

WINTER BUTTER

The making of butter in winter cannot be done in the same manner as is the practice in summer. The production of the milk (the feeding, housing, time for calving of the cows) and the keeping, are so different and so faulty in winter, that we cannot succeed in making export butter, or even butter for the home-market, by following the rules that guide us in the process used for butter-making in summer.

1st. The need of destroying by pasteurising the greater part of the noxious germs of fermentation is absolute. Immediately after the skimming, which may be fairly well done at 90° F., the cream is to be warmed in the bain-marie for 20 minutes, keeping it stirred almost continuously, and then cooled down to 50° F., as fast as possible, so as to prevent any fermentation during the lowering of the temperature. During the passage through this scale of temperature, there is produced, by the exposure to the free air, a vast evaporation that carries off from the cream an almost incredible quantity of smells of all kinds that have lain imprisoned in the milk under the layer of cream. The cream becomes completely changed and returns almost to its neutral condition, thereby becoming through its absorbing power more easily impregnated with any flavour or smell that may be presented to it. The ferment, whose preparation and use we studied in the last chapter, is the matter on which we reckon to impart to the butter the specific flavour that proceeds from the acidulation of the cream and which is required by the market.

The cream is kept at 50° F., for 3 hours that the fatty matter may become thoroughly cool. This cooling gives its firmness, permits the aggregation of the fat-globules by the action of the churn, and enables us to secure as complete an extraction of the butter as we have any right to expect.

Between whiles, the maker can devote himself to his ordinary work, such as the washing, cleaning up of the machinery, utensils, pumps, pasteurisers, etc., he ought also to see that the churn is cooled, to hinder, in some degree, the rise in temperature of the cream.