

WHAT DO WE NEED FOR A VALUE-BASED BEEF MARKETING SYSTEM?

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SUMMARY

A functioning value-based marketing system is critical to the economic well being of the beef industry. Producers must be paid for producing what the consumers demand. Clear signals must come from the consumer to the marketing chain to the producer. The U.S. beef industry has agreed upon 8 consensus points that need to be resolved before a functioning value-based marketing system can become a reality. Following the agreement on these consensus points, the U.S. beef industry has declared "War on Fat." The consensus points and the industry's "war" plans are discussed.

INTRODUCTION

The concept of value-based marketing likely will be the livestock industry's greatest focal point for the remainder of the 20th Century. Livestock producers have been frustrated at the apparent lack of monetary differentiation among market animals with great variation in quality and carcass composition. No species seems to be immune from this problem: marketing cattle, sheep, and hogs "on the average" is commonplace throughout the United States. What producers want is a true "value-based" marketing system where livestock are bought and sold on individual carcass merit. In the U.S., carcass merit deals with evaluations of two different areas: (a) quality--marbling, maturity, etc.--and (b) composition--total lean, fat and bone, or lean with an acceptable level of external fatness, along with trimmable fat and bone. Without market differentiation, no real incentives are given for producers to purchase "better" breeding stock, for feeders to sort animals to better meet slaughter endpoints or not to overfeed, for packers to trim boxed beef, pork or lamb more closely rather than selling excess fat down the chain, and for retailers and purveyors to purchase products differently than in the past.

Although value-based marketing applies to all three livestock species, this overview will concentrate on beef because of the recently completed work of the Value Based Marketing Task Force (1990). The beef industry found that something had to be done to ensure that value-based marketing was implemented in the near future. The Task Force was assembled under the combined auspices of the Beef Industry Council of the National Live Stock and Meat Board and the National Cattlemen's Association. Membership on the Task Force came from seed-stock and cow-calf producers, feeders, packers, purveyors and retailers.

In its report (VALUE BASED MARKETING TASK FORCE, 1990), the Task Force identified this clearly stated objective as its goal: "To improve production efficiency by reducing excess trimmable fat by 20% and increasing lean production by 6%, both by 1995, while maintaining the eating qualities of beef." The Task Force listed 8 consensus points that serve as specific research areas or priorities to accomplish the stated objective. Discussions of individual consensus points follow.

CONSENSUS POINTS TO THE REPORT

Consensus point 1: Communicating value to the retail industry is critical to reducing waste at production. In 1986, retailers across the U.S. began the "War on Fat" with the adoption of "1/4-inch Trim Specifications" programs. This was the result of the major finding of the National Consumer Retail Beef Study (CROSS et al 1986 and SAVELL et al 1989) which found that the loss of trimmable fat from retail cuts could result in an improved image and increased sales of beef. The National Beef Market Basket Survey (SAVELL et al 1991) concluded that: (a) the average fat thickness of retail cuts of beef was .11 inch, and (b) over 42% of beef cuts had no external fat. Retailers had responded to the clear message that for beef to be competitive in the

marketplace, it had to have less trimmable fat than at any point in the past. The Task Force felt that the retail segment of the beef industry has done its part for beef; however, the packer segment of the industry is lagging far behind in reducing the amount of excess fat production.

The main factor identified by the Task Force for the lack of response by the rest of the industry was the lack of clear economic signals being sent from retailers back through the supply chain. It was felt that the retail segment did not have the information available to show what the value of closely trimmed, higher cutability primals and subprimals was worth. Therefore, conducting research to gather new cutability information to help the beef industry make more informed purchase decisions.

Five recommendations for information needs were listed in the Task Force report:

1. Carcass to primal cut. Called for developing cutability information from the primal cut that reflects differences in cutting style, sex-class, breed-type and fatness effects. This information is reported in GRIFFIN (1989).
2. Primal to retail cut. Called for developing cutability or yield data from the subprimal to interface with the information obtained in GRIFFIN (1988). The information will reflect differences in trim level, cutting style, bone-in versus boneless, and factors related to the yield of retail cuts from various subprimals. This information is complete and is reported in GARRETT et al (1991).
3. Retail simulation. Called for a retail simulation study to determine all of the information needed for a "value equation" of closer trimmed beef. A simulated backroom of a retail store was constructed in the Rosenthal Meat Science and Technology Center at Texas A&M. This backroom had cutting tables, bandsaws, wrapping machines and the other usual features found in a supermarket. In addition to using this facility to obtain cutting test information, the researchers used meat cutters from the meat cutting school at the Texas State Technical College at Waco to obtain time and motion information on the possible labor savings that could be realized if retailers to cut closer trimmed subprimals compared to the regularly trimmed commodity subprimals. The time and motion information is contained in the report by GARRETT et al (1991).
4. Develop user-friendly software. Called for developing user-friendly software to aid packers and retailers with making decisions regarding selling/purchasing closer trimmed beef. A feature of the information gathered for Recommendations 2 and 3 above, a software package called CARDS -- computer assisted retail decision support--was developed by animal scientists and computer specialists at Texas A&M University (WALTER et al 1991). This software was released to the public at the National American Wholesale Grocers Association and National Grocers Association Meat Operations Meeting in Kansas City on September 30, 1991. The CARDS system allows comparisons among different purchasing options for commodity (up to 12 1/2-inch or 1/4-inch maximum external fat boxed beef cuts when cut into retail cuts with different fat trim specifications--1/4-inch, 1/8-inch or no external fat. Information generated by CARDS includes gross profit, net profit per hundred pounds cut, cutting yields, and costs. The CARDS program is being distributed to interested parties at no-cost to encourage maximum use of the information by the different segments of the industry.
5. Develop communication workshops for the industry. Called for conducting workshops to help in the dissemination of cutability information to the various segments of the beef industry. With the unveiling of the CARDS system at Kansas City in September 1991, the dissemination phase of the packer-to-retailer cutability information began. It consisted of hands-on workshops, meetings, one-on-one visits, and other methods of information transfer. The packer-to-retailer information transfer process has reached a saturation point, the

will focus on the feeder-to-packer interface. It is important that the educational process occur at the interfaces between the various segments at the point nearest the consumer and work back from there. Attempts to work from the producer forward likely would be counterproductive without the other segments demanding new and improved products.

Consensus Point 2: Closely-trimmed boxed beef should be an option in the marketplace. This point is related to Consensus Point 1. With retail cuts having less than .11 inch fat, and with boxed beef, for the most part, coming into the backrooms of retail stores with up to 1 inch of external fat, a tremendous amount of fat is being trimmed at retail that should be removed before or should never be put on in the first place.

Consensus Point 3: The beef industry should develop packaging systems to meet marketing/merchandising demands. In the U.S., the beef industry lags behind the poultry industry in the availability of case-ready retail products. The Task Force felt that with successful case-ready products, packers would be able to better define the types and qualities of the raw materials (boxed cattle) necessary to fit their programs. A criticism of case-ready beef has been that when vacuum packaging is used, the resulting color of beef in the deoxymyoglobin state is purple. Both poultry and pork, because of lower levels of myoglobin in the muscle, do not become as dark in color when oxygen is removed in the vacuum packaging process. Studies have shown that once consumers purchase and use case-ready beef, they are likely to purchase additional products. Consequently, the problem lies in getting consumers to purchase the product the first time. Packaging technology thus appears to be an important constraint in successful case-ready programs for beef.

Consensus Point 4: There is currently inadequate data to clearly understand, and therefore respond to, varying consumer demands for quality. A major criticism of the beef industry is the apparent lack of producing to specific targets. The beef industry generally attempts to sell what it produces rather than determine what the market wants and then adjust breeding and feeding programs to produce such. Most will agree that there is more than one market for beef. The National Consumer Retail Beef Study found that some consumers preferred Choice because of its taste characteristics while other consumers preferred Select because of its leanness. Today, markets exist for Prime, high and average Choice (Certified Angus Beef, Monfort's Chef's Exclusive, Excel's Sterling Silver), Choice, and Select. What the beef industry does not know is the size of these markets today and what will their size be in the short- and long-term.

are needed not only for large and small metropolitan markets, but for retail and wholesale service sectors as well. Until more definitive information is available to tell the beef industry what it should be producing, there will be no real targets to address. This could result in the possibility of having vast under- or oversupplies of particular qualities of beef that may cause market prices to vary tremendously.

Consensus Point 5: Changing U.S. quality and yield grade lines would reduce excess fat production, but may present risks to the market potential for beef. For the past several decades, the USDA quality grades for beef have been changed (usually lowered) in an effort to reduce the amount of carcass fat produced associated with the minimum requirement for U.S. Choice. The last such change occurred in 1975 when, along with other changes, the marbling line for U.S. Choice within A maturity was flattened so that increasing maturity within A did not require a corresponding increase in marbling. This change was controversial and did not go into effect until 1976 after the legal challenges were settled. With strong support from the National Cattlemen's Association, USDA attempted to further reduce the marbling requirements for U.S. Choice in the early 1980s; but was soundly defeated by groups and individuals further down the marketing chain. Attempts to change beef grades has shifted from a scientifically based exercise to a highly charged political exercise.

For example, there is some evidence that changing the marbling requirements for U.S. Choice Small 00 to Slight 50 and moving the yield grade 4 line to the existing yield grade 3.5 could result in a minor reduction in fat produced. Texas A&M University modeled these changes using existing information and predicted that there would be less excess fat produced. However, the Task Force recommended no change in existing grades at this time because of the potential liability.

Consensus Point 6: The beef industry should pursue research and development of an instrument for the assessment of carcass value. Beef grading currently requires that carcasses be chilled and ribbed before the quality and yield grades are assessed. This one- or two-day delay between the time of slaughter and the time of grading and the use of humans in grading are two of the factors involved in the reluctance of cattle feeders to trade "on-the-rail" (see Consensus Point 7). The need to chill carcasses before grade assignment limits packers' ability to adopt technologies such as hot boning. The development of an instrument to accurately grade carcasses before chilling could alleviate one of the problems.

The Task Force recommended that the beef industry draft a master plan for the research and development of an instrument capable of evaluating carcass leanness, marbling and maturity. The Task Force stated that the proposed instrument should accomplish the following objectives:

1. The instrument must be able to predict percentage or pounds of lean, marbling (or pounds of chemical fat) and maturity with a high degree of accuracy.
2. The instrument must have a high level of accuracy and precision (repeatability) on independent variables.
3. The instrument must be designed for slaughter rail application and be strategically located (perhaps before the hide is removed) so that the system does not prohibit the adoption of existing or new processing technologies by packers.
4. The instrument must be capable of evaluating all carcass traits and computing the dependent variables (percentage or pounds of lean, marbling and skeletal maturity) at projected production rates, realizing the possibility exists of having more than one instrument on the line.
5. The instrument must be able to withstand extremes in temperature (0 to 40°C) and humidity (up to 100 percent) without losing accuracy and precision.
6. The instrument must be tamper-proof, to prevent errors in assessment.
7. The precise recalibration of the instrument must be accomplished quickly and easily.

A research team from the University of Illinois was awarded the contract to begin development of an instrument centered on ultrasonics to achieve these objectives. This is a long-term initiative that likely will not be completed until the end of the century.

Consensus Point 7: Fed cattle should be valued on an individual carcass basis rather than average live price. Today, most cattle are sold to the packer on a lot basis. The lot is accumulated from several sources, from different genetic backgrounds and ages, and sold together with the hope that, on the average, the lot will sell for more money than the cost of the feeder cattle plus feed and the other associated expenses. Within most lots there are cattle that have significantly above-average cutability and quality while there are also cattle that have significantly below-average cutability and quality. In short, the lot does not compensate for the bad ones. In fact, there are premiums and discounts associated with

method of marketing cattle: cattle with inferior genetics that are under- or overfinished receive premiums while those with superior genetics that are correctly finished receive discounts compared to their actual worth.

A solution to the marketing of individual carcasses is for cattle producers to sell on a "grade and yield" basis. Unfortunately, many cattle feeders refer to this marketing option as "steal." Although mistrust between buyer (packers) and sellers (feeders) is nothing new, moving the ownership transfer location from the feeder (pen) to the packer (cooler) is of major concern to feeders. Feeders, generally, do not understand packing operations, USDA quality and yield grades, chilling and ribbing conditions, etc. In addition, there have been allegations that packers will not "fight" for grade placement (e.g., trying to move U.S. Choice carcasses into the U.S. Choice grade) with the USDA graders on grade and yield carcasses with the same enthusiasm as they will for cattle purchased live. Also, the issue of regrades, those carcasses that do not grade U.S. Choice on the initial pass through the grading stand, but are subsequently graded later on a regrade rail or when the carcasses are brought past the grading stand again, is a problem. Most feeders believe that the only U.S. Choice carcasses they will be paid for are those that are graded on the initial pass. Until there is greater understanding or trust between feeders and packers, grade and yield selling will remain a limited marketing option.

Consensus Point 8: The beef industry should conduct research aimed at clearly identifying the genetics of carcass merit. For value-based marketing to be a success, making fundamental changes in the cow herd to reduce fat while maintaining quality is essential. Current sire evaluation programs provide limited carcass data. If cattle producers wished to select breeding stock for improved carcass merit today, it would be impossible to obtain enough information to do so.

The Task Force recommended that the beef industry prepare requests for proposals that would accomplish the following: (a) develop improved methods of identifying beef sires that express desirable traits for marbling and lean composition, and (b) identify genes (gene probes) that influence marbling, tenderness, muscling and fatness. Proposals have been awarded to research teams at the University of Georgia for the first project--carcass EPDs (expected progeny differences)--and Texas A&M University for the second project--gene probes. The Task Force recommended that the research results from the two research projects be compiled into a data base from which carcass EPDs (or their equivalents) can be computed and included in National Sire Evaluation programs.

CONCLUSION

The question that has to be asked is, are we winning the war on fat? Some major battles have been won, some important battles are being fought and others have yet to be waged. In the consumer's mind, because of the changes made at retail, beef, pork and lamb are better today than ever before. The remaining portions of the chain now have to do their parts to make the commitment to reduced fatness.

Obviously, the livestock and meat industries have their obligations to making value-based marketing a reality. We in academia have a role to play, too. Most of the Consensus Points serve as guides to the types of research needed to be conducted to answer important questions regarding value-based marketing. Educators and extension specialists have roles to play in disseminating information needed to improve the genetics, feeding and management, grading and identification, and fabrication and marketing of leaner livestock and meat products.

Let's hope that the remaining portion of the 1990s serves as a springboard to a viable value-based marketing system for the next century.

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