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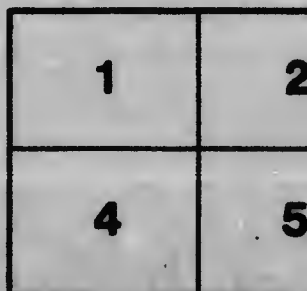
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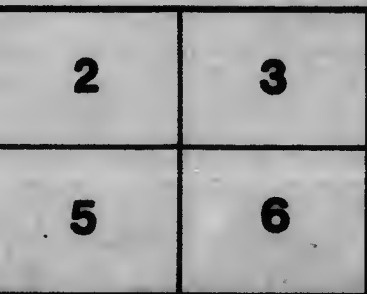
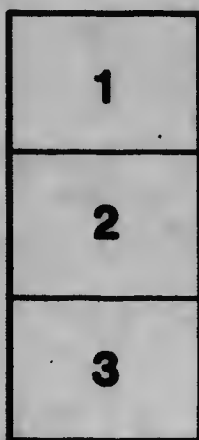
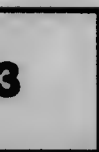
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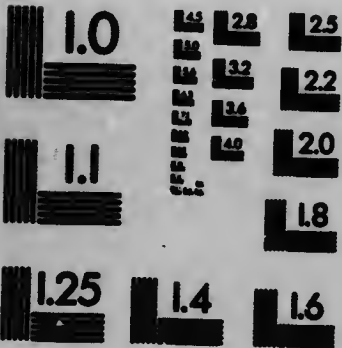
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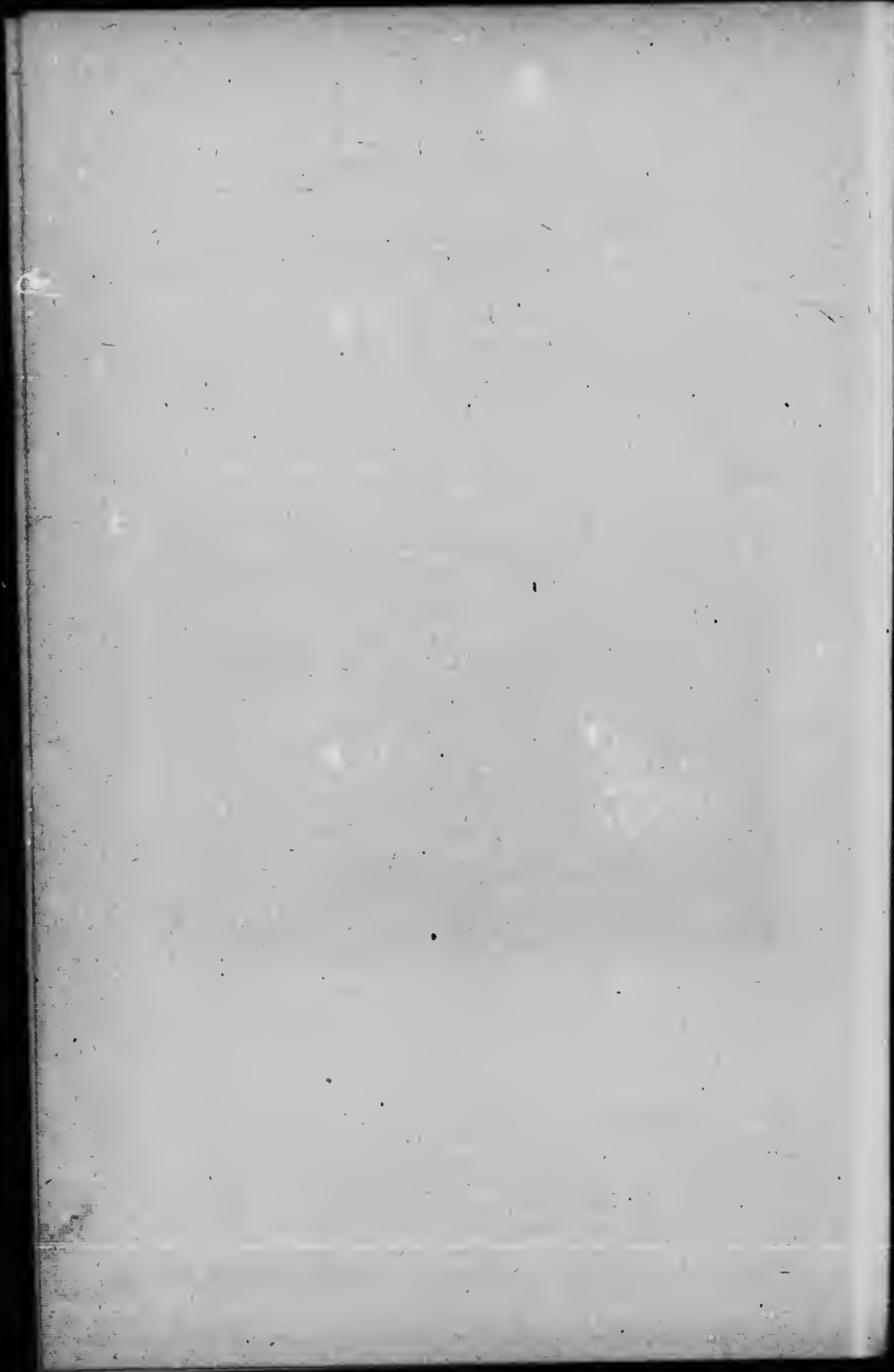
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## Government of the Province of Saskatchewan

DEPARTMENT OF AGRICULTURE

# THE GRADING OF CREAM

Paying for food products according to their quality is a system which is gaining rapidly in all parts of the world.

In Canada all fruits are graded and bought and sold according to grade. Grains are practically all graded and a large percentage of eggs, butter and other farm products are sold according to their quality.

Is there any reason why cream should not be graded? Is it fair that a farmer who sends in sweet cream of excellent flavour, and from which a high grade of butter can be made, should receive no more for it than does the man who sends in over-ripe, badly-flavoured cream from which it is impossible to make good butter?

Believing the principle to be right, the Co-operative Creameries, several years ago, adopted the system of grading cream and paying for it according to its quality, and after noting from year to year the marked improvement in the cream received and in the flavour and keeping qualities of the butter made, we do not hesitate to pronounce this system a decided success.

The following are some of the reasons why cream should be graded if the creamery industry in Saskatchewan is to become the success that it should be.

### REASONS FOR GRADING CREAM.

1. It is obviously just to all classes of dairymen.
2. It makes for individual and collective improvement on the farm and at the creamery.
3. It dispenses with the premium on inferior cream under the pooling system and replaces it by a premium on the best.
4. Competition in the butter markets.
5. Higher standards of quality being fixed by the trade.
6. The prospect of obtaining a higher price for the butter.
7. The growing desire on the part of the enlightened producer and manufacturer to offer only the best to the trade.

### GRADE STANDARDS ADOPTED BY THE DAIRY BRANCH.

Extra No. 1. Cream must be perfectly sweet and fit for the domestic trade.

No. 1. Cream must be clean and fresh flavoured showing no sediment and free of lumps and curdy matter.

No. 2. Sour or sweet cream slightly off or strong in flavour, but of a smooth and even consistency.

No. 3. Cream that does not qualify for the other grades.

#### DIFFERENCE IN PRICES.

The advance price on Extra No. 1 is 3 cents per pound of butter fat above No. 1 and 5 cents above No. 2, while No. 1 is 2 cents higher than No. 2.

#### (Example)

If the advance price on No. 2 cream is 22 cents, the advance price on No. 1 cream will be 24 cents and the advance price on Extra No. 1 will be 27 cents.

#### OBJECT OF THE DAIRY BRANCH.

1. To reward each farmer according to the class of work he does.
2. To obtain cream, fresh, sweet and clean in flavour.
3. To make butter clean in flavour, if kept in cold storage for several months.
4. To obtain the highest price from the best trade.
5. To develop a profitable market for creamery butter made in Saskatchewan.

#### DUTY OF DAIRY FARMERS.

1. To milk in a clean place.
2. To milk with clean hands and dress and to wash or brush (the former method preferred) each cow's udder before milking.
3. To separate the milk immediately and skim a 35 per cent. cream.
4. To wash the separator immediately after each milking.
5. To cool the cream in cold water to which ice has been added to a temperature of 50 degrees Fahr. or lower within two hours after separating.
6. To use a thermometer to make certain of the temperature.
7. To keep the cream in a "shot gun" can or "creamer" sitting in cold water until lifted for delivery to the creamery.
8. To deliver the cream to the creamery three times a week if possible and certainly not less than twice each week.
- (a) To work willingly with the Dairy Branch to create a demand for creamery butter made in Saskatchewan and to supply the trade that will pay a profitable price, because of its superior flavour and good quality.

#### FLAVOUR SUPREME.

The flavour of the cream determines the flavour of the butter, and its bacterial content and development determine the keeping properties of this butter. The farmers who take care of the cream while on the farm and deliver it in splendid condition are the backbone and mainstay of the dairy industry, while those who are careless and indifferent are



responsible for butter that is off or strong in flavour and does not possess good keeping properties. The classification of prices gives justice to both.

#### A HIGHER STANDARD OF QUALITY IN BUTTER.

Butter that would pass as finest ten years ago would not qualify as such today. This standard is being fixed by the consumers as they are demanding from the retailer, who in turn demands from the wholesaler, clean, fresh, sweet flavoured butter possessing good keeping qualities.

Butter made during the winter months throughout all Canada is not sufficient to supply the demand, while during the summer months there is a surplus. Summer butter is held in cold storage to supplement the winter make. Butter, therefore, that does not possess good keeping qualities may pass inspection when put into storage but be severely criticised when taken out for the trade. It is not sufficient to have butter clean in flavour when made, but it should show this characteristic when sold to the consumer even at the end of six months. This can only be done by making it from cream not showing undesirable flavours, and such cream can best be obtained by grading and by paying more for good cream than for that of inferior quality.

#### CONTROLLING TEMPERATURE OF CREAM WHILE IN TRANSIT.

The following shows the results of experiments conducted by the Agricultural Experiment Station at Berkeley, California, with railroad shipping cans uncovered, covered with dry felt cover and with wet felt or burlap cover. These methods might be adopted by any farmer in Saskatchewan.

	IN THE SHADE				IN THE SUN			
	Start	1 hr.	3 hrs.	5 hrs.	Start	1 hr.	3 hrs.	5 hrs.
Temperature of air .....	99	100	99	98	114	128	110	104
Temperature of contents:								
No Cover .....	60	61	78	82	60	80	92	96
Dry Cover .....	60	62	65	66	60	65	70	73
Wet Cover .....	60	62	66	67	60	64	68	70

#### GRADING CREAM NECESSARY TO MEET TRADE REQUIREMENTS.

In the building of a successful and profitable dairy industry the marketing of the product is almost as important a factor as the production of the cream.

A favourable impression may be made on the market by the sale of a good shipment of butter, but if the second shipment is inferior in quality, the favourable impression created by the first shipment is lost and instead a prejudice against this butter is created because of its lack of uniformity and desirable flavours.

In order to pay the producers of cream the highest price the market affords, we must be prepared to offer the trade butter equal to any on the market. We must not only produce butter of good flavour when it is churned but we must produce butter which will retain this flavour until it reaches the table, whether it be one week or one year.

Anyone who has had experience in the making or marketing of butter knows how impossible it is to manufacture butter of good keeping quality from over-ripe or badly-flavoured cream. It quite frequently happens that 90 per cent. or more of the cream received at a creamery is of good quality but if one or two bad lots are taken in and mixed with the better cream, the keeping qualities of the whole churning is seriously injured. It is easy then to realise how difficult or how impossible it is to produce high grade butter of good keeping properties unless the cream is graded and steps taken to prevent the inoculation of the butter with these undesirable flavours.

The possibility then of supplying the market with uniform butter of good keeping properties which will bring the highest price depends upon selecting the cream. No other method will produce the desired result.

From the financial standpoint of the farmer as well as for the reputation of the dairying industry, the grading of cream is right in both principle and practice.

#### REPUTATION OF CREAMERY BUTTER MADE IN SASKATCHEWAN.

The reputation of creamery butter made in Saskatchewan is now in the making. Much depends on the next few years. We have the assurance of the best dealers that if we maintain the uniform high standard that government creamery butter has reached it can be disposed of at a price in excess of that paid for the regular run of creamery butter. This means a direct gain to the farmers who produce the cream, for it costs no more to manufacture No. 1 butter than it does butter of an inferior grade.

The possibility of obtaining the higher price rests largely with the farmers who produce the cream. The Dairy Branch has a staff of competent creamery managers engaged to protect the farmers' interests in manufacturing their cream into butter.

To enable shippers to produce cream of the highest quality it is necessary for them to know the best methods of caring for dairy utensils and for cooling the cream. Information in regard to these matters will be supplied free of charge to any one sending his name to the Dairy Branch, Regina. Ask for Bulletin No. 15 on "The Care of Cream."

Dairying in Saskatchewan has almost unlimited possibilities. The Dairy Branch working alone cannot hope for success, but with the co-operation of the farmers of the province success is assured.





