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THE ECONOMICAL FEEDING OF DAIRY COWS *

Prof. H. H. Dean, O.A.C., Guelph, Ont.

Definite Data as to the Cost of Producing Milk is lacking. Points of some curious Experiments. Some Advice of interest to all Cow Owners.

It is to be regretted that we know so little about the actual cost of producing milk. At the College for three years, 1896, 1897 and 1898, in round figures, it cost practically one cent to produce a quart of milk. Since then, food and labor have all increased so that it probably costs from 25 to 50 per cent., or more to produce a quart of milk to-day, than it did when these results were secured. New Jersey found in the seven years up to 1902 that it cost 2.37 cents to produce a quart of milk when charging up everything that could reasonably be attached to the cost of producing milk. It probably costs somewhere from two to two and one half cents a quart to produce milk in Canada to-day. It is unfortunate that we have not more definite data. Our people are wakening up to the need of knowledge on this point, for as we lessen the cost of milk production we increase the profits of the dairy business.

SUMMED UP IN SIX WORDS

The whole question of economical milk production can be summed up in six words, the man, cow, feed, stable, water, exercise, and we might add a seventh, cleanliness

The man's part is to make an environment for the cow suitable for milk production. Some curious experiments have been made within the last few years relative to this point. Mrs. Howie, an American lady has tried the plan of providing music for the cow at milking time. She found that music playing at the time of milking increased the flow of milk. A Chicago man purchased a set of chimes, which he attached to the cows while in the pasture. It is said that the music from these chimes was really entrancing and its effect was to increase the milk production of these cows. Another man provided cream-colored suits for his cows in summer time and resorted to the practice of cleaning their teeth daily. The result of his attentions were, it is said, two gallons increase a cow per day.

While we may question the merits of such means of increasing the milk flow, they point to the fact that we must make a study of cows in a way that we have never done before in this country. For years we have preached that cows should not go dry for more than from two to six weeks. It has been noted that the best results are often secured from a cow when she is given a rest of two months. Have we given this point study enough? In her period of rest, the cow is enabled to build up flesh and vitality. When "worked" for 11 1-2 months of each year, she has little opportunity to lay up such stores.

REPLACING PART OF MEAL RATION

Experiments in Denmark have revealed the fact that a large percentage of the meal ration may be replaced with mangles and sugar beets. In some instances, I believe too much meal is fed to produce milk economically. The growing of mangels in this country has not been carried to the point it should be. Turnips have been grown to too large an extent.

When substituting a part of a meal ration with roots, the change should be made gradually and results in milk production noted. A cow being fed on large amounts of dry feed and meal is doing a lot of work. Roots tend to cool her blood and in this way give beneficial results besides being readily digested.

THE CHEAPEST THINGS AVAILABLE

A recent writer said that fresh air never killed anybody. If dairymen would keep their cows as they ought to keep them, they would increase their milk production. The majority of stables, and it might be mentioned houses, also, are not provided with sufficient light and fresh air,—two of the cheapest things we can furnish.

I do not think that it will pay to put in expensive watering devices. Cows are better to go out to a trough to water, if the water be not too cold. It will be better for their health in the long run.

IT PAYS TO GIVE EXERCISE

There are cows that are confined too closely for a long time. Some of our dairymen have followed the "no exercise" theory and practice to the extreme. This has had an ill effect upon their herds.

We should study and work to produce milk economically and to get it cleanly; get more milk, cleaner milk, such as is more fitted for the average consumer.

The Champion Steer of the Guelph Winter Fair and his owner, Mr. James Leask

This is the magnificent Shorthorn steer that last year at Guelph won first prize in his class as a calf. Mr. Leask has disposed of him for $225.

Q.—Which would you prefer sugar beets or mangels?

A.—In feeding experiments, carried on at the College and elsewhere, mangles have been found to be quite equal to sugar beets.

Q.—Do you not think that warm water is better for the cow and that she will take more of it than she will of cold water?

A.—I don't believe that a cow relishes half warm water. We cannot ask a cow and find out her likes in this particular but I know that people when they want to quench their thirst prefer cool, fresh water. Water is needed to cool the body. There are special cases however, where warm water is advisable. As a general principle, however, it would appear that a cow prefers cold water.

Q.—Can you increase the fat in the milk of any particular cow?

A.—No. Feeds have little or no influence on the fat content of the milk although the milk fat will vary in percentage.

Q.—How much meal should be fed to a cow?

A.—This is a question that each man must determine for himself. A feeder should experiment and find out how much meal and how much roots and other feed a cow can profitably make use of.

Q.—What is your opinion about silage?

A.—It is the cheapest bulky food that a farmer can produce for milk production. More corn can be grown on an acre than is possible with any other fodder crop and the silo is the best place to keep it.

Q.—Which would you prefer, mangles or silage?

A.—Pound for pound I would take the mangles. Corn silage however is more economical from the standpoint of production. The best results are obtained from combining the two.

* The substance of an address delivered in the lecture room at the Guelph Winter Fair last week.