



CAB Corner on Quality
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July 2008

Technology in perspective

By John Stika, CAB President

We need technology in this industry, to help us produce the best beef, profitably. We need to satisfy consumers as well as producer cash-flow demands. It's not easy to meet those needs, but millions of research dollars continuously seek answers.

Answers may be thought of as tools. Some work better than others and, as with all tools, you have to know how and when to use them.

The latest answers have come in the form of beta-agonist feed additives at the end of the cattle finishing phase. Optaflexx® and Zilmax® have allowed feedlots to produce more pounds of beef more efficiently, but neither beta-agonist improves quality.

Zilmax, in particular, has been found to reduce marbling scores by 22 points when fed for 20 days. That may not sound like much, and has been reported as an "acceptable" 2.2% reduction in marbling, but the impact is much greater.

When applied to the bell shaped distribution curve for marbling scores within the CAB carcass database, that seemingly small effect equates to a 32% reduction in premium Choice carcasses.

The impact on CAB acceptance is even greater since the brand has nine additional carcass specifications besides marbling alone. Our brand specifications also require that certified carcasses have a ribeye area between 10 and 16 square inches and weigh less than 1,000 lb., with less than an inch of fat cover.

Beyond the 32% reduction in supply due to a significant decrease in marbling from Zilmax use, an additional 2.5% of current supply falls away when the estimated 30-lb. increase in hot carcass weight and 1.3-square-inch increase in ribeye area are accounted for.

While we do gain a few more eligible carcasses due to a reduction in fat cover, and a few more that can produce a 10-square-inch ribeye, the net loss is still approximately 34.5% of current CAB brand supply among those cattle fed Zilmax for the recommended duration.

Steak tenderness is another potential concern, based on recent work at Oklahoma State University. At seven days post-harvest, 17.4% of control steaks were intermediate to tough, compared to 46.1% fed Zilmax. Further aging to 21 days moves those figures to 1.6% for the control and 10% for the Zilmax-fed, but aging beef in warehouse coolers is not free, and most retail beef sells much sooner.

Zilmax use is said to add value based on pounds and yield, but it is not clear how or if the retailer, restaurateur or consumer will realize a share of that value. Of course, in the long run, they are the ones who decide what is valuable.

Beta-agonists may have a place in beef production, but a targeted approach would best serve our future. Using previous carcass data, ultrasound or DNA technology, pens that have very little hope of marbling could be identified for these technologies.

With such a strategy, feedlots that want to multiply pounds of lower quality beef may do so without compromising the quality-based market that contributes \$500 million per year to the beef industry, as determined by CattleFax.

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