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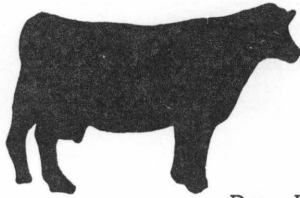
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WHAT YOU SHOULD KNOW ABOUT
FRESH AND FERMENTED COLOSTRUM
BLACKSBURG, VIRGINIA



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Fresh colostrum is the most important food a calf will ever consume. Fermented colostrum is also an excellent food for rearing calves. It is without cost and easy to use. It is, however, important to understand several points to avoid problems.

What is Colostrum?

Colostrum is the first milk produced by the cow after calving. A first calf heifer may produce as much as 100 pounds while older cows will produce up to 150 pounds. The baby calf only needs to be fed about 8 to 10 percent of its body weight per day, which will amount to 25 to 30 pounds during the first three days. This leaves approximately 75 to 125 pounds which may be fermented. It is the cheapest feed you'll never buy.

The First 3 Days (fresh colostrum)

The new born calf should receive 1 quart or more of colostrum milk from the dam within 30 minutes after birth. The calf is born with no protection against disease and the antibodies present in colostrum milk are mother nature's way of providing protection. If the calf is allowed to nurse, the teats and udder should be washed and dried to prevent the calf becoming infected before receiving the colostrum milk.

Some dairymen milk the fresh cow and feed the calf with a nipple bottle. You then know how much colostrum the calf has consumed.

Freeze for Emergency

Fresh colostrum may be frozen and used for an emergency. You may find it convenient to freeze in quart or half-gallon paper milk cartons. Do not heat above 125° F when thawing to prevent denaturation of the antibodies.

Suitable Colostrum

Gargety (mastitic) milk should not be frozen for emergency purposes or saved for fermented colostrum purposes. Colostrum from cows which have been dry treated for mastitis within 10 days of calving should not be fermented as it will contain too much antibiotic. It may, however, be fed fresh.

Containers to Use

Twenty-gallon plastic garbage cans with lids are best. Larger ones are too heavy to handle and may split. Galvanized cans become corroded. It is best to have 3 cans available; one from which you are feeding (feed from the oldest can), one full and ready to feed, and one being filled. When the first can is empty, thoroughly clean and have available for refilling.

Storage

Containers should be stored in the calf barn or cow barn. They may not be kept in the mild house. Temperatures of 50-60° are excellent for promoting adequate fermentation. Cooler temperatures are not harmful. Temperatures above 80° may cause problems of spoilage. Keep out of direct sun and in a cool place during warm and hot weather.

Feeding Instructions

Fermented colostrum may be offered on the second or third day. It may be fed from nipple pails or bottles or from an open bucket. If calves balk at drinking fermented colostrum, mix colostrum with whole milk for several days to allow them to adjust. Fermented colostrum should be fed at the rate of 2 parts of colostrum to one part of water. If the water is hot, it will help in dissolving large particles of fat which are often present because of their accumulation at the top of the milk in storage. Use a heavy paddle to stir the colostrum, breaking up the fat and mixing thoroughly.

Feed fermented colostrum at the same rate as other calf feeds (8-10% of body weight of calf).

Calves adapt quickly to fermented colostrum. Some dairymen believe the calves do better on fermented colostrum than other feeding regimes. Changing from fermented colostrum to milk and back again has posed no problems after the calf has been initially adapted to the fermented colostrum.

Feeding Calf Starter and Hay

Offer calf starter at about 1 week of age. Rub it on their nose after they have been fed the fermented colostrum. Feed only what they will clean up to avoid an accumulation of unpalatable starter.

It is not necessary to feed hay until after weaning as the small amount eaten is not worth the bother of feeding. If you do prefer to feed hay to your calves, offer a high quality mixed or legume hay.

Other Points

Fermented colostrum may be fed before it is fully fermented. Fresh colostrum may be added to colostrum that has already been fermented. It may change the characteristics for a day or so, but it will soon all be the same.

Colostrum that has fermented more than a month should be discarded. The protein will begin to putrify and separate from the colostrum. The calves will reject it.

Fermented colostrum loses its antibody protection. Only fresh colostrum has immunity protection.

Commercial preservatives of proprionic, acetic and formic acids, are available and sometimes useful. Follow the manufacturers' directions.

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