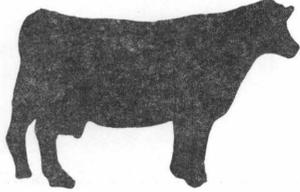


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dairy guidelines

EXTENSION DIVISION VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY BLACKSBURG, VIRGINIA



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FEEDING THE CALF



(from birth to weaning) VIRGINIA

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The critical time in the life of a calf is from birth to weaning. The calf is born with little or no protection against disease but Mother Nature has allowed for this with immediate availability after birth of colostrum milk. Colostrum milk is the first milk secreted by the cow after birth and is a special food for the new-born calf. As compared to regular milk, it is high in fat, total solids, vitamin A and a most important item, antibodies. The antibodies (large protein molecules) are produced by the cow several weeks before calving and are thus present in the colostrum milk. The antibodies give the calf protection against disease that cause scours and high death losses. It is, therefore, very important for a calf to receive 1 quart of colostrum milk within thirty minutes after birth.

Wash and dry the cow's udder and teats before the calf nurses. If the calf gets a mouth full of manure before it receives the colostrum, it will be much more susceptible to illness. Many dairymen prefer to feed the colostrum to the calf from a bucket rather than allow it to suck because you then know how much it has consumed.

Feed colostrum milk at the rate of 8 to 10% of the calf's body weight for the first 3 days. Freeze any unused colostrum for emergency purposes or pickle it and feed to other calves.

Care at Calving

It is important that the calf be born in an area that is reasonably clean. A well-drained pasture, near the center of farm activity is best in all seasons except winter. The elements of weather can provide a cleaner area than we can provide in most calving pens. The calving pen should be completely cleaned and sanitized occasionally with bedding added as needed to provide a clean, dry bed.

Apply tincture of iodine to the calf's naval cord as soon as possible after birth. This channel should be sealed from entrance of infectious organisms.

Feeding Whole Milk

Table 1 is a suggested guide for feeding whole milk to the large breeds (Holstein and Brown Swiss). The small breeds (Jersey, Guernsey, and Ayrshires) should be fed only three-fourths or 75% of the amount shown. One may compare the cost of 25 pounds of dry milk replacer with the value of 175 pounds of whole milk and determine the most favorable economics of feeding a milk replacer versus whole

milk. A milk replacer usually has the economic advantage. One should, however, purchase a high quality replacer made primarily from dairy products rather than plant products.

Calf Starter and Grower

Offer calf starter at about a week of age. Rub it on the calf's nose after milk feeding. Provide only a small amount of starter daily so it does not accumulate and become unpalatable. As it learns to eat, feed all it will consume up to 4 pounds per day for the large breeds and 3 pounds daily for the small breeds.

A commercially prepared calf starter is recommended over a home mix as it will contain antibiotics, added vitamins and minerals and be more palatable. At about six weeks of age, change to a growing concentrate ration containing 16 to 20% protein. This may be the same ration fed to the lactating cows.

Weaning

Calves may be weaned at the end of the 4th week of age if they are doing well and eating around 1-1/2 pound of calf starter per day. For weak calves or those that have been sick, milk feeding may continue through the fifth, or perhaps, the sixth week.

Table 1. Suggested feeding schedule for dairy calves to weaning

Age	Milk (Twice/day) (lbs/feeding) ⁽¹⁾	Calf starter ⁽²⁾	Calf grower ^(2,3)	Hay
1-3 days	Colostrum	--	--	--
4-14 days	3.5	Free choice (up to 4 lbs per day) ↓	--	--
3rd week	4.0		--	--
4th week	3.5		--	Free choice
5th week	0 - 2.5		--	↓
6th week	0		--	
7-12 weeks	--	↓	Free choice (up to 4 lbs per day)	

(1) Small breeds should be fed only 75% or 3/4 as much as shown. If a milk replacer is fed, mix according to manufacturer's suggestions and feed the mixture as shown (usually 1 part powder to 9 parts water).

(2) Feed up to 3 lbs. per day for small breeds, and 4 lbs. for larger breeds.

(3) The grower may be the same 16 or 20% concentrate that is fed to the milking herd.