

Now tainted milk mostly comes under the attention of the practical man when cows are first turned out to grass. Either he observes it himself, or if selling his milk wholesale is speedily not tied by the firm who purchase it.

The milk, shortly after drawn, assumes a mildly bitter flavour, which increases with the length of time it is kept, and is more pronounced the higher the temperature. Should the milk be made into cheese, attention is firstly drawn to it at that period when the curd is cut and the whey separates out. The whey tastes different from usual, any sweetness being almost imperceptible.

The bitterness increases rapidly until the whey is drawn, both curd and whey being strongly impregnated with it. During all stages it is noticeable, when the cheese goes to press, and even next day, when taken out for capping, and afterwards bandaging before being removed to the ripening room.

CAUSES.

are difficult to state definitely. Cows receiving daily an abundance of grass, and then when brought in at nights (the weather being too cold at first for them to be left out altogether) part of their winter ration of perhaps hay, straw, mangels, &c., do not generally give milk of the finest nature desired, *i. e.*, at least as regards taste, &c.

The next and most fruitful cause I have noticed is due to the cows when first left out altogether grazing in the hedgerows at nights. The cold nights, which they certainly must feel to a great extent, as compared with their winter housing, cause them to eat under the hedges to avoid the cold winds as well as can be; there the coarsest of grasses and weeds always grow, and are eaten at times like this, whereas, under ordinary circumstances, they are avoided. Also the young chooting buds on the hedges are often eaten, and these and the weeds, &c., may cause the taint referred to.

It is a strange fact that many herbs have a direct influence on the milk, generally for the bad, and although milk flavoured with garlic is not prevalent at this time of the year, the other taint is extremely obnoxious and very deleterious to the cheese or butter produced from such. Bacterial action should not be left out as a cause; possibly some tribe unnamed so far have a good deal to do with the trouble.

REMEDIAL MEASURES.

As far as the milk-selling farmer is concerned, there is nothing better than very efficient refrigeration to keep the taint from becoming worse. At a low temperature, although noticeable to a slight extent, it lies practically dormant. Passing the milk twice over the refrigerator will also aerate or oxygenate it, besides bringing about the extra cooling required. There is a special refrigerator with combined aerator now on the market, but doubtly cooling is sufficient for all practical purposes.

As to cheese-making, when taint is noticeable in the milk the best thing to do is to make it as frequently as possible into cheese. To begin with, add starter and also more rennet than usual, scald to 100 deg. Fahr. (depending on the variety), and allow to become fully acid before drawing the whey, after which keep the curd warm and turn and open out frequently until ground. After grinding spread out in a thin layer for the air to play well about it, and salt more liberally than usual. Leaving for an hour after salting before putting into cheesets helps to free the curd somewhat from the objectionable smell present. In dealing with tainted milk for cheesemaking, the utmost care should be taken not to be deceived as to the degree of acidity of the cheese. It should be borne in mind that the taint masks the acidity, and it is only on strictly definite tests, such as the caustic soda test for acidity, that the different stages of progress in the making can be accurately judged. A feature that it is necessary to call attention to also is that of using pure starter of milk, butter-milk, whey, &c., as the case may be. It should be clean and sharp to the taste and smell. After making objectionable milk into cheese, never keep any of the whey to add to the following day's make, as this only carries on the taint. Start afresh by allowing some pure new milk to go sour, and add that.

Curiously enough it is often the case that ill-flavoured curd develops during the ripening period (three to four months' time) into nicely flavoured cheese. How the ripening process is able to do away with the uncanny taste and smell is not yet explained; however, it often does so, though of course not by a long way every time.

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