

KANSAS STATE AGRICULTURAL COLLEGE
Agricultural Experiment Station

CIRCULAR NO. 39

OFFICE OF STATE DAIRY COMMISSIONER

Cream Grading for Kansas

Geo. S. Hine, Commissioner

A circular explaining why cream should be purchased according to grade, and giving rules on which the grading may be based

More than \$1,000,000 loss annually is incurred to our state through the delivery and sale of inferior grades of cream. The producer bears all of this loss.

MR. DAIRYMAN, WHAT GRADE OF CREAM ARE YOU DELIVERING? ARE YOU RESPONSIBLE FOR A PART OF THIS LOSS?

WHY THIS DIFFERENCE IN VALUE.

It is impossible to make first grade butter from second grade cream. The most modern equipment and the most efficient men obtainable are both to be found developed to the highest point in our Kansas creameries. Nevertheless, it is impossible for these experts with this equipment to produce a high grade product from poor cream. It is this high development of our creameries which is largely responsible for the recognition our butter receives today on the large markets where it must be sold in competition with butter from Minnesota and Wisconsin. The butter from these states is made from cream delivered to the factory in far better condition than is our Kansas product.

Some idea of the prices received for the different grades of butter may be determined by looking over the following table which is based on the prices received in New York during the months of January, February, and March of this year.

Average prices paid for butter on the New York Market for the week ending:

	Extras	Firsts	Seconds
Jan. 10	35 $\frac{3}{4}$ —36 $\frac{1}{2}$	28 $\frac{7}{8}$ —34 $\frac{1}{4}$	24 $\frac{3}{8}$ —28
Jan. 17	33 $\frac{1}{4}$ —33 $\frac{1}{2}$	28 $\frac{1}{4}$ —32 $\frac{1}{4}$	24 $\frac{1}{2}$ —27 $\frac{3}{4}$
Jan. 24	31 —31 $\frac{1}{2}$	28 —30 $\frac{1}{2}$	25 —27 $\frac{1}{4}$
Jan. 31	27 $\frac{7}{8}$ —28 $\frac{3}{4}$	26 —27 $\frac{1}{4}$	23 $\frac{1}{2}$ —25 $\frac{1}{4}$
Feb. 7	26 $\frac{7}{8}$ —27 $\frac{1}{4}$	25 $\frac{1}{4}$ —26 $\frac{5}{8}$	23 $\frac{1}{4}$ —25 $\frac{7}{8}$
Feb. 14	28 —28 $\frac{1}{2}$	26 $\frac{1}{4}$ —27 $\frac{1}{2}$	23 $\frac{3}{8}$ —25 $\frac{3}{4}$
Feb. 21	30 $\frac{3}{4}$ —31	27 $\frac{1}{4}$ —30	24 —26 $\frac{3}{8}$
Feb. 28	31 $\frac{1}{8}$ —31 $\frac{1}{2}$	27 $\frac{3}{4}$ —30 $\frac{1}{2}$	24 —26 $\frac{3}{4}$
March 7	30 $\frac{1}{2}$ —31 $\frac{1}{4}$	27 $\frac{1}{2}$ —30	24 $\frac{3}{4}$ —26 $\frac{7}{8}$
March 14	28 —28 $\frac{1}{2}$	26 —27 $\frac{1}{2}$	23 —25 $\frac{1}{8}$
March 21	25 $\frac{7}{8}$ —26 $\frac{1}{2}$	24 —25 $\frac{1}{8}$	21 $\frac{3}{4}$ —23 $\frac{1}{8}$
March 28	26 —26 $\frac{1}{2}$	24 —25 $\frac{1}{2}$	22 $\frac{1}{3}$ —23 $\frac{1}{2}$

The published market quotations are often misleading since they are based on the highest prices received for the grade known as "Extras." Especially is this true of Kansas butter since none of its grades high enough to sell better than "Firsts," and a great portion goes as the lower grades of "Firsts," with a considerable portion selling as "Seconds." For instance, the difference in the market quotation and the actual selling price of the different grades of butter for the week ending Jan. 10, would be the average market quotation for the week, 36 1-2c. The selling price of the greater portion of "Firsts" was 30c with "Seconds" selling for about 25c.

Who Receives the Benefit of this 11 1-2c Spread in Price?

Under our present buying system, the man delivering a second grade cream receives just as much a pound for his butter fat as does the man delivering a first grade cream and yet the butter made from these two grades of cream is sold for a difference of from 5 to 11 1-2c per pound. Is this a fair buying basis? Emphatically no! There is absolutely no justice in a system allowing the producer of an inferior cream, from which only an inferior grade of butter can be made, to receive the same price for his article as does the producer of a first grade cream from which a high grade butter can be made.

It costs more to produce a clean cream and requires

more time to care for it properly and to keep it in such condition that it will grade first when delivered at the point of sale. The man delivering this kind of cream should be compensated for the extra work entailed,

Trial Month Beginning June 15, 1914.

Because of the points mentioned above, this department has always been in favor of a grading system. We have urgently advocated the adoption of a system based on quality. All creamery companies located in Kansas have finally agreed to adopt the following plan:

Cream will be purchased on grade for one month, beginning Monday morning, June 15, 1914. No difference will be made in price, however, until the end of the trial period, when, if successful, these companies propose, as suggested by the department, to make a three-cent difference in price between first grade and second grade cream. No third grade cream will be accepted.

Cream Grading.

Cream shall be graded according to the following rules:

First grade cream shall consist of cream that is clean, smooth, free from all undesirable odors, clean to the taste, and sweet or only slightly sour.

Second grade cream shall consist of cream that is too sour to grade as first, that contains undesirable flavors or odors in a moderate degree, that is foamy, yeasty, or slightly stale, or that is too old to pass as first grade cream.

Third grade cream shall consist of cream that is very old, rancid, mouldy, dirty, or curdy, and such cream will not be accepted by the creamery companies.

How to Get First Grade Cream.

To produce first grade cream, it is necessary that absolute cleanliness be observed in every detail and that the following rules be adopted and followed:

1. Wipe the cows' udders with a damp cloth before milking, or wash the udders when necessary.
2. Remove all milk from the barn immediately after milking and separate it at once.
3. Set the separator screw so that the cream will test about 35 per cent.
4. Wash, scald, and air the separator and all other **milk** utensils immediately after using.

5. Cool the cream immediately after separating it. Never mix warm cream with cold cream.

6. Keep the milk and the cream cool; this is best done by placing the cans containing them, in a tank of flowing water.

7. Stir all cream at least twice a day.

8. Do not allow the cream to freeze.

9. Deliver the cream as required by section 8 of the dairy law, which reads as follows:

"Cream to be used in the manufacture of butter that is not delivered to point of shipment within twenty-four hours after milking, must contain not less than twenty-five per cent. of butterfat and shall be delivered in wholesome condition."

"No part of any shipment of cream to be used in the manufacture of food products shall be more than three days old when delivered to the point of shipment during the MONTHS of May to October, inclusive, and four days old during November to April, inclusive,"

"Such cream must not be delivered at the point of shipment more than one hour before the schedule time of the train on which it is to be shipped, unless kept in a protected, cool, and sanitary place free from foul odors."

10. Keep the receptacles containing milk and cream covered with a wet blanket while delivering these products in warm weather.

Do not fail to ask your operator what grade of cream you are delivering and how you can improve the quality.

If this grading system is adopted after the trial month, do not blame the operator if your cream does not grade first; find out and remedy the evil. Everyone can produce first grade cream. Remember, the operator has to pay the difference out of his own pocket, if he gives you a first grade price for a second grade cream.

How The Department Will Help You.

The state dairy commissioner's department stands ready and anxious to help anyone desiring assistance in any of the following points:

How to improve the quality of milk and cream.

Proper location and method of constructing a milk house.

Proper location and method of constructing a sanitary dairy barn.

Proper method of sampling and testing milk and cream.