THE MANUFACTURE OF COTTAGE CHEESE

Cottage cheese is a palatable, nutritious and valuable food product that has gained in popularity during recent years. This popularity may be attributed to improved quality as a result of new and modern methods of manufacture, and to the finding of new uses for the product in the menu.

The manufacture of cottage cheese is a profitable outlet for surplus skim-milk, and is a way of converting skim-milk into an attractive, appetizing food. There are several methods used in the manufacture of cottage cheese. The one that appears to be the most popular and the most suitable for commercial practice uses rennet as the coagulant. The cheese so made is called by various names, such as sweet curd, low acid rennet type, and pop corn, the latter getting its name owing to the size and resemblance of the curd particles to pop corn.

Cottage cheese made according to the rennet method has good keeping qualities because of the low acid content, and is characterized by distinctive curd particles, which retain their shape and individuality when creamed. The following procedure is recommended in manufacturing such a cottage cheese:

If it is desired to complete the manufacturing process in one day, pasteurize high quality, fresh skim-milk at a temperature of 145° F. for 30 minutes and cool to 88°-90° F. and then add 10 per cent of clean flavoured laetic culture, and rennet at the rate of 1 c.c. per 1,000 lbs. of milk. Dilute the rennet in 30 parts of pure water before adding to the milk. The desired coagulation and acid development should take place in approximately six hours.

The coagulum is cut when it is firm but not brittle and when the whey shows an acidity of approximately .55 per cent. The curd will break cleanly in front of the finger and show little or no wheying off when it is firm enough. In cutting it is best to use a half-inch horizontal knife lengthwise of the vat and a half-inch perpendicular knife lengthwise and crosswise of the vat.

After the curd has been cut, stir gently and cook to approximately 115° F., allowing about one hour to reach this temperature. Hold at this temperature and stir until the curd has properly firmed. This may be determined by squeezing a small amount in the hand. If the curd holds its original shape it is ready to be drained and washed. Care should be taken in cooking to see that it is done slowly and uniformly, as this is the most important operation in the production of a high quality product.

When the whey has been drained off, wash the curd two or three times with cold water, trench and leave to drain for one hour. After draining, place the curd in cans or racks and thoroughly chill by placing in a temperature of 35° F. for approximately five hours. This chilling is necessary in order to prevent excessive breaking when the product is creamed.
The curd is usually salted at the rate of one pound of salt to one hundred pounds of curd. If a creamed product is desired, use approximately seventy pounds of pasteurized, homogenized cream, testing 15 per cent fat per hundred pounds of curd. Pour the cream over the curd, mix thoroughly and place the mixture in a cold room for a few hours to allow the curd to absorb the cream. If a drier cheese of somewhat better keeping quality is desired, use a richer cream in smaller quantities. A small amount of vanilla may be added to creamed cottage cheese to improve the flavour.

A few dairies follow the practice of setting the milk at night and finishing the process the next day. If this procedure is desired, warm the skim-milk to 70-72° F. and add one per cent starter and 1 c.c. of rennet to every 1,000 pounds of milk. In about twelve hours, or the next morning, the milk should be sufficiently coagulated to be cut, cooked, washed, etc., as outlined above.

Several types of packages are used in marketing cottage cheese, the most popular being the glass jar or tumbler and the 12-16 oz. waxed paper cup. In either case weigh the well-mixed cheese into the package, seal, and immediately place in a refrigerated storage. The product is now ready for distribution.

In the sale of cottage cheese to large users, such as hotels or restaurants, it is well to use a returnable metal container of one or more gallons capacity depending on the size of the account. By so doing a considerable saving is accomplished, both in labour and material.

Cottage cheese is a perishable product. Therefore, if a profitable business is to be built or maintained in this product, the cheese must be kept cool and fresh, put in an attractive package and delivered promptly and frequently.

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