A Manual for Cheese Makers - 1866

Hart, Bros. & Co.

A MANUAL

FOR

CHEESE MAKERS,

PREPARED BY

HART BROS. & CO.,

WEST GOSHEN, CONN.

SEPTEMBER, 1866.

In presenting this little manual to our patrons, we have been actuated by a desire to secure a continuance of the reputation of the well-known "Goshen Cheese;" and thus contribute to the pecuniary interest of the dairymen of Litchfield County. How to maintain that reputation is a matter that appeals both to the pride and the pocket of every dairyman. Hoping to aid in promoting that result, and thus secure for our farmers the highest prices, we have prepared the following observations and directions.

We have consulted not only some of the best written authorities, but many of the best cheese-makers in the County. To the latter we hereby tender our sincere thanks.

After ten years experience in selling cheese, we think we have learned what kinds of cheese sell the most readily, and at the best prices; and as cheese is made to sell, it is for the interest of the maker to produce such as shall sell the best. In the following pages we have carefully condensed the opinions both of scientific men and practical cheese-makers, as well as the demands of the trade; and we think if our friends and customers will employ the results of their own experience and observation, combined with the *study* of the directions here given, Goshen cheese may be A No. 1 in the market.

THE RENNET.

Soak an average sized rennet in one gallon of luke-warm water, for at least twelve hours. Rub it thoroughly to get its strength. Lay the rennet aside, and dissolve one pint of dairy salt in the liquid, remove the scum, strain the liquid, put it in a jug, cork tightly, and set it in the cellar. Shake thoroughly before using.

The same rennet may be put into about half the original quantity of water, and there remain till the first preparation is nearly used; but it must be stirred every other day till wanted.

THE ANNATTO.

Put a quarter of a lb. of "Concentrated Lye" into one gallon of hot water, let it stand several hours, or until the liquid is clear, then pour off, avoiding the sediment at the bottom. Add one pound of Annatto, and stir occasionally for a day or two, or till thoroughly dissolved, when a quart of salt should be added, and the whole preparation put into a jug, corked tightly, and kept in a cool place (cellar preferable.) When wanted for use, shake thoroughly, and wait a moment for any sediment to settle before pouring out for use.

The color of the cheese inside should be *a bright orange*, a cream or lemon color being insufficient.

FOR MAKING OLD CURD ENGLISH DAIRY CHEESE.

Have the tubs, pails, pans, strainers, and in fact *all* implements connected with the dairy, kept *sweet* and clean.

The milk should be perfectly sweet. If, however, any portion of it should *be very slightly* changed, add a small quantity of saleratus, say one tea-spoonful to a pan of milk. If positively sour, give it to the hogs.

By all means use a *thermometer*, as the hand is not a correct guide. The milk should be warmed in summer to 90 or 92 degrees, and in spring and fall to 96 or 98 degrees. Care should be observed, when new and skimmed milk are united, not to violate the last mentioned rule.

The quantity of *Rennet* should be such, as to change the milk into curd in about 50 or 60 minutes.

Carefully *cut*, or *break* the curd with the hands, and let it stand 15 to 20 minutes, whey off, break it

up again finely and evenly, avoiding large pieces, and whey off as before. Now, while constantly stirring so as to cook it evenly, add warm water or whey so as gradually to raise the temperature of the whole mass to 100 degrees, as this thoroughly separates the whey from the curd, and improves the quality. After sufficient stirring, let it stand half an hour, when it may be placed in the sink to drain. After it has drained sufficiently and become solid, cut it into pieces of about one foot square, and from three to four inches thick, turn them over and spread them so that one piece shall not lie upon another, allowing them so to lie until wanted for the press. In this way the curd will be solid and close, and the danger of becoming porous and spongy will be avoided.

In cutting the curd, (the same being from 12 to 24 hours old,) a curd cutter is desirable, but if a knife is used, cut it as evenly as possible into pieces about 1-4th of an inch square.

In *scalding*, the water should be gradually brought to 110 degrees of temperature after putting in the curd. Scald 15 or 20 minutes to properly warm it through.

In *salting*, use 15 ounces of salt, to a cheese that will weigh when taken from the press, about 25 lbs. The salt should be applied soon after scalding, while the curd is warm. Stir it thoroughly for 10 or 15 minutes, and spread as thinly as possible. It should lie in this condition at least half an hour, that it may cool, and the salt become thoroughly incorporated with the curd. In this way, the artificial heat is removed and the danger of huffing avoided.

Put to *press* at a temperature of 65 or 75 degrees—70 is nearest right, but in warm weather it cannot be cooler than the room in which the curd is kept. Put the weight on gradually at first, or until the whey runs clear from the cheese, when it may be increased.

Press twelve hours, and be sure that sufficient weight is applied to get out all the whey, and make the cheese compact and solid. When a curd is soft, press more slowly than when firm. Remove it from the press, cap it, put it to press again the other side up, and let it stand 36 hours longer. After this, let it stand a day or more to permit the capping to become thoroughly dry, when it is ready to be greased. Use sweet grease or whey oil, applying it as hot as possible, and using as much as possible. Having done this, it will need no farther grease for a month or more. Turn daily, and rub them with the hand.

In making cheese in what is termed the "QUICK WAY," or from new curd, observe the preceding directions respecting the warmth of the milk, the quantity of Rennet, the cutting or breaking up, and wheying off. Then add warm water or whey so as to gradually raise the heat of the whole

mass to 100 degrees. Let it stand half or three quarters of an hour, stirring twice during the time. Remove part of the whey, and add sufficient hot water to bring the temperature of the whole mass up to 110 degrees. Let it remain half or three quarters of an hour longer, or until the curd will squeak between the teeth like India Rubber. Then whey off, salt, cool, put to press, &c., the same as by the other process.

As a general rule, we prefer cheese made of old curd.

GENERAL OBSERVATIONS.

In all matters pertaining to the dairy, absolute cleanliness is necessary, and this means more than exemption from visible dirt. The curdy portion of milk is liable to putrify, and *boiling water only* will cleanse wooden vessels used in the dairy.

Newly painted utensils should not be used under two or three months, as there is danger of poison being extracted from the paint and imparted to the cheese.

The premises also should be clean. Milk absorbs all kinds of odors with great facility, and the richest of milk may be spoiled as readily before, as after the rennet is added.

During a thunder-storm, close the milk-room, so as to exclude, as far as possible, the outer air.

When milk is "run up" at night, in warm weather, and the temperature is found to be above 90 degrees, reduce it to this point by the use of cold water.

In warming the night's milk in the morning, warm as much of it as possible, and heat none above 98 degrees, as this starts the oil.

"Too much caution cannot be exercised to have the rennet clean and good. Properly prepared, the liquid is bright, clear and effective, *perfectly free from any disagreeable smell or taste*, and will keep in perfect order through the season. If faulty in any respect, the cheese will suffer accordingly. Tainted rennet is the source of infinite mischief to the dairy, even when the taint is so slight as to be unsuspected. It produces ills well known to the dairyman, as huffing, rapid decay, nauseous stenches, the breeding of mites, and, often the loss of the cheese." [S. L. Goodale, Sec. Maine Board of Ag.]

When a curd is dry and solid, it is a good indication. When the pieces of curd are elastic all through, it is properly scalded.

Carefully observe the directions about coloring the cheese inside, *and bring it up to the standard.* This is of great im-

portance. Dairies of cheese in other respects nearly perfect, are often rejected for want of color. Exercise care in mixing curds, two colors in cheese being as objectionable as in butter. A careful use of the thermometer, together with an observance of the suggestions herein embodied, would enable us, when filling orders from different dairies, to give nearly a uniform color, and would also tend to uniformity of style and quality in the same dairy.

Let every cheese be entirely covered with cloth and the heads sewed in. In curing cheese, a dry room, air and light are important, but sunshine or a strong current should not come directly upon it. The temperature of the cheese-room should, by all means, be nearly uniform—from 70 to 80 degrees is about right. Use the thermometer, and as the weather cools, supply artificial heat. Great mischief is done in the spring and fall, by allowing cheese to stand in cold apartments. Consequently they go to market wholly uncured, and are very likely to injure or spoil.

As a general rule, cheese should not leave the shelves till they have been thirty or forty days from the press.

We would remark in this connection, that the use of the *skimmer* has reached to such an extent, particularly in the spring, as to render the cheese nearly valueless, and if continued, we fear that prices will not prove very remunerative. It would be well to go no farther in this direction than to skim the night's milk, and put the morning's milk into the cheese unskimmed.

The shippers want for their trade, as good cheese as can be made, and would select only such, were they taking them from a store in New York. A cheese that is either soft, huffy, light-colored, ill-shaped, leaky, sticky, or that has a damp surface, is unsuitable to go to the West Indies, however much of cream there may be in it. That trade requires a cheese that is firm and close, but not tough, with a good flavor, a nice exterior, is well colored, and has good keeping qualities.

As a large proportion of the Goshen cheese goes to a hot climate, and is subjected to great heat on its passage, our readers can readily see why it is necessary to avoid the defects mentioned above. We find that nearly or quite one third of those sent to the West Indies perish before arriving at their destination. This evil must be remedied, if Connecticut farmers expect to hold the trade of past years, and find a ready market and good prices for their cheese. We may add that the quality of N. Y. State and Ohio cheese is being steadily improved. The latter State is now furnishing some beautiful English Dairy shipping cheese.

Cheese-making is the great overshadowing agricultural

interest in the hill towns of Litchfield County; and to make an excellent article should be the ambition of every farmer, and should enlist the most careful attention of all who engage in its manufacture.