



Cattle Producer's Handbook

Management Section

748

Weaning Management for Calves

*Gene Pirelli, Extension Livestock Agent
William A. Zollinger, Extension Beef Specialist
Oregon State University*

The main objective of a weaning program is to get the calves separated from their mothers and on their own as simply and efficiently as possible. The actual time of weaning should be at the point when cow milk declines and calf gain begins to decrease in response to milk availability. Calves need to be old enough to use other feed resources, but they are traditionally weaned at about 7 months of age.

Some operators, before weaning, will put cows and calves in a pasture that will be home for the cows after weaning. Then the calves are removed and put on pasture or drylot separate from their mothers. Tight fences are essential if calves are trailed to the new location or left close to the cows.

Another option is to separate the cows and move them to a different location. This leaves the calves in familiar surroundings where they are accustomed to watering facilities and supplemental feeding.

Fenceline weaning (placing cows and calves on opposite sides of a fence) has been shown to reduce the distress of separation associated with weaning for both cows and calves. A recent University of California study found that fenceline-weaned calves gained 95 percent more weight in the 2 weeks after weaning than calves totally separated from their dams at weaning, whether on pasture or in a drylot. After 10 weeks, fenceline weaned calves had still put on 31 percent more weight. Fenceline calves did not go off-feed at weaning like totally-separated calves, and they bawled less, paced the fence lines less, and spent more time lying down.

A successful weaning program should encourage calves to begin eating supplemental feed quickly. Some producers are able to bunk-break calves before actual separation of cow and calves. Others, who are not able to do this because of resources or geography of the ranch, wait to bunk-break calves after weaning. The sooner the calves begin to eat supplemental feed, the more successful the weaning process. Supplemental feeds can be grains, protein supplements, or hays depending on calf nutritional requirements and feed resources on the

ranch. Operators should plan around their resources to reduce the stress on calves during this time.

Fresh, clean water is also essential for the calves. If they have not been accustomed to drinking from a trough before weaning, it is a good idea to let them hear running water splashing into a trough in the new lot. If calves are accustomed to ground water as a drinking source, a brief time of trough overflow may be helpful in the transition to trough drinking.

Stress at Weaning

When cows and calves are abruptly and totally separated, they can bawl 3 days or more. After that, they will settle down and get accustomed to separation. Much has been said about stress and weaning as factors in disease, especially respiratory diseases. Environmental factors such as dust can add to stress, particularly if weaned calves are moved to dry, dusty areas.

During the late 1980s, researchers discovered many of the metabolic pathways that contribute to immune failure following stress and weaning. As it turns out, Vitamin A and Vitamin E are major keys in stress and disease resistance in cattle. They protect cells and the immune system from damaging hormones and highly reactive oxygen-containing molecules produced and released during stress and nutrition/management changes that occur at weaning time.

Low levels of copper, zinc, selenium, manganese, and iron also increase demand for vitamins E and A, as well as compromise the response of the immune system, during stress. Study papers in the Cattle Producer's Library Nutrition Section or other units for further information on vitamins and minerals in beef cattle production.

To help minimize weaning stress, calves should be fed a ration that assures adequate levels of the vitamins and minerals mentioned above. Injectable vitamins A and/or E may be a management tool to consider. Further, research trials throughout the western states indicate that calves should receive clostridial and other calthood vaccinations against common diseases 3 to 4 weeks before weaning