

Beef Logic

by R.A. "Bob" Long



The pros and cons of early weaning

The beef production industry is currently giving some attention to the "early weaning" of calves. Traditionally, calves have been weaned at 7 to 8 months of age. However, if nutrition and management are adequate, calves can be weaned at much younger ages and with a number of advantages.

Rebreeding the cow herd to maintain a 12-month calving interval is a major problem for beef producers. Well-fed, mature cows normally show first estrus (heat) about 55-65 days after calving. Since the gestation period is about 283 days, a cow must have been in heat, bred and pregnant by 80-85 days after calving or she can't calve every 12 months.

Cows in poor body condition, cows losing weight due to inadequate nutrition, heavy-milking cows and particularly first-calf heifers calving as 2-year-olds do not usually cycle before 85 days after calving, resulting in late-calving or open cows.

A possible solution to this problem is early weaning. Cows nursing young calves show first heat three or four days after calves are removed. Therefore, dams of calves weaned at 60 days of age have two chances to conceive before the 85-day deadline.

Early weaning works especially well for

breeders who use artificial insemination (AI) since all cows are in heat during a short period of time, allowing for more efficiency in heat detection and insemination.

Another advantage of early weaning is increased feed efficiency. Lactating cows require considerably more protein and energy than do dry cows, so feed can be reduced as soon as calves are weaned.

Research has shown a 15%-20% reduction in total feed energy required to feed a weaned calf and cow separately.



SHAUNA HERMEL PHOTO

Researchers estimate that weaning calves at 60 days of age reduces feed required for the cow herd by 35%-50%.

This reduced feed requirement suggests a big advantage for early weaning in times of drought or feed shortage of any kind. Obviously, the calves must be fed after weaning, but research has shown a 15%-20% reduction in total feed energy required to feed a weaned calf and cow separately.

The disadvantage of early weaning is the necessity for proper nutrition and management of young calves. Young cattle have a high requirement for protein and energy normally supplied by mother's milk. Further, the rumen is not yet fully developed, dictating a diet of high-quality protein and low fiber content.

Such diets are expensive; but they are

cheaper in the long run because of the excellent feed conversion in young cattle and the increase in daily gain compared to calves nursing dams on pasture. When early-weaned calves reach normal weaning age, they must be continued on feed with high-concentrate diets until ready for slaughter or the advantage will be lost.

When comparing early-weaned vs. normal-weaned calves from birth to slaughter, researchers agree that early weaning requires less total feed for the cow herd and for the calves, better feed conversion and cheaper gains during the feeding period, and a calf ready for slaughter at a younger age. However, there is disagreement as to carcass characteristics.

Some workers report more marbling and the resulting higher quality grade for early-weaned calves. Others found no difference. Similarly, some researchers report greater fat cover on early-weaned calves. None of these differences were great.

Unfortunately, all workers used an average fat thickness as an end point for slaughter, which resulted in considerable variation in carcass weight. Since fat thickness has been shown to be largely influenced by genetic potential, it would appear to be an unreliable slaughter end point. More research needs to be done with genetically uniform cattle and weight as the criterion for slaughter.

In summary, early weaning can be a useful procedure in certain situations but should be undertaken with the realization that proper facilities, good nutrition and management are necessary for success.

We welcome your input

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