

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

The Beef Industry in Transition: Current Status and Strategic Options

Cheryl J. Wachenheim and Rodger Singley

In recent years, the U.S. beef industry has lost a significant portion of its historically dominant market share, due both to changes in consumer preferences and to an increase in the price of beef relative to pork and poultry. Changes within the beef industry to improve its competitive position have been slow and relatively unsuccessful. Challenges faced by the industry include a fragmented marketing channel and mistrust among its many participants, lack of specificity in product quality evaluation, and a lengthy and complex production cycle. Future success in maintaining or gaining market share will depend upon the availability of timely information, including forecasts of consumer demand, and the development of incentives to encourage effective behavior by all channel entities to meet this demand. Branded products have been utilized in other sectors of the agricultural industry and have increased consumer demand while also providing production and marketing incentives to align the behavior of channel participants. Industry coordination supporting branded fresh beef products is also a viable option for the beef industry.

Key Words: beef branding, coordination, industry structure, marketing channel, vertical integration

The Structure and Environment of the Beef Industry

"Create the Link" was the theme of the 1997 annual meeting of the National Cattlemen's Beef Association—the "link" referring to the connection between the consumer and the mostly independent participants throughout the beef marketing channel. This explicit call to all participants in the industry to work together to make progress toward a common goal, that of providing a consistent product well aligned with consumer demand, comes at an important time for the industry. U.S. per capita beef consumption has declined from 84.6 pounds in 1970, when beef made up 60% of consumers' expenditures for red meat and poultry, to 67.5 pounds in 1994, when beef accounted for less than 50% of expenditures (Bennett; Schupp and Gillespie).

Cheryl Wachenheim is assistant professor, Department of Agricultural Economics, North Dakota State University; Rodger Singley is associate professor, Department of Marketing, Illinois State University.

The authors thank Dr. Jim Mintert for helpful suggestions on an earlier draft of this paper. We are also indebted to the Department of Marketing at Illinois State University, which provided the time and resources for this research. Special gratitude is extended to Ed without whose presence, deep thought and boundless creativity would not exist.

Two major factors appear to have led to the dramatic decline in beef's share of the consumer's meat dollar: (a) relatively slow progress by the beef industry in offering products well suited to evolving consumer lifestyles, and (b) an increase in the price of beef relative to competing meat products (Menkhaus et al.). The poultry industry, which has picked up most of beef's market share loss, has continued to cost-effectively provide products with the nutrition profile, added value, and convenience required by today's consumer (Smith, 1996b; Feedstuffs, 1995). Consumers perceive beef as being less healthy and less convenient to prepare than poultry. In addition, the eating quality of beef suffers from inconsistencies not common in the poultry and pork industries. This is largely due to the number of breeds in, and production practices used throughout, the beef industry and the age at which cattle are slaughtered. Product consistency in the pork industry currently supports the use of only two quality grades, "acceptable" and "unacceptable," as compared to the eight used to evaluate the quality of beef.

Further, the beef industry has not kept up with the efficiency gains made by the pork and (particularly) the poultry industries, resulting in an increasing relative price for beef over time. It currently costs \$0.70 to produce a pound of beef, but only \$0.24 to produce a pound of chicken (Ritchie et al.). Cost, and thus price to consumers, is important, although there does not seem to be agreement on the extent to which relative price influences market share for beef. Findings reported in the literature have ranged from crediting an increasing relative price with most of the industry's loss of market share (Huang and Haidacher; Johnson et al.) to describing meat price as a less important factor in influencing consumption (Hui, McLean-Meyinsse, and Jones, 1995, 1997). Whatever the potential for relative price reductions to help the beef industry recapture lost market share, further cost reductions will be slow and small, and likely will be matched or surpassed by beef's competitors (Barkema and Drabenstott).

To succeed in their stated goal of maintaining or gaining market share, the beef industry must develop a strategic plan and work to ensure that the marketing channel necessary to implement it is in place. This study examines the existing beef marketing channel and the feasibility of alternative strategic options for the beef industry. In the sections that follow, we identify the option best suited for progress toward industry goals and present a framework for implementing the proposed strategy.

The Beef Industry Marketing Channel

The pace of the beef industry's response to changes in the competitive meat environment is, in large part, due to the structure of its marketing channel. This channel consists of six specialized participants: cow-calf producers, stocker operators, feedlot operators, packers, wholesalers, and retail outlets (restaurants, food service institutions, and traditional retail stores). In contrast to many traditional marketing channels, no clear beef industry channel captain exists to contribute the necessary vision and to serve as the industry leader in providing products consistently meeting

consumers' wants and needs. Without an effective channel captain, there is no entity to define and support, through appropriate incentives, the roles and responsibilities of each channel participant in meeting consumer demand.

Results of the first National Beef Quality Audit in 1991 and the industry's 1995 progress check underscore the industry's resulting lack of coordination (National Cattlemen's Association, 1995). Not only is there widespread difference in opinion among channel members on how to fill the gap between what the industry provides and what consumers demand, but the current incentives driving participants' decisions differ and at times even conflict. For example, cow-calf and feedlot producers rationally, although at times hesitantly, attempt to respond to quality incentives from packers. However, management decisions are also influenced by the fact that the beginning stages of the marketing channel are forage based, include varying production environments, and experience changing relative forage and grain prices (Mullins and Page; Smith, 1996a). Incentives offered for cattle with certain characteristics are either not great enough to compensate for the additional cost required to produce them or they are not being clearly communicated to decision makers in the beginning of the channel. The former was confirmed by a 1997 survey which found that 90% of cow-calf producers believe the beef industry needs to put more emphasis on carcass traits, but only 11% agree that economic benefits are being realized by those participants who currently do so (*Drovers Journal*).

One might argue that the packer, as the industry's gateway to the consumer, can and does coordinate the marketing channel. Of obvious value to packers is the eating quality of the beef they sell and the ability to offer this quality to their customers consistently. Packers reward producers for beef quality using the U.S. Department of Agriculture's (USDA's) grading system which identifies eight beef quality grades. When this system was established in 1965, there was a tremendous amount of variation in the age and quality of beef moving through the marketing channel. Over time, changes in genetics and production practices have greatly reduced the quality variation of beef; i.e., 47% of quality graded beef currently falls into a single category—Choice, and over 93% falls into two categories—Choice and Select (National Cattlemen's Association, 1995). Beef quality grade categories are now so broadly defined that within-category variance can and does produce a wide range of consumer taste experiences (Smith et al.).

The packing industry also evaluates beef carcasses using USDA yield grades. Conceptually, carcasses with more external fat receive a discounted price relative to those with less external fat. However, in practice, only carcasses with excessive levels of external fat are discounted. The loose application of yield grade discounts by the packer decreases the incentive to producers to consider the retailer's stated preference for beef with less external fat. The large-framed animals more adapted to dry, hot environments require more external body fat to reach the level of marbling required to achieve the Choice quality grade than do smaller framed animals. Because cattle are not discounted for this external fat unless excessive, cow-calf producers continue to receive a market signal supporting the selection of larger framed animals. Industry loss due to excess fat and incorrect conformation

has decreased but still amounts to \$47.76 per steer and heifer moving through the marketing channel (National Cattlemen's Association, 1995).

If the industry would gain by decreasing external fat, one might ask why packers don't drive this change. This question was addressed by Savell, citing one of the most powerful messages from the 1991 Beef Quality Audit—that producers were willing to produce for the market if packers simply communicated demand with specificity and incentives. Likewise, Schroeder et al. reported that all of the major U.S. beef packers were willing to buy cattle based on carcass merit. The answer lies in the findings of the National Cattlemen's Association Value-Based Marketing Task Force, a group designed with the objective of improving production efficiency in the beef industry. The task force found that, while retailers had responded to the consumer's desire for less external fat on beef, they had not communicated this message back to packers via incentives for trimmed beef (National Cattlemen's Association, 1990). Although the industry is making progress by educating retailers and developing technology which allows accurate evaluation of the value of beef cuts, no channel participant currently has the power to champion alignment in retail and packer incentives, a necessary condition before packers can communicate consumer demand back through the rest of the channel (Savell). In summary, no entity exists within the relatively fragmented beef industry to successfully direct channel behavior toward meeting consumers' desires.

Alternative Industry Structures

Regardless of who ultimately provides leadership to the channel, for the beef industry to regain a competitive position, channel entities must engage in integrated or cooperative activities. Recognition of this need is not new; it is its implementation that has eluded the industry. It might seem logical for the industry to try to copy the integrated structure of the poultry industry given its success, or changes in the pork industry, an industry that has made initial progress through coordination. These strategies are discussed below and applied to the beef industry.

Integration

Over the past 30 years, the poultry industry has successfully aligned its participants by defining performance measures and reward systems and assigning roles and responsibilities so that each participant is acting in the best interest of the whole system (Seagraves and MacDonald). The industry has accomplished this through integration where so-called "integrators" own not only hatcheries and breeding and production facilities, but slaughtering and processing facilities, transportation networks, and feed mills (Smith, 1995). The grower stage of production is contracted out to independent producers who follow production practices specified by the integrator. This structure provides integrators with control of the product from inception

to sale, and thereby allows them to achieve the very tight control over product quality and consistency required to support a brand. Thus the integrator is able to act as a channel captain and take a systems view in coordinating the channel for consumer satisfaction and better overall industry performance.

This example of vertical and horizontal integration would appear to be a logical structure for the beef industry to imitate. However, the length of the beef production cycle and economic constraints to concentration and integration make it unlikely that an integrated structure will evolve in the beef industry. First, biological realities dictate a much longer industry response time to changes in consumer demand. In the poultry industry, there is only a nine-week lag between hatching the chick and selling the finished product in a retail outlet. The analogous stage in the cattle industry, birth of the calf until it reaches market weight, can take one and onehalf years. Yet, even this is not the full story because, like that of chicken, the quality of beef produced is more dependent on the genetics of the animal than upon feeding and other production practices. To utilize genetics as a control over beef quality, another two years may be added to the production cycle for the selection and raising of the desired breeding stock and the wait during the nine-month gestation

Second, the nature of the beef production process, a process which includes cow ownership and up to 9-12 months on pasture, requires enormous capital and land investment, and therefore results in a very large number of independent producers at the beginning of the channel (there are approximately 900,000 individual cow herds in the United States). This is coupled with an increasingly concentrated structure driven by economies of size as one moves forward in the marketing channel to the feedlot and the packer (Barkema and Drabenstott). The forementioned biological and economic differences make it unlikely that the beef industry could successfully adopt the integrated marketing channel structure of the poultry industry.

Coordination

An alternative to integration for the beef industry is coordination. Coordination through marketing and production networks is increasingly common in the pork industry as a means for producers with small- to medium-sized operations to gain the efficiencies achieved by larger operations. Hog marketing networks, which have traditionally consisted of horizontal marketing coordination between independent producers, have begun to include agreements on production practices such as adopting common genetics and rations—practices designed to help producers provide a consistent product. Pork producers have also made progress by working backwards with breeders and suppliers and forward with packers and processors (Smith, 1996a) and, in some cases, by adopting some forms of vertical integration (e.g., producer-owned seedstock supplier) or the nearly fully integrated structure common in the poultry industry.

In theory, a coordinated industry is comprised of individual units acting as though in an integrated structure; that is, performance measures, reward systems, and roles and responsibilities are aligned. Unlike vertical integration, coordination would not require major structural changes in the beef industry, but would nonetheless allow the industry to operate as a unit in developing and implementing strategies. However, beef industry coordination is unlikely to occur without acceptance of a common goal by all participants throughout the marketing channel and the emergence of a strong channel captain to facilitate change.

The goal of participants throughout the channel would be to cost-effectively provide value as defined not by the immediate channel customer, but by the ultimate beef consumer. The beef industry has the tools to deliver what consumers value. Genetics and production practices required to provide product consistency and palatability have been identified, and the use of supporting technology such as ultrasound imaging is growing. But tools are not enough. Participants must have information about, and incentives to deliver, what consumers demand. No longer can cow-calf producers select genetics based simply on producing a live, healthy calf that grows well. Nor can feedlot operators purchase and feed animals that will achieve only the objectives of remaining healthy, growing quickly and efficiently, and meeting the minimum quality and yield grade requirements currently communicated by packers. Packers will have to modify their current practice of specifying only widely defined quality and yield standards and acceptable carcass weights. Incentives must be aligned for the beef industry to be successful in providing more value to consumers.

A second facilitator of industry change through coordination, a strong channel captain, is also possible within the fragmented structure of the beef industry. A central participant has been involved in most successful coordination attempts throughout the meat sector. An effective beef industry channel captaincy would result in the flow of accurate, specific, and timely information from the consumer through the retailer, wholesaler, and packer, to the feedlot operator (the participant who manages production practices), and to the cow-calf producer (the participant who chooses genetics). This is a realistic goal. Nearly all existing marketing alliances and agreements in the beef industry include carcass merit pricing and the sharing of information between the packer and the producer about carcass performance (Schroeder et al.). Each of the three largest U.S. beef packers has the equipment in place to identify and share this information (Kay). Equipped with specific information about the value of their product, participants would be better able to plan for targeted demand and conform to specific quality standards for particular markets (e.g., drug-free production).

Currently, forward price and production contracting arrangements, which allow participants to make informed decisions to change genetics and management practices with less risk, are slowly evolving at the packer's initiative in both the pork and beef industries. This evolution has been impeded, however, by extensive mistrust between industry participants, particularly producer mistrust of packers. Mistrust in the beef industry partially stems from concentration in the beef-packing sector; 81%

of slaughter steers and heifers marketed from the approximately 35,000 feedlots in the United States are purchased by only three packers (Schroeder et al.; Smith, 1996a, 1997; Feedstuffs, 1996). This mistrust is not confined to the perceptions of producers. The current U.S. Secretary of Agriculture has criticized the level of concentration in the packing industry, stating it "results in fewer choices, lower quality, and higher prices" (Glickman, p. 10).

In part a result of this suspicion within the industry, the current market environment is typified by a small number and lack of specificity of open market transactions to provide information. The volume of open trades on which to report prices has decreased as packers increasingly buy direct from feedlots and strive to capture cattle supplies in advance of kill date. Such captive supply is an important tool as investment requirements in the low-margin packing sector make a high level of capacity utilization a necessity (Mullins and Page; Barkema and Drabenstott). Even when reported (because few cattle are traded based on individual carcass merit), prices are often averages for a load of animals rather than those specifying discounts and premiums offered for cattle with differing carcass characteristics (Schroeder et al.). The low use of carcass merit assessment is explained, in part, by (a) what the industry terms a "grade and steal" perception by producers who are wary of an evaluation system which occurs on the packer's home turf, and (b) producers' preference for a known price for an animal over an unknown, qualitybased price for a carcass (Savell; Feuz, Fausti, and Wagner). Clearly, trust required for an effective channel captaincy is not currently present in the beef industry.

Branding as a Coordination Mechanism for the Beef Industry

Industry Coordination

The land- and capital-intensive nature of beef production makes integration over most or all of the production and marketing channel an unlikely evolution and an unviable strategy for the beef industry. Biologically defined time lags and a manystage production and marketing process also make it improbable that the existing market will ever be effective in maintaining or increasing beef's market share. A viable industry structure must facilitate coordination of production and marketing throughout the channel to provide a known, value-added product to consumers. Even in the absence of a channel captain, the beef industry has recently taken steps toward this goal in an effort to develop commodity brand loyalty. A brand-like initiative for beef was begun in January 1997. Smith (1998) reports the goal of this initiative is

Schroeder et al. report that captive supplies as a percentage of total slaughter has remained relatively constant at 20-25% during the past eight years.

... to differentiate beef in the marketplace and, in doing so, encourage beef producers to adopt genetics, animal health and nutrition practices, management strategies, beef handling, cutting, packaging, distribution and merchandising techniques and other programs to deliver beef that consistently meets consumer dynamics (p. 16).

Industry leaders anticipate that this initiative will provide the framework for a coordinated system.

There is reason to be optimistic. Watson likens the beef industry's current position to that of the cotton industry in the 1960s. Market share for cotton had fallen from 70% to 36%, in large part due to the advent of polyester and other synthetic fibers. As part of this industry's brand initiative, focus was shifted to new product development to make products more attractive to the end consumer (e.g., wrinkleresistant clothes), developing partnerships between growers and manufacturers to help reduce the cost of developing and producing new products, and taking action to reduce production cost, not just of cotton, but of the final product produced with cotton. The Seal of Cotton, developed as a commodity brand in 1973, helped the industry coordinate and regain lost market share in the absence of a strong channel captain. Today, cotton's market share is approximately 56%.

The Value of Branding

Brands are a familiar and accepted part of the marketplace for both producers and consumers, and are generally considered to be representative of the producer's promise to deliver a known and consistent product to consumers. Branding rapidly gained importance in the United States with the move from "neighborhood" marketing by cottage industries in the late 1700s to regional marketing in the 1800s. Sponsors of nationally broadcast radio serials in the 1930s promoted brands as being like a trusted member of the family.

Marketers typically use branding to identify their products to consumers and to differentiate their offerings from competitors. From the consumer's point of view, brands are seen as providing a way to evaluate the quality of a product and to determine what attributes and benefits the product may possess. Familiar brand names may also serve to reduce a buyer's perceived risk of purchase, and the brand itself sometimes offers an innate value or reward—for example, the status symbolized by such brands as Mercedes-Benz or Ferrari.

In spite of its widespread appeal, branding is still relatively uncommon in some product categories including fresh fruits and vegetables and fresh meat products, although producers such as ConAgra and Tyson Foods have succeeded in shifting a significant portion of the poultry market to branded products (Erricson). Branding is not an untested strategy to provide beef consumers with an identifiable product. Over the past two decades, participants in the industry have coordinated specialized beef marketing through branding. Various structural alternatives have been employed to provide branded fresh beef products to the marketplace: integration (Harris

Ranch Brand Beef), coordination (Certified Hereford Beef), and open-market channels (Certified Angus Beef). The Certified Angus Beef brand, widely recognized as the most successful beef branding program to date (Eftink), is nothing more than the identification of a desired beef quality, the articulation of a clear set of live animal and carcass specifications, and the provision of related economic incentives.

Coordination for Successful Branding

A successful branding strategy for the beef industry will require more than a brand image designed to provide consumer appeal. The industry must have a structure which leads to cost-effective, consistent, and identifiable quality products. There are three basic approaches the industry can use to obtain the product consistency needed to support a brand strategy. One alternative is for the packer to sort carcasses into narrowly identified quality groups that provide the necessary consistency. Packers would pay for value-using objective, value-based measures, and open, published bidding; producers, rather than balking at the widening price differentials between cattle with differing carcass characteristics (perceived by them as unfair pricing), would respond through changes in genetics and production practices. Producers would move toward producing that consumer-identifiable quality of beef for which their production environment is best suited. For example, genetics used in a hot, dry environment result in beef with less marbling, a characteristic appropriately marketed as leaner, perhaps even "range-fed" beef. The advantage of this alternative is that it would not require a great deal of channel organization and cooperation. The primary disadvantage is that value-based marketing is risky for packers because it requires the cooperation of retailers and will increasingly require coordination with producers when marketed products have characteristics not easily identified from a carcass.

A successful branding effort will more likely require coordination and cooperation among channel members throughout the beef industry. This can be accomplished through strategic alliances or the presence of an effective channel captain. Strategic alliances provide coordination when one firm or sector cannot gain sufficient control over market information and access, or does not have the expertise, technology, and resources to effectively direct an industry (Symonds)—as appears to be the case in the beef industry. Moreover, successful strategic alliances also require "long-term relationships for mutually beneficial goals which include trust, communication, and a willingness to share benefits of the relationship" (Muirhead, p. 16). These attributes do not characterize the current relationships among channel participants in the beef industry.

A third alternative for the beef industry is the reorganization of production and distribution around a channel captain who has the power to coordinate the entire channel and direct it toward efficiency and greater consumer responsiveness. For a channel captain to be successful, it must have the power to direct the behavior of other channel participants. Often, the channel captain achieves power through economic size as compared to other entities in the channel (Wal-Mart's power over its suppliers illustrates this form of channel captaincy). Other entities become channel captains because they have certain expertise required by other channel members. Within the beef channel, however, participants are co-dependent upon others for expertise in different areas, and no one member has sufficient "expertise power" to achieve channel captaincy. Therefore, it is unlikely that any one member can emerge as the channel captain through a "power war," a scenario which would likely have a detrimental impact on the industry. Thus, the best strategy for the beef industry will include both the recognition that cooperative, coordinated organization is necessary to slow, stop, or even reverse the trend of eroding market share, and the industry's acceptance of an emerging channel captain.

The industry's channel captain must be that participant who is in the best position to direct the channel toward optimal behavior. The packer is likely to be the optimal choice for channel captain. The packer is situated in the middle of the channel and has some understanding of the goals, behaviors, and constraints of the other members. Additionally, the packer is the interface between production and distribution, and can therefore provide balance to the channel. Finally, it is the packer who evaluates the product and consequently is in the best position to enforce quality standards in the channel.

The captain can direct channel behavior toward effectively meeting evolving market demand by specifying animal genetics and production practices which will result in a consistent product meeting the quality associated with a particular brand. To accomplish this, the channel captain must be able to provide incentives to the other members in order to receive their cooperation. In the case of the beef channel, these rewards will likely take the form of promised increased profits which can and should be achieved through securing the cooperation of the entire channel in producing products desired by consumers. With an organized channel producing consistent, desirable products, strong consumer brand loyalty can be fostered.

Implementing a Coordinated Branding Strategy

A coordinated branding strategy for the industry and its success in meeting industry goals will hinge upon the ability to produce a product for the market rather than the historic practice in the beef industry of finding a market for the product (Savell). The assurance of consistency for branded beef products is particularly important because there are no raw meat traits identified which are highly correlated with palatability of cooked meat, and consumers thus have a difficult time selecting for "anticipated palatability" (Jeremiah et al.). In fact, the majority of consumers want additional guidance in the selection of fresh meat purchases. To provide the necessary consistency, packers will need to be able to identify beef which will deliver consistent eating quality; no participant is going to put its name on a product that is not consistent. It should be noted that consistency in products does not mean one beef

product for all consumers; it means offering identifiable products to consumers who value them.

Under the assumption of the ability to provide an identifiably consistent product, the first step in the new product development process is the generation of product ideas. The Beef 2000 and Beyond Task Force report concluded that "opportunities abound for successful development and effective marketing of innovative, valueadded beef products and prepared foods containing beef" (Henderson, p. 13). Among the recommended industry initiatives are: fostering innovative development of consumer-friendly, convenient products; supporting case-ready branded programs; merchandising products more creatively and effectively; and improving product packaging.

Market research is the primary means by which participants in an industry learn which product attributes are most important to consumers in different segments. Existing market research has clearly shown that different market segments exist for beef (Hui, McLean-Meyinsse, and Jones, 1997). Differentiating these market segments and providing the product characteristics on which each segment places value will be important contributors to brand success. Examples of the industry's early recognition of this strategy are Monfort Packing Company's quality program where beef is separated and marketed as Chef's Executive, Lean Beef, or Commodity Beef (Ritchie and Rust), and Maverik Beef's focus on the 30% of beef consumers who place the most value on the attributes of its lean, light, and natural beef.

Significant research efforts have been put forth to identify factors important in consumers' purchase choices for food (Piedra, Schupp, and Montgomery; Schutz, Judge, and Gentry), meat (Hui, McLean-Meyinsse, and Jones, 1995) and, in particular, beef (Mehkhaus et al.; Zey and McIntosh; Saunders and Rahilly; Sapp and Harrod; Eales and Unnevehr). Through this process, a number of different product ideas for various segments within the beef market already have been created. Some examples of product ideas resulting from industry research include lean and healthy beef, convenient beef, prestige/gourmet beef, and natural beef (beef raised under conditions likely to be perceived as animal and environmentally friendly) (McNaughton, Boyle, and Bryant; Jeremiah et al.; Gao and Spreen; Menkhaus, Whipple, and Field). Many of the product ideas generated within the industry have the potential to introduce products which will be perceived by consumers as being truly different from, and of greater value than, basic/unbranded beef products.

Further challenges to providing the right product attributes and marketing mix in the beef industry include (a) the importance of ensuring that the consumer doesn't destroy or otherwise dilute the provided and marketed attributes associated with a particular branded product during meal preparation, and (b) fully utilizing the role of packaging (Hui, McLean-Meyinsse, and Jones, 1997). Because product packaging and labeling play both a functional role in protecting and adding convenience to the product and a communicative role in which product benefits and brand image are shared with consumers (Chamberlain; Piedra, Schupp, and Montgomery), this final

preparatory step in case-ready beef must be included as an important component of strategic brand development.

Conclusion

Within the industry there are numerous ideas for branded products. To implement these ideas, however, the industry must embrace changes of the type cited earlier within this article. The current structure of the beef industry—including a historic lack of trust, a lengthy production process, high investment costs, and the lack of accurate and timely information and incentive flows—makes coordination efforts difficult and true pricing efficiency unlikely. In the short to intermediate term, and perhaps as a long-term strategy, branding by packers may serve as the coordinating interface between the consumer and participants throughout the industry and would provide the economic link required to make a marketing strategy successful in this multiple-participant, fragmented industry. In addition to facilitating information and incentive flows back through the marketing channel, branding establishes an outlet for changing and shaping consumer perceptions of a product. Ultimately, however, a branded product must provide added value to the consumer.

References

- Barkema, A., and M. Drabenstott. (1990, November/December). "A crossroads for the cattle industry." Federal Reserve Bank of Kansas City, *Economic Review*, pp. 47–66. Bennett, S. (1994, April). "Beef fights back." *Progressive Grocer* 73(4), 131–133.
- Chamberlain, D. (1983, September). "Packaging: A brand's instant image." *Progressive Grocer*, 62(9), 25, 27.
- Drovers Journal [staff]. (1998, February). "Rating your responses." Drovers Journal 126(2), 44–52.
- Eales, J., and L. Unnevehr. (1988). "Demand for beef and chicken products: Separability and structural change." *American Journal of Agricultural Economics* 70, 521–532.
- Eftink, B. (1987, September). "Newcomers can learn from the grand-daddy of branded beef." *Successful Farming* 85(11), 32.
- Erricson, J. (1989, May 29). "Meat marketers ply branding iron." *Advertising Age*, pp. 28–29.
- Feedstuffs [staff]. (1995, November 6). "Chicken industry to continue creating demand for products." Feedstuffs 67(46), 32.
- ———. (1996, February 19). "USDA study shows packer concentration: Task force to determine effect on prices." *Feedstuffs* 68(8), 3, 6.
- Feuz, D., S. Fausti, and J. Wagner. (1994). "Beef marketing: Offering consumers more lean." *South Dakota Farm and Home Research* 45, 6–7.
- Gao, X., and T. Spreen. (1994). "A microeconometric analysis of U.S. meat demand." *Canadian Journal of Agricultural Economics* 42, 397–412.

- Glickman, D. (1995, November 6). "Efficiency isn't excuse for too much packer concentration." Feedstuffs 67(46), 10.
- Henderson, G. (1996, January). "The business of beef: Shifting your business focus from production to product." Drovers Journal 124(1), 12–13.
- Huang, K., and R. Haidacher. (1986). "An assessment of price and income effects on changes in meat consumption." In R. C. Buse (ed.), The Economics of Meat Demand (pp. 139-156). Department of Agricultural Economics, University of Wisconsin, Madison.
- Hui, J., P. E. McLean-Meyinsse, and D. Jones. (1995, December). "An empirical investigation of importance ratings of meat attributes by Louisiana and Texas consumers." *Journal of Agricultural and Applied Economics* 27(2), 636–643.
- -. (1997). "An empirical investigation of consumer concerns about nutrition, taste, price, and chemical additives during meat shopping." Journal of Food Products Marketing 4(1), 31-41.
- Jeremiah, L., A. Tong, S. Jones, and C. McDonell. (1993). "A survey of Canadian consumer perceptions of beef in relation to general perceptions regarding foods." Journal of Consumer Studies and Home Economics 17, 13–37.
- Johnson, D., J. Connor, T. Josling, A. Schmitz, and G. Schuh. (1989). "Competitive issues in the beef sector: Can beef compete in the 1990s?" Paper No. 1, Hubert H. Humphrey Institute of Public Affairs, University of Minnesota, Minneapolis.
- Kay, S. (1995, August). "Beef: What worked in the past won't work in the future." Meat and Poultry 41(8), 14-22.
- McNaughton, J. P., C. R. Boyle, and E. S. Bryant. (1990). "Beef and pork consumers: Socioeconomic, personal, and lifestyle characteristics." Technical Bulletin No. 172, Mississippi Agricultural and Forestry Experiment Station, Mississippi State, MS.
- Menkhaus, D., D. Colin, G. Whipple, and R. Field. (1993). "The effects of perceived product attributes on the perception of beef." Agribusiness: An International Journal 9, 57-63.
- Menkhaus, D., G. Whipple, and R. Field. (1988, 2nd Quarter). "Some consumers will pay extra for lean beef." Choices, pp. 28–29.
- Muirhead, S. (1995, September 11). "Buyer/seller relationships enter whole new era." Feedstuffs 67(38), 16.
- Mullins, M., and G. Page. (1996, January 29). "Cooperation will help beef industry realize opportunity." Feedstuffs 68(5), 12.
- National Cattlemen's Association. (1990). "The war on fat! A report from the Value-Based Marketing Task Force." NCA, Englewood, CO.
- -. (1995, December). "Improving the quality, consistency, competitiveness, and market share of beef: The final report of the second blueprint for total quality management in the fed-beef (slaughter steer/heifer) industry—National Beef Quality Audit, 1995." NCA, Englewood, CO.
- Piedra, M., A. Schupp, and D. Montgomery. (1995). "Household perceptions of the nutritional labeling of meats." Journal of Food Distribution Research 26, 54-60.
- Ritchie, H. D., J. L. Orth, J. N. Ferns, T. T. Pierson, J. H. Hilker, and J. R. Black. (1997, February 3). "Time is now for beef industry to consider change." Feedstuffs 69(5), 1, 25-26.

- Ritchie, H. D., and S. Rust. (1995, October 16). "Incoming feeder cattle traits can optimize slaughter end point." *Feedstuffs* 67(43), 12–13.
- Sapp, S. G., and W. J. Harrod. (1989). "Social acceptability and intentions to eat beef: An expansion of the Fishbein-Ajzen model using reference group theory." *Rural Sociology* 54, 420–438.
- Saunders, R. P. M., and S. A. Rahilly. (1990). "Influences on intention to reduce dietary intake of fat and sugar." *Journal of Nutrition Education* 22, 169–176.
- Savell, J. (1993, July 22). "Value-based marketing of beef." Presentation to Farmland Industries, Inc., University Advisory Board, Kansas City, MO.
- Schroeder, T. C., C. E. Ward, J. Mintert, and D. S. Peel. (1997, February). "Beef industry price discovery: A look ahead." In W. D. Purcell (ed.), *Price Discovery in Concentrated Livestock Markets: Issues, Answers, and Future Directions* (pp. 19–84). Virginia Polytechnic Institute and State University, Research Institute on Livestock Pricing, Blacksburg.
- Schupp, A. R., and J. Gillespie. (1997). "A discussion of the future of the beef industry in the United States." *Louisiana Rural Economist* 59, 5–8.
- Schutz, H., D. Judge, and J. Gentry. (1986, November). "The importance of nutrition, brand, cost, and sensory attributes to food purchase and consumption." *Food Technology* 40(11), 79–82.
- Seagraves, M., and B. MacDonald. (1997, January 20). "Poultry industry must look to next level of integration: Supply chain optimization." *Feedstuffs* 69(3), 20, 28, 30.
- Smith, G. C., J. R. Savell, H. R. Cross, J. L. Carpenter, C. E. Murphy, G. W. Davis, H. C. Abraham, F. C. Parrish, Jr., and B. W. Berry. (1987). "Relationship of USDA quality grades to palatability of cooked beef." *Journal of Food Quality* 10(4), 269–286.
- Smith, R. (1995, November 6). "From 23 hens to 42 million pounds per week: Perdue Farms Marketing Company's 75th year." *Feedstuffs* 67(46), 11.
- ——. (1996a, January 29). "Beef industry squabbling is putting market share, structure at major risk." *Feedstuffs* 68(5), 1, 29–31.
- ——. (1996b, November 25). "Demand shows chicken, pork building dominant position." *Feedstuffs* 68(49), 30.
- ———. (1997, January 27). "Corners of the beef industry starting to respond to the competitive rules of the marketplace." *Feedstuffs* 69(4), 1, 16–17.
- ——. (1998, February 2). "Beef industry responding to consumer dynamics by moving toward competitive business structure." *Feedstuffs* 70(5), 16, 28.
- Symonds, B. (1995, September 11). "Strategic alliances: A key strategy in restructuring agribusiness." *Feedstuffs* 67(38), 16.
- Watson, K. (1995, October). "Turning the tide: Cotton Incorporated offers a lesson to beef." *Drovers Journal* 123(10), 20–21.
- Zey, M., and W. McIntosh. (1992). "Predicting intent to consume beef: Normative versus attitudinal influences." *Rural Sociology* 57, 250–265.