



Beef Tech-Line



Overview of Preconditioning

Jim Turner, Ph.D., Beef Nutritionist

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Preconditioning is a vaccination, nutrition, and management program designed to prepare young cattle to withstand the stress associated with weaning and shipment to a stocker, backgrounding yard or feedlot. Preconditioning can begin prior to or at weaning. Most preconditioning programs consist of a 30 to 60 day program in which the animal is dehorned, dewormed, castrated, adapted to eating out of feed bunks and drinking out of water troughs and vaccinated for common cattle diseases.

The first step of preconditioning is determining how the cattle will be marketed. Preconditioning will not pay off if the animals are simply hauled to the local sales barn without any documentation. The marketing program can take many forms. Local sales facilities can develop a special sale or tele-auction, with the complexity growing into a video auction that is aired nationwide. The marketing date also needs to be set. Are the cattle going to be forward contracted? In many geographical locations a key part of marketing is avoiding the October price slump; calves can be forward contracted for later delivery. The largest value added step for small herds may be marketing in pot loads; this allows the buyer to purchase a load of cattle with a single bid. The cow/calf producer should determine if he wants to participate in a comingled sale or single source truckload sale. This is dependent on the size of operations involved.

The value of preconditioning for smaller producers is illustrated in Table 1. This data is from the Western North Carolina Preconditioning association from 2003-2006. The premium per head is calculated against the nearest weekly sale for the same week the cattle were marketed. This does not take into account the changes in price since the beginning of the preconditioning period but it does provide a good comparison of how these programs can affect the selling price.

Table 1. Premiums from Preconditioning

Weight	Premium, \$/hd
500-600	62.95
600-700	84.29
700-800	106.03

Premiums were determined by subtracting the nearest weekly sale of similar weight cattle from the 2003-2006 Western North Carolina Preconditioned Sale results.

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Weaning is a stressful time for cattle. Calves are separated from their mother, hauled to a sale barn, run through the auction and then hauled across the country and expected to consume an unfamiliar diet when they get there. It is no wonder that there is significant morbidity and mortality during this period. Using a preconditioning program can prevent some of this stress and minimize the effects of what can't be prevented. Training cattle to eat and drink from troughs will help them adjust to life at a stocker, backgrounding or feedlot operation.

Cattle should be dehorned and castrated prior to being sold as preconditioned. These are stressful procedures if not carried out prior to three months of age. When done at weaning the additive effects of these procedures along with all the other stressors may cause the calf to become more susceptible to disease.

There are many different types of preconditioning programs. Most pharmaceutical manufacturers have recommended programs that utilize their vaccines. During this time cattle are:

1. Bunk broke and trained to drink from water troughs
2. Vaccinated for many of the following diseases:
 - Infectious Bovine Rhinotracheitis (IBR), Parainfluenza-3 (PI-3), Bovine Viral Diarrhea (BVD) and Bovine Respiratory Syncytial Virus (BRSV)
 - Mannheimia (formerly Pasteurella) haemolytica, Histophilus somni (formerly Haemophilus somnus)
 - Clostridials, 7-Way (blackleg, enterotoxemia, etc.)
3. Treated for internal and external parasites
4. Castrated—bull calves should be castrated and healed
5. Dehorned—horned cattle should be dehorned and healed

Some sales specify minimum or maximum weights, the particular vaccination program to use, if implants can or cannot be used and if the cattle have to be home raised. Many programs require Beef Quality Assurance (BQA) certification (www.bqa.org)

The nutrition and supplementation program is key to the success of the program. The nutrition program should provide a moderate gain as cattle should not become overly fleshy or full. Cattle need to be bunk broke and adjusted to consuming concentrate. Many programs have a minimum amount of concentrate the cattle should be consuming, usually around 1.5% of their body weight. Most of these diets will be coproduct based, utilizing wheat midds, soybean hulls, dried distiller's grains and corn gluten feed. StressGuard Starter products and GainRite grower products are ideal for these programs.

Hubbard Feeds Inc.
PO Box 8500
Mankato, MN 56002-8500
1-800-869-7219
www.hubbardfeeds.com

