

percentage of solid in the mixed liquid as in the skim milk, so that one part of powder to ten parts of water makes it about right. Twelve churnings were made, part with regular skim milk starter, and part with powdered milk starter. These all scored practically the same, and there seems no danger of getting a bad flavor with the powder.

Mr. Barr devoted three months during the summer of 1911 in conducting experiments on the pasteurization of cream and the use of pure cultures, the object of the work being to obtain some definite information on pasteurizing and using a culture in all kinds of cream. The work was conducted at the Renfrew Creamery, Renfrew, Ont., the cream being selected from the regular supply. This cream was put in one of the creamery cream vats and divided into different lots, each lot being treated differently.

The following tables will show the result of the average score on the flavor of the butter from a number of these experiments:

AVERAGE SCORE ON THE FLAVOR OF THE BUTTER FROM THE SAME CREAM SWEET, AND AFTER STANDING 24 HOURS AT A TEMPERATURE OF FROM 51 TO 62 DEGREES.

Condition of Cream.	Average Acidity in Cream.	Average Score for Flavor—Possible 45.			
		Raw Cream without Starter.	Raw Cream with Starter.	Past. Cream without Starter.	Past. Cream with Starter.
Sweet	.30%	40.79	41.58	41.87	41.92
Sour	.55%	40.64	41.05	41.75	41.79

These experiments show that when the cream is delivered to the creamery fairly sweet and clean in flavor, there is not a very great difference in the flavor of the butter from raw cream with starter and the two lots pasteurized. These three lots, however, scored considerably higher than the lots from raw cream without starter. There is little difference between the lots from sweet cream and those from sour cream, or the same cream kept 24 hours longer.

Total score sweet cream lots 41.54

Total score sour cream lots 41.30

AVERAGE SCORE ON THE FLAVOR OF THE BUTTER FROM CREAM DELIVERED AT THE CREAMERY IN A SOUR AND SLIGHTLY TAINTED CONDITION.

Average Acidity in Cream when received.	Average Score or Flavor—Possible 45.			
	Raw Cream without Starter.	Raw Cream with Starter.	Past. Cream without Starter.	Past. Cream with Starter.
.54%	38.75	36.47	40.73	41.10