

## Tying tenderness to beef value

Current methods of valuing a carcass are tied directly to the amount of intramuscular fat in the ribeye muscle. However, according to Kansas State University Professor of Agricultural Economics Ted Schroeder, the measurement is a poor predictor of what consumers would be willing to pay for the meat derived from that carcass.

During the study, Schroeder examined data collected from USDA's Meat Animal Research Center. The information included 3,154 carcasses in an effort to assess how the cattle would have been valued under traditional dressed and grid-based pricing systems. That information was then compared with valuations based on the actual tenderness of the carcasses.

He found there is considerable variation within individual quality grades in terms of tenderness. Meaning current grading standards do a poor job of predicting actual value as it relates to tenderness and a consumer's willingness to pay.

"Because of the way they are estimated, tenderness premiums vary with different quality grade premiums, especially the Choice/Select price spread. This would be expected given seasonal factors affecting supply and demand of Choice and Select beef," he said. "We would expect tenderness premiums to have similar seasonality. Given the way that we have estimated tenderness premiums, they likely represent conservatively smaller premiums than what we would expect to be present in the marketplace."

However, that desire has not been clearly communicated to producers in the form of premiums paid for tenderness. As a result, tenderness considerations are rarely measured and few commercial cattle producers are willing to pay the costs associated with DNA testing for tenderness markers. That may change as consumers begin to place more emphasis on their desire for tender cuts of beef. Schroeder said his research demonstrates there is a demand for tender beef and producers could be better compensated for producing the type of beef consumers are asking for.

"This research shows that we can more accurately reward producers and redistribute value to producers for providing the type of product that consumers want," Schroeder said. "As an industry, we

can add a premium back onto a tender Select grade carcass that has, in the past, been discounted because it didn't meet the Choice grade."

Numerous studies have shown consumers prefer—and are willing to pay more for—tender beef.

One of the most frequently cited factors in an unpleasant beef eating experience is the inconsistency of the product's tenderness, a measure that cannot be accurately predicted by current quality grading standards, Schroeder said. Above all other characteristics of a good eating experience, consumers prefer a tender cut of beef regardless of its quality grade. In one study, consumers expressed a willingness to pay a substantial premium, as much as 50 cents per pound, for steaks "guaranteed" to be tender. Another study found consumers were willing to pay an additional 95 cents per 12-ounce steak if it was guaranteed tender. Yet one other study by the same research team found a willingness to pay \$1.84 more per pound for tender steaks.

Because quality grade based on marbling score has a low correlation to tenderness, current grading methods, which reward producers for well-marbled carcasses, may be leaving money on the table when it comes time to market the retail product for consumers, particularly when it comes to producers whose cattle fall into the Select and low Choice categories.

"A significant number of Choice carcasses produce tough steaks and many Select carcasses yield tender steak cuts. Therefore, using USDA quality grades to value carcasses results in over-valuing some carcasses and under-valuing others relative to tenderness valuation," Schroeder said.

His research suggests that grid premiums paid to producers should be better related to consumer preferences. Schroeder's research suggests a new grading system that builds on the current grid structure, which rewards quality grade and yield grade, but also places an emphasis on tenderness of the carcass.

As it stands now, Schroeder's research found that current grid premiums under-value carcasses in comparison with wholesale values by as much as \$136/cwt. His system would help producers

recover some of the value by more closely pairing consumers with the tender cuts of beef they seek while rewarding producers for growing more of what consumers demand.

On average, Schroeder found carcasses which were graded Prime and Standard were undervalued when tenderness of the carcass was taken into consideration. Carcasses in the upper one-third Choice and Select carcasses were mixed in their results of grid and tenderness valuation and lower two-thirds Choice, by far the largest sample in the group, was always overvalued on average using a grid.

Schroeder's study indicates a significant error between current grid valuation and any potential tenderness valuation.

"More than 61.5 percent of the upper one-third Choice carcasses are either under- or over-valued by more than \$8/cwt. when priced on a grid relative to a tenderness measure," the study concluded.

Schroeder said the meat industry officials he has presented the information to have been very interested in the results but he said it will be a long, slow, uphill battle to make the industry understand and appreciate the value of incorporating tenderness scores into carcass premiums.

"Quality grades don't currently reflect what consumers want in a cut of beef. Ultimately, if we are able to give consumers a more desirable cut of beef that suits what they are looking for, we will increase demand and, as a result, prices paid to producers will increase," Schroeder said. — John Robinson, WLJ Editor

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