

Advantages of a Rich Cream.—Thin cream is responsible to a large extent for the sour cream flavour so frequently found in gathered cream butter.

Many patrons have the idea that a large amount of cream should return a correspondingly large pay cheque, forgetting that they are paid only for the butterfat in the cream, or the butter made from the fat.

The skimming of a rich cream is a decided advantage to the patrons in more ways than one. The following table shows the advantage with reference to hauling and the amount of skim-milk retained on the farm, of skimming a rich cream with a herd of ten cows with an average yield of 4,000 pounds of milk testing 3.5 per cent.

TABLE I.—Total milk, 40,000 pounds. Total butter fat, 1,400 pounds.

| Per cent fat in cream. | Sent to the Creamery. | | Kept on the Farm. | |
|------------------------|-----------------------|--------|-------------------|------------|
| | Butter-fat. | Cream. | Skim-milk. | Skim-milk. |
| | Lb. | Lb. | Lb. | Extra Lb. |
| 20..... | 1,400 | 7,000 | 33,000 | |
| 25..... | 1,400 | 5,600 | 34,400 | 1,400 |
| 30..... | 1,400 | 4,662 | 35,338 | 2,338 |
| 35..... | 1,400 | 4,004 | 35,996 | 2,996 |
| 40..... | 1,400 | 3,500 | 36,500 | 3,500 |

The foregoing table shows that there is the same amount of fat sent to the creamery in all cases, but there is a very great difference in the amount of skim-milk left on the farm. An additional advantage is that there is less cream to be taken care of, and it is easier to keep it sweet.

Table II shows the results of experiments conducted by the Dairy Division, on keeping thick and thin cream from the same milk under exactly the same conditions for different periods.

TABLE II.

| Cream Kept. | Length of time kept. | Fat in cream. | Temperature of cream. | Acidity of cream. |
|-------------------------|----------------------|---------------|-----------------------|-------------------|
| | | Per cent. | Degrees F. | Per cent. |
| In the cellars..... | 36 hours.. | 31.00 | 65.50 | 0.430 |
| In the cellars..... | 36 " .. | 22.20 | 66.50 | 0.540 |
| In insulated tanks..... | 36 " .. | 31.67 | 57.50 | 0.175 |
| In insulated tanks..... | 36 " .. | 22.00 | 57.50 | 0.195 |
| In insulated tanks..... | 60 " .. | 32.19 | 55.40 | 0.380 |
| In insulated tanks..... | 60 " .. | 21.55 | 55.50 | 0.440 |

These figures show that in every case the thin cream had the highest acidity, and it had always a much stronger flavour.

If all the cream sent to cream-gathering creameries tested 30 per cent fat, it would mean thousands of dollars of extra money in the pockets of the patrons from the feeding of more and better stock, and the quality of the butter would be very much improved.