

Trade increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land .- Lord Chatham.

Vol. XXXIV

1915 B.C.

ping is ndustry, she, be Hey will our milk are in s at pre-nilk per is pas-is pas-is couver, hered by from the

shipped n and is f.

by this

operative

gers say

made by than by

fond of

hat's the butter,"

e cream-

be ship-but some

wn there ato their

iobs un-

d so they s' in our

e output

see there

ure milk farmers butter fat

rying in-

stigating

that the

and that

he farmer

lk, which

llon. The

citizen to

10 cents

10 cents allon. Of

es to the

sportation

er where? e farmers ause they

PETERBORO, ONT., OCTOBER 28, 1915

No. 43

## Feeding and Care of Dairy Calves The Details of a System Advocated by United States Department of Agriculture.

THE feeding of the dairy calf should begin before it is born. Too many dairymen practice very scant feeding of pregnant dry cows, and as a result weak, puny calves are dropped which from birth are handicapped in their development and are difficult to feed and care for. It is false economy for any dairyman to withhold feed from a cow under such circumstances, as this is likely to affect unfavorably the future welfare of the calf as well as later milk production by the cow. While the demands upon the cow at this time are perhaps not quite so great as when in ull milk production, there is

nevertheless a severe strain upon her, and she should be fed liberally so as to be able to produce a strong well-developed calf, and so that she may be in good condition to give a large flow of milk.

Teaching the Calf to Drink In nature the calf sucks the cow until it can support itself. In modern dairy farming, however, the value of butterfat and whole milk forces the dairyman to separate the calf from the cow soon after birth. The milk produced by the cow for the first few days (colustrum) has properties which put the calf's digestive system in good working order. It is therefore necessary that the newly-born calf have this milk. It is a good practice to let the calf suck the cow for about 48 hours after birth, but if weak and poorly developed it may be well to let it suck for several days to gain strength.

The longer a calf remains with the cow the harder it is to teach it to drink, but it is usually a simple matter to teach a good robust calf

to drink if taken when not more than two days old. Before this is attempted the calf should be kept from the cow for about 12 hours; it will then be very hungry. About two quarts of its mother's milk, fresh and warm, should be put into a clean pail and held in front of the calf, which will sometimes put its nose into the pail and drink without coaxing. In most cases, however, it will be necessary to let the calf suck the fingers and by this means gradually draw its nose into the milk. The fingers should be re-

noved carefully as soon as the calf gets a taste

of the milk. It will oftentimes take its nose out of the milk in a few seconds, and if so, the operation will have to be repeated. Patience is necessary. Usually after the second or third feeding the calf will drink alone. Occasionally a calf is stubborn and its nose has to be forced into the pail; in such cases it should be stradd'd and backed into a corner. The nose is then grasped with one hand, two fingers being placed in the mouth and the nose forced into the milk, when the calf, by sucking the fingers, will draw the milk up into its mouth. The fingers should

caused by feeding too much milk than by feeding too little. As a rough guide to the inexperienced feeder the following is suggested:

First week. Feed a 60-pound calf four quarts. a day of its mother's milk, warm from the cow.

Second week. If no digestive troubles appear and the calf is thrifty, increase the feed to five or six quarts of whole milk a day. This does not need to be its mother's milk.

Third week. Feed as for second week, except that one quart of skim milk is substituted for one quart of the whole milk.

Fourth week. Same as third week, except that one-half of the milk should be skim milk and one-half whole milk.

When the calf is one month old it may receive all skim milk provided it is thrifty. The amounts can be increased gradually until it is three months of age, when it should be taking 8 to

10 quarts a day.

The foregoing rule for feeding applies only to a calf weighing about 60 pounds at birth. It may be varied according to weight and the vigor of the calf. Experience will soon teach the feeder how to vary the amounts. Larger calves will need a little more milk. When skim milk is. used instead of whole milk some feeders attempt to feed more of it, because they think that the extra amount given will compensate for the loss of fat. This is entirely wrong. No more skim milk should be fed than if whole milk were used, but the fat removed from the milk should be replaced by grain, as pointed out in another paragraph.

Heating Milk For Calves While the calves are young the milk should be heated to blood heat (90 degrees to 100 degrees F.). When two or three monthsof age calves will do well on cold milk, provided it is of the same temperature, or practically so, at each feeding. The important thing is that the milk be of the same temperature at each

feeding. Dirty or old milk should not be given. Grain to Feed With Milk

A little grain should be fed as soon as skim milk feeding begins, in order to replace the butter fat removed in the cream. Two parts, by weight, of cracked corn and one of wheat bran make a good grain mixture which every farmer can readily secure and requires no special preparation. The calf should be taught to eat this grain by sprinkling a little of it in the feed box right after feeding the milk. No more grain should be fed than the calf will clean up readily.

The calf should be supplied with plenty of



By Mutual Understanding: Nature's Way Is the Simplest System of Calf Rearing Known.

be gradually removed and this operation repeated until the calf will drink alone.

Time of Feeding and Quantity

When a calf is young it is best to feed it three times a day, as nearly eight hours apart as possible; but many successful feeders feed only twice a day. The calf must be fed regularly and in equal quantities. It is impossible to give a rule which will apply to all cases, for some calves have greater appetites than others, grow faster, and therefore should have more milk. The working capacity of the stomach of the calf is small, and during the first few weeks more troubles are

a higher it is sold y and the hange are and manare being excellent methode flourish to y have in ent of the

the neces airie mar dollars an grow the will market he district. cer a go nt.-W. Province

of the Ostion will be Idings, To Thursday or which s been properts alon nent will be Mr. The ng experi-the Hor-crester, N aester, N