

PAYMENT FOR MILK ACCORDING TO ITS BUTTER OR CHEESE VALUE.

While in creameries payment according to quality is always made in proportion to the amount of fat furnished by each patron, in cheese factories two different methods exist:

(1) According to the amount of fat in the milk, as in creameries.

(2) By taking into consideration the casein, as well as the fat, of the milk. As the per cent. of casein in milk is fairly constant, some constant number, usually 2, is added to the per cent. of fat as an allowance for the casein.

Extended experiments carried on at this station all go to prove that the second is the much preferable method to adopt in cheese factories. (For information on this question write the Dairy Department for a bulletin entitled "Experiments in Cheesemaking.")

To make a division of money according to the second, or fat-casein method, taking 2 to represent the per cent. of casein in the milk: During a certain month three patrons supply milk to a factory, as follows:

A, 3,462 pounds milk, testing 3.1 per cent. fat.
B, 5,220 " " 3.6 "
C, 8,371 " " 4.0 "

From the above milk are made 1,650 pounds cheese. The cheese sells for 9½c. a pound and it costs 1½c. per pound to manufacture it.

Net value of a pound of cheese, $(9\frac{1}{2} - 1\frac{1}{2}) = 8\frac{1}{2}c.$

Net value of 1,650 pounds of cheese = $1,650 \times 8\frac{1}{2}c. = \$140.25.$

As seen below, there are 971 lbs. fat and casein.

971 pounds fat and casein are worth \$140.25

1 pound " is " $\frac{140.25}{971} = 14.44c.$

Name.	Pounds milk.	Per cent. fat.	Per cent. fat and casein.	Pounds of fat and casein.	Value at 14.44c. per pound.
A.....	3,462	3.1			\$ c.
B.....	5,220	3.6	5.1	176.5	25 48
C.....	8,371	4.0	5.6	292.3	42 20
Total			6.0	502.2	72 51
				971.0	140 19

METHOD OF CONSTRUCTING TABLES FOR USE IN THE SECRETARY WORK OF A FACTORY.

In making a division of the proceeds of a cheese factory or creamery, a simple table can be readily made out which will materially lessen the labor of the secretary, and also the chances of making mistakes. The method is equally applicable, whether a division of the proceeds be made upon the fat basis, or the fat-casein basis, or according to the weight of the milk, and can probably be best explained by taking an example. Let us suppose that in a creamery, for a certain month, the net value of a pound of fat is 19.74 cents. This makes the net value of 100 pounds of fat equal \$19.74.