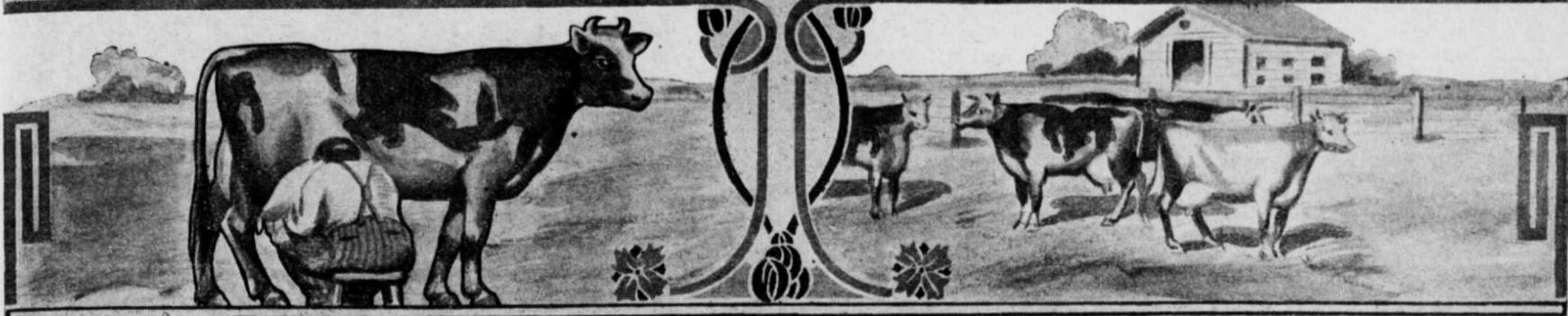


DAIRY DEPARTMENT



PRODUCING PURE MILK.

Bulletin 160 of the Ontario Department of Agriculture contains an address by Prof. H. H. Deah on the production of milk from which we take the following:

The first thing I want to emphasize in the production of milk is that we must have a good cow. What is a good cow? One that will produce at least 6,000 pounds of milk, or make not less than 250 pounds of butter in one year, at a cost of not more than \$30 for feed. Such a cow as that is a profitable animal. Will you bear in mind that a careful estimate, based upon results of the cow testing associations, states that the average production of the cows of the provinces of Ontario and Quebec, which comprises the best dairying districts in Canada, is only 3,000 pounds of milk in the year. A man can not afford to keep cows that produce only 3,000 pounds of milk in a year. One of the factors that we must bear in mind regarding a good cow is that we must have a strong, healthy, vigorous one, if we would have milk that has what is called vitality. I think it would be impossible to get the

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best milk for drinking purposes from a cow that is low in vitality.

Second, the cow must be fed the right kind of food. It is little wonder that many farmers are unable to obtain satisfactory milk production. They do not feed. If you ask a cow what she would rather have to eat, she would answer, "Give me juicy, succulent grass, and I will give you plenty of milk." For five or six months of the year the farmer must substitute for grass such food as mangels, carrots, and corn. If you want the best quality of milk, do not feed turnips. We should recommend the following ration for winter milk production: Eight to 10 pounds of clover hay, 30 to 40 pounds of corn silage, 20 to 30 pounds mangels, 8 to 10 pounds meal made up of equal parts of oats and bran by weight, and 1 to 2 pounds of oil cake, gluten-meal, or pea-meal, the ration to be given in two feeds daily to each cow. A cow does not need to be fed more than twice a day under ordinary conditions.

Give the cow plenty of water. How much water do you think was drunk by the cow that gave 96 pounds of milk in one day? Nearly 200 pounds. That does not mean that the milk was water, as her milk tested about 3.5 per cent fat. You can not water milk through the cow. Only man has learned that trick.

Next, give the cow plenty of salt. Treat her as if she were your friend. Any man who will kick a cow or strike her with a pitchfork should be taken by the back of the neck and kicked out of doors.

The cow house should be kept clean and sweet and well ventilated. Such a condition can be got at small expense. Bulletin 143 gives instruction as to how to ventilate a cow stable at small cost. No man should keep his cows in a small, damp, filthy house and expect good milk fit for human use. The cows must be kept clean. If you suggest currying the cows, farmers will laugh at you, but nevertheless cows need to be regularly brushed and curried. They need to be kept clean as much as horses, if not more so. It is impossible to get clean milk from dirty cows. You have only to notice the sediment in a milk bottle to know that this is a fact. The people of this country should rise and demand clean, sweet milk. Next, cows should be milked in a kindly manner. The person doing the milking should have on clean clothes. As a rule, the milking should be done by a man. He should

have on clean clothes, and should wash his hands before milking. Milk in a quick manner into a clean pail. The milk, immediately after it is drawn from the cow, should be strained, and cooled to a temperature of 50 to 60 degrees. If you get milk cooled to 50 or 60 degrees, it can be kept for a long time, and will be fit for human consumption. Milk which is not cooled at once forms a medium for the development of bacteria, and very often contagious diseases are spread through an impure milk supply.

I see no reason why skim-milk should not be sold. It is of special value to growing children. A great many cities have laws prohibiting the sale of skim-milk. I hold that skim-milk should be sold, that the poor of our towns and cities ought to have it. But it is hard to get any one to buy skim-milk, because it gives one the appearance of being poor. Buttermilk is a most healthful drink. If people would drink buttermilk instead of whisky, it would probably be better for all concerned. Scientists tell us that there are germs in sour milk which fight against the germs causing death to the human body. It is also said that buttermilk has a tendency to lengthen life. People in some parts of Europe drink largely of sour milk, and these people live to a very great old age.

The Wisconsin station lays down this law for dairy cleanliness: The stable should be kept as clean as possible and the cows well bedded and clean. The utmost cleanliness should be observed in milking. All dirt should be brushed from the cow before beginning to milk, and it is best to dampen the udder and flank of the cow, so as to prevent the dust and fine dirt from falling into the milk. The milk should be strained immediately after milking and not allowed to stand in the cow stable any longer than is absolutely necessary.

MILK FEVER, SO-CALLED.

We are now approaching the season of the year when farmers who have heavy milking cows, especially of the special purpose dairy breeds, coming in, will be in danger of suffering severe loss through the disease erroneously known as milk fever, says Wallace's Farmer. As a matter of fact, and as a rule there is an actual reduction in the temperature of the body. It is more of a brain disease than anything else, and hence has been called parturient apoplexy. In the old country it is called "dropping after calving."

This disease seldom affects any but well fed, heavy milking cows. It comes on suddenly directly after calving, and terminates in a very short time either in recovery or death. Cows with the fourth, fifth, or sixth calf are more susceptible to it than any others. It occurs mostly in summer and is more likely to occur in June than in any other month. It is also more likely to occur with cows that are brought from a pasture into the barn to receive better care during calving than with cows that are allowed to stay in the field.

In these heavy milkers all the feed that is eaten in excess of that required to run the machine is turned into milk and not into flesh or fat. This excess nutriment stored up in the glands and the blood induces what is called a plethoric condition, or excessive fullness of the blood vessels. When the calf is born and the blood which has been sustaining it is thrown back into the circulation, if the udder does not begin active secretion very promptly there is danger of milk fever.

At first the cow is excited and rest-

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