SALT.

The very best quality of pure, fine grained dairy salt should be used. As in the manufacture of butter, store the salt in a clean, sweet, dry cupboard where it will not absorb surrounding odours.

PAILS.

Agate pails as a rule are best, but other makes can also be used. Some manufacturers recommend wooden tubs for the reason that they do not conduct the heat either from or to the milk as quickly as metal pails. However, we prefer agate pails for the reason that they are more easily kept clean, are more durable and cost very little more at the outset. Great care must be used in the use of any pails that the temperature is maintained evenly while the curd is being formed, and that the cream does not have an opportunity to rise to the surface of the curd as would be the case where the milk was dropping rapidly in temperature.

DRAINAGE TABLES.

A good table which can easily be made is one which is well covered with lead or galvanized zinc, the top of which has a small ridge raised about the edge, and the whole surface draining into one corner, where a hole is left for the whey to drip into a pail. A good hardwood topped table draining to one end is also very good. For the beginner an ordinary table, tilted at one end so that the whey will drain to a given corner where it can be caught, is quite suitable.

CHEESE MOULDS.

Coulommier cheese moulds are circular rings made in two sections, the one slipping into the other (see photo). These rings are 5¼ inches in diameter, the lower section of which is 2 inches high, and the upper section or collar is 3 inches high. These can be made by a good local tinsmith with an outside cost of 30 to 40 cents each.

DRAINAGE BOARDS.

Drainage boards are required to lay the cheese on after being placed in moulds. Some makers prefer straw mats, but after considerable experience with the same their use has been discontinued and substituted by a board 14 inches in length, 8 inches in width, the surface of same being beaded at every quarter inch. Such a board can be made by any local woodworker at very small cost, and owing to its greater cleanliness and durability is much preferable to the straw mat. After using, the boards should be thoroughly rinsed in cold water, then scrubbed with scalding water and soda, after which they should be thoroughly scalded or boiled and well drained.

LADLES.

A good ladle is necessary for the placing of the curd in the moulds. A good tin ladle may be used, but we have found that a good agate ladle is easier kept clean and in consequence is preferable. It is necessary that the ladle should have a sharp edge so that it will cut the curd as clean as possible in order to dispense with the loss of fat.

THERMOMETERS.

A good reliable floating dairy thermometer is necessary and can be purchased for approximately 25 cents. It is well to note that without this thermometer it is impossible to judge the optimum temperature, and the mistake of a few degrees will make a marked difference in the quality of the cheese.

MEASURING GLASS.

A small measuring glass for rennet extract (as per photo), costing about 25 cents each, is very handy in measuring rennet.

PAPER.

The best quality of grease-proof parchment paper is required, in order thoroughly to wrap the cheese for marketing. This can be obtained from any good dairy supply firm or often from your local stationers or printers.

CARTONS OR BOXES.

A neat but cheap and attractive way of marketing cream cheese, especially when shipping some distance, is a cardboard box made to fold in at the ends. These can be obtained for from $3 to $4.50 per thousand, depending on the amount of printing on the same. As in the marketing of any dairy product, it pays to have a neat imprint of the farm, manufacturer and address of same on the wrapper, and this can be better printed on the box than on the parchment.

METHOD OF MAKING.

The requirements for twenty cheese are 100 pounds (10 gallons) of new, sweet milk, 150 to 200 drops of rennet extract, and 10 ounces of pure dairy salt.

Procedures are briefly as follows:—

1. Strain the milk into clean agate, metal, or wood pails.

2. Raise the milk to a temperature of 80 degrees.

3. Add the rennet to the milk and stir gently to the bottom for about four minutes, thus insuring an even distribution. The quantity of rennet used is regulated by the rapidity with which you desire the formation of the curd. If a slower curd is desired, use about 15 drops per gallon of milk; but if a rapid curd is desired, use 20 drops of rennet extract. We prefer the latter quantity. In either case, dilute the rennet with about ten times its bulk of water in order to make uniform mixing somewhat easier.

4. As a cover for the pails nothing is better than three or four ply of good cheese-cloth. Cover the pails as soon as the rennet is mixed with the milk. If the temperature is low, stand the pails in a tub of hot water so as to maintain 80 degrees F. in the milk. A room temperature of 60 to 65 degrees is preferable. Do not stir the milk after the rennet has been thoroughly stirred in.

5. Prepare the drainage table, board and moulds for the reception of the curd. This is done by laying the beaded boards on your drainage table, where they can be left undisturbed after the moulds have been filled. Place the moulds or rings on boards with the two sections connected. Ladle the curd into the moulds in thin slices, as it will drain more quickly than if ladled in thick slices. If the curd has been kept at too high a temperature, or if it has been ladled roughly, there will be a loss of fat, which thus causes a dry cheese. After a nice, soft curd has been formed, which ought to take from two to three hours, start ladling in the moulds. If the moulds do not hold all the curd to begin with, the remainder may be added as soon as the moulds have drained a short time. The time the curd takes in draining depends to a considerable extent on the temperature of the room and the manner in which the curd is ladled. As above stated, the optimum temperature of the room is 60 degrees F. If the temperature falls below this point the draining will take too long, with a bitter flavoured cheese resulting.

6. Some manufacturers prefer cutting out a special ladleful of curd for the tops of the cheese, but others prefer turning the boards in about eight hours, which will make a good, smooth top to the cheese. In about twenty-four hours the curd will have sunk below the bottom of the upper ring, when the upper section may be detached, after which place a board upside down on top of the lower ring and turn the cheese. Care must be taken in removing the first board as the cheese may adhere to it slightly.

7. Sprinkle the top of curd with good salt at the rate of about one-eighth ounce per cheese, wash the drainage table and replace the cheese on the second boards on table and allow to drain for another twenty-four hours.

8. Turn cheese as in the day previous and sprinkle the other side with a similar amount of salt. In about another twenty-four hours the cheese will be ready for eating if customers desire a fresh Coulommier cheese. The most of the consumers, however, prefer a cheese which has ripened somewhat longer. Consequently at this time, namely twenty-four hours after the second salting, the moulds are removed and the cheeses are placed on beaded boards to ripen for five or six days, when they are ready for marketing. Wrap neatly in the parchment paper, pack in the cartons or cardboard boxes and send to market.

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