

Management Strategies to Improve End Product

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The American consumer expects a safe, wholesome, high quality eating experience each time they purchase a steak from the grocery store or restaurant. As stocker or cow/calf producers, it's easy to assume that we have little impact on the eating experience of the American consumer, but we're still beef producers impacting our ultimate product, that ribeye steak that will keep that consumer coming back for more beef. There are many common management practices (some even before that calf is born) that can improve the quality of our end product. Many of these management strategies are relatively easy to implement, and many producers may already be using these strategies for economic reasons.

Previous research and experience has shown that genetics have a huge impact on the variation we see in beef quality and tenderness. Implementing selection practices for improved carcass quality at the cow/calf level can have drastic impacts on end product. Most breed associations today provide several carcass EPD's, and some even combine these EPD's into an index value to better select cattle more likely to produce progeny with improved quality, yield, or even tenderness. In addition, there are numerous companies currently offer a wide range of DNA tests that aid in predicting carcass quality. In fact, as a breeder you may already be implementing some of these genetics into your herd without even realizing their impact on the consumer.

Many stocker producers often purchase calves with little to no knowledge of their genetic background, and therefore have limited control over this management area. However, there are numerous other management strategies which they do control which may affect end product.

Calf health is one major area which most producers consider effects on their bottom line, but it also may have a major impact on carcass quality as well. Mississippi Farm to Feedlot data illustrates the impact that calf health can have on profit and carcass quality. Summarizing 6 years and 2,751 head of Mississippi steers fed through this program, shows that we can divide calves into one of three groups based on their health at the feedyard. Calves were either untreated (Healthy), treated once (ONE), or treated twice or more (TWO+). Healthy calves gained 3.43 lb/day, while calves treated TWO+ only gained 3.09 lb/d. Those steers treated at least once also had less hot carcass weight, backfat thickness, and calculated yield grade. All of this loss of performance and carcass quality added up to less net return from finishing. Steers that stayed healthy throughout finishing brought \$60.79 more than steers treated once, and \$188.69 more than steers treated twice or more. This data emphasizes the importance of a good herd health program, and the effect it can have on your bottom line.

Sickness can affect carcass quality in as well. Over 16,000 head fed through the Texas A&M Ranch to Rail Program showed that sick calves had 12% lower Choice carcasses than healthy calves. When cattle are sold on a grid based system, the impact of quality grade on carcass value is immediately felt, as many of these grids are quality based. In addition, the impact that quality grade has on the consumer's eating experience has been well documented.

A good herd health program starts at home. It is essential to develop a good working relationship with your local veterinarian, and develop a vaccination strategy that is tailored to your herd. One thing that is important to consider when designing your vaccination schedule, is timing of the initial vaccine and subsequent boosters. Weaning time is a very stressful point in an animal's life, and the stress of weaning can weaken that calf's ability to build an immune response.

Establishing antibodies to disease is vital, and when that animal's immune system is compromised during this stressful situation, it may not build sufficient antibodies to protect against future disease. Therefore, it is recommended that for added protection, vaccinations be given 30 to 60 days prior to weaning, and then repeated at weaning time.

A good preconditioning program is designed to create weaned, properly immunized calves that will perform well when stockered or fed. These management strategies add value not just for the producer implementing the program, but throughout the beef industry. Conventionally, these programs will include basic vaccinations for clostridial and respiratory diseases, parasite control, castration, dehorning, and acclimating calves to feed and water troughs. This added value is realized through calves that exhibit reduced incidence and costs of illness, improved weight gains and feed efficiency, and even improved end product quality.

As beef producers in all segments of the industry, it is always important to consider our ultimate end product, beef. It is vital that we remember that our management practices at all segments of the beef industry have an impact on the quality of beef that we produce. From selecting high quality breeding animals to ensuring that stocker cattle are vaccinated and healthy, these management strategies impact our bottom line. Remember we can have a big effect on that consumer's eating experience when they purchase that ribeye steak, and keep them coming back for more nutritious and delicious beef.