

TWELVE QUESTIONS ON NATURAL BEEF PRODUCTION

South Dakota State University (SDSU) Extension beef feedlot specialist Erik Loe, Marshall county (SD) Extension educator Tyler Melroe, and SDSU Extension veterinarian Russ Daly answer some of the most common questions about natural-beef production.

What is "natural" beef, and what are "never evers?"

First, all beef produced and sold in the U.S. undergoes an inspection process and is considered safe and wholesome. Natural beef is defined by USDA as being minimally processed and simply relates to post-harvest processing of the beef product. USDA is currently revisiting the labeling issue and is addressing "naturally raised," as well as "natural beef."

Second, most natural-beef programs have generally adopted "never-ever" policies that are in line with their customers' demands. Never-ever signifies no growth implants, no antibiotics (including ionophores), and no animal by-products in the feed.

What are the primary variables to consider when raising cattle for natural programs?

They are: Identifying a market; understanding the natural program's specific production protocol, record keeping, purchase price of feeder cattle, vaccination program and diet formulation; and managing excluded cattle. Production protocols will vary among different natural-beef programs. Check with each program on the allowable use of ionophores, coccidiostats, implants, MGA, dewormers, antibiotics, estrus synchronization hormones (culled replacement heifers), and beta-adrenergic agonists (e.g. Optaflexx(R), Zilmax(R)).

What does a producer lose by not using ionophores and implants?

Ionophores and implants improve feed conversion and increase rate of daily weight gain. SDSU research shows suckling calves can add 20-30 lbs. when implanted. Moreover, there can be a total of an additional 70-100 lbs. of bodyweight when a proper lifetime implant strategy is used.

Meanwhile, ionophores improve the energetics of ruminal fermentation by modifying the fermentation end-products. This modification increases the amount of feed energy available for the ruminant to use for maintenance and growth.

The bottom line to not using implants and ionophores is that animal bodyweight is decreased by 70-100 lbs. and feed conversion is 10-15% less, respectively. This decrease in feed conversion may increase the feed cost of gain by 3-5¢/lb.

of gain.

What does a producer lose by not using feed-grade antibiotics?

Feed-grade antibiotics are used to decrease liver abscesses and to aid in control of bovine respiratory disease (BRD) complex, among other health problems. Liver abscesses impact cattle performance and can decrease carcass yield.

Is vaccination allowed under natural programs, and are there other animal-health considerations in targeting the natural-beef market?

Vaccinations for conditions such as BRD and liver abscesses are not only allowed but critical to the health and well-being of animals in which the use of antibiotics isn't allowed. Illness is costly to a natural feeding program -- not just in treatment costs but because treatment usually means the animals are no longer eligible for the "natural" label.

Other health challenges may include: increased susceptibility to rumen acidosis, bloat and liver abscesses. Because of these issues, nutrition, bunk management, biosecurity and facilities take on added importance when natural-feeding programs are considered.

How do you manage cattle treated with antibiotics, which invalidates them for the natural program?

Foremost, raising and/or purchasing cattle that have been on an optimal preventive medicine program and managed to reduce stress (e.g., at weaning time) is of utmost importance. Your estimate of the potential morbidity rate will aid you in determining how much you can pay for the cattle and what your breakeven will be.

Identifying and treating cattle as soon as signs of illness are observed will improve the response of cattle to treatment and, therefore, the productivity of the individual animal. However, in never-ever programs, treated animals must be properly identified and excluded from being marketed as natural.

Are there ways to compensate for those lost efficiencies?

An aggressive marketing program that identifies premiums for naturally raised cattle is step one. Second is placing healthy and growthy calves into a finely tuned management system with appropriately formulated diets. Use of direct-fed microbials (DFM) can be considered, but understand that research results have reported variable responses to these products. Additionally, the cost of DFMs is similar to, or greater than, the cost of ionophores.

What sort of premiums are possible by raising natural beef, and do they outweigh the extra production costs?

Premiums in natural programs vary tremendously. In spring 2006, premiums approached \$20/cwt. for market cattle. However, early February 2007 bids for natural cattle have only been about \$2/cwt. over market.

Some programs offer other incentives, such as guaranteed premiums and assistance in transport costs. If markets for naturally raised cattle aren't secured ahead of time, the premiums that would be obtained through conventional marketing outlets usually don't allow compensation for lost production efficiencies. However, the opportunity to receive premiums like last spring would still offer greater returns over conventional market cattle.

What difference does breed of cattle make in producing cattle for the natural market?

Breed is extremely important to fit the target market. Typically, quality-based programs, which reward premiums for cattle with superior marbling, are a 75:25 ratio of British to Continental heritage, while cutability-based programs (which reward high red meat yield) will be the inverse, or a 25:75 ratio of British to Continental heritage.

If a producer is raising cattle that would qualify for a natural program, what steps are needed to access that market?

Let buyers know you have the kind of cattle they may be looking for. Be proactive by communicating with your stockyards, or directly contact individuals involved in procurement from natural-beef companies that seek your type of cattle.

If corn prices are high, are you better off raising cattle for the natural or the conventional beef market?

With elevated corn prices, increasing efficiency is critical. Consequently, as the price of corn rises, the cost of gain for natural cattle increases at a greater rate than conventional cattle. In the current scenario of high corn prices, even greater premiums for natural cattle are necessary for profitability.