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Future of the Beef Industry

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INTRODUCTION

Where we have been and where we are today will largely dictate what the future will look like. The loss of market share has been widely chronicled, but it needs to be reviewed again in the context of establishing the current situation. This fact-based downsizing of the industry demands that we ask why it has occurred. There is discussion on both sides of the issue, but again, good science and the facts suggest much of the long-run problem has been on the demand side. The cycle is complete, then, when we ask why we have demand problems. If we can take a look at where we are, what the situation is today, where the industry appears to be heading in terms of structure and strategies, then we have a base for anticipating the future of the beef industry.

THE PRESENT SITUATION

Perhaps no single set of data describes where we are better than per-capita consumption data shown in Figure 1. Widely misused as a measure of the strength of demand for the meats, per- capita consumption instead shows per-capita offerings or per-capita supply over time. It is a tautology that we will consume what we produce in a perishable commodity like beef. Storage and stocks held in inventory do not really make that much difference in terms of the annual availability of product.

What the data plot clearly shows is that per-capita offerings of beef have declined significantly across years coming from a high near 95 pounds (retail weight) in 1976, down toward 65 pounds in the 1990s. This is the much-discussed decline in market share. This is also concrete evidence over time of an industry that is facing disinvestment and downsizing as contrasted to a net inflow of investment dollars and resulting growth. A glance at the plot indicates that quite the contrary appears to be happening in the poultry sector with investment dollars being attracted to that sector and per-capita offerings increasing significantly. The plot uses ready-to-cook measures instead of edible weight for broilers, but the patterns are the same no matter the units used: poultry is growing and beef is declining. Pork, on a per-capita offering and per-capita consumption basis, has been relatively flat across the years.

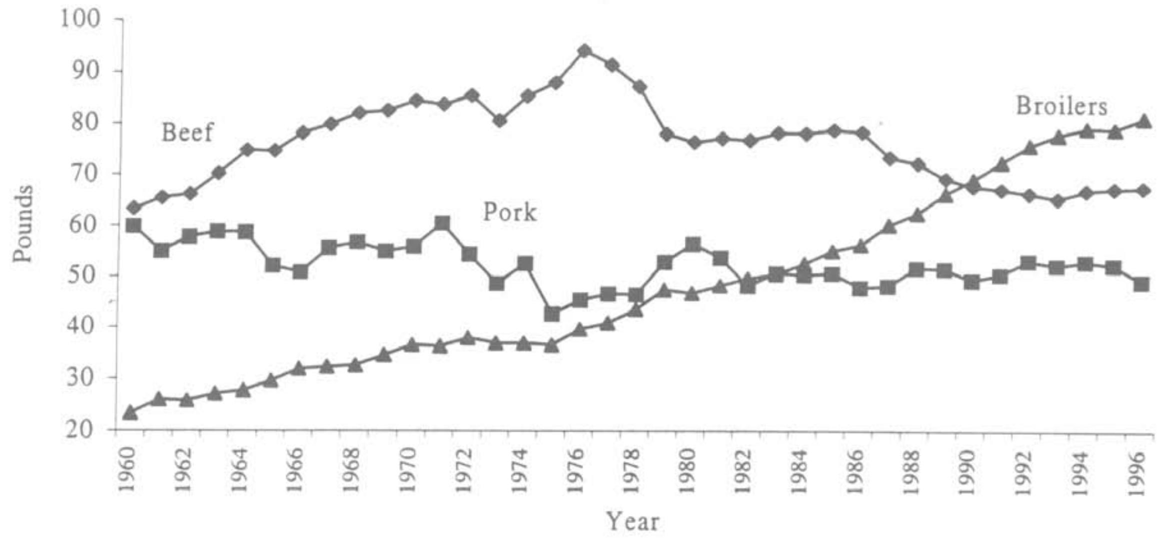

Figure 1. Per-Capita Consumption of Beef, Pork, and Broilers, 1960-96

What set of economic forces or events has moved us to this position? There is always discussion about the importance of cost and being price competitive at the consumer level. The data show that there is clearly a great deal of variation in cost of producing a weaned calf and a finished steer or heifer geographically around the country. There is always room to improve efficiency and get costs down, and any ability to do that would allow the beef offering to be more price competitive at the consumer level and would tend to help keep resources (and producers) in beef production. In fact, the industry has made considerable strides in this area, especially during the decade of the 1980s. Figure 2 shows output per beef cow and shows an astonishing gain across the past 15 years, most of it in the 1980-87 period, as producers faced a cost/price squeeze and sought to adopt technology, change the genetics, and in other ways try to get increased production per cow. This has translated into increased efficiency and lower costs. It is clear, then, that the industry has made considerable progress in this arena although additional progress, if it could be accomplished, would clearly help the industry compete.

Figure 3 documents the more serious longer-term issue. A scatter plot of per-capita consumption of beef and inflation-adjusted beef prices (so they can be legitimately compared across years) is shown for all years since 1960. In general, any move up and to the right in this scatter plot indicates a higher demand surface and indicates growing and strong demand. Conversely, any move down and to the left indicates a decrease in demand and shows the industry is moving to a lower demand surface. Clearly, since the 1979-1980 period, the pattern has been one of a movement down and to the left for the beef sector. The same quantity of beef offered in 1996 would have gone at substantially higher prices if we had been on the same demand surface that we were on 10-15 years ago. To illustrate the nature of the problem, visualize a line with a negative slope of about 45 degrees running through 1985 or 1986. A demand curve did go through these points 10-12 years back. Extend that curve to the left above the 1996 per-capita

offering and note the price in our inflation-adjusted dollars would have been around $2.70 if we had been on the same demand surface, the same demand strength, in 1996 that we were on in 1986.

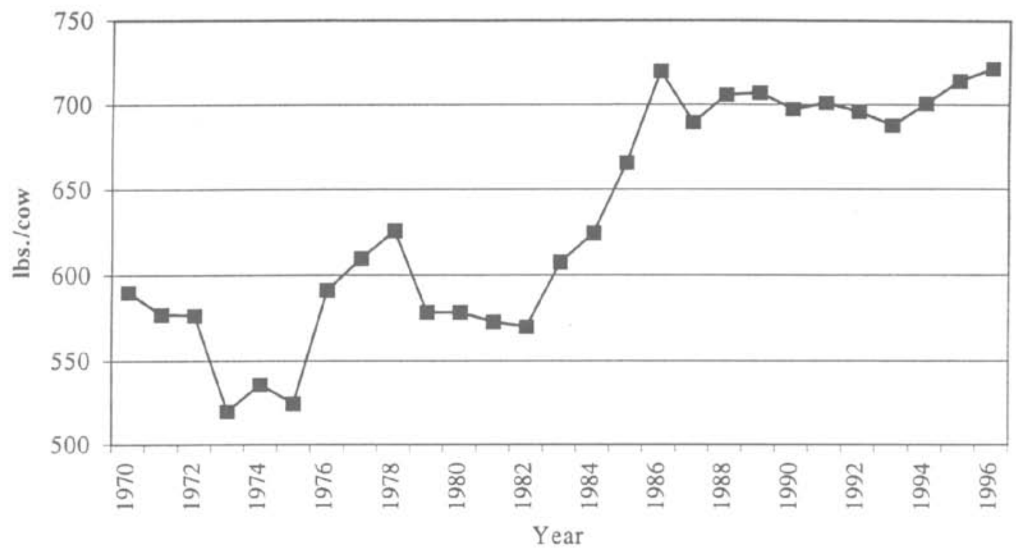

Figure 2. Output Per Beef Cow, 1970-96

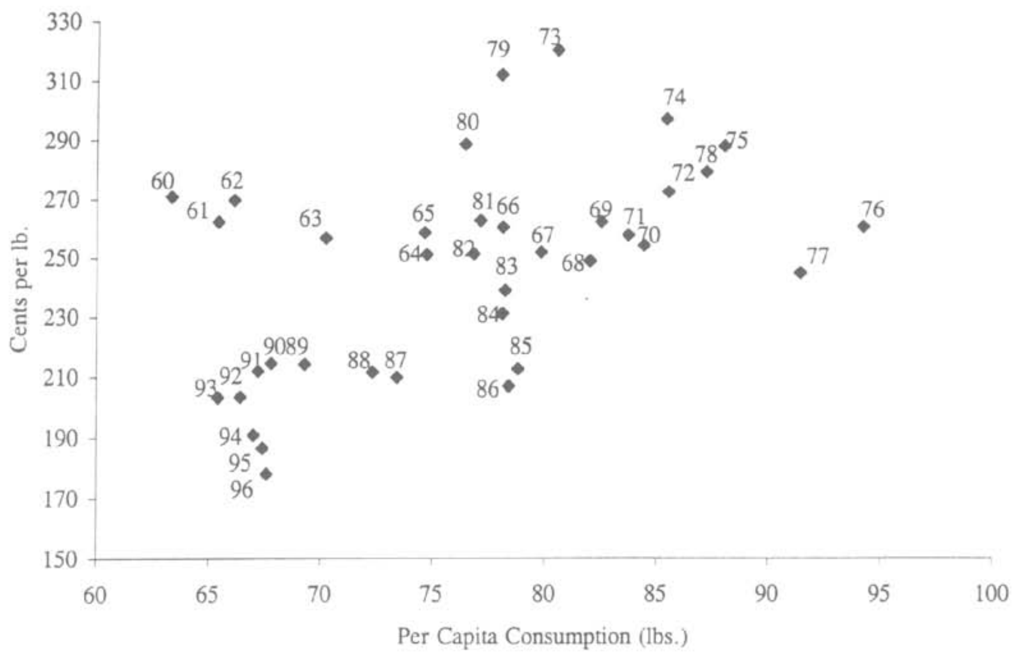

Figure 3. Per-Capita Consumption and Deflated Retail Price for Beef, 1960-96

As price comes down at the retail level, reflecting the consumer's reluctance to pay stronger prices for the current beef offering, the pressure is inevitably felt at the producer level. The retailer down through the processor, and increasingly even the feedlots, try to operate on a margin basis. *Any declines in prices at the top of the system manifest themselves ultimately in the form of lower prices at the producer level.* The only thing that can prevent this from happening is increased efficiency at the processing level, and while there is evidence that the large packers are relatively efficient, price spreads at the retail level continue to expand. Any expansion in the margin that the middleman has to extract puts even further downward pressure on prices at the producer level.

The result has been a significant and long-term downsizing of the industry. Figure 4 shows a plot of both total cattle numbers (left scale) and beef cow numbers (right scale) through January 1, 1997. The modest cyclical advance in numbers that has occurred in recent years appears to have already peaked, perhaps pushed along by record corn prices during 1996. The downtrend in numbers appears to be ready to be resumed. If that is the case, then further losses in market share would appear to be inevitable as we move toward the year 2000 and beyond.

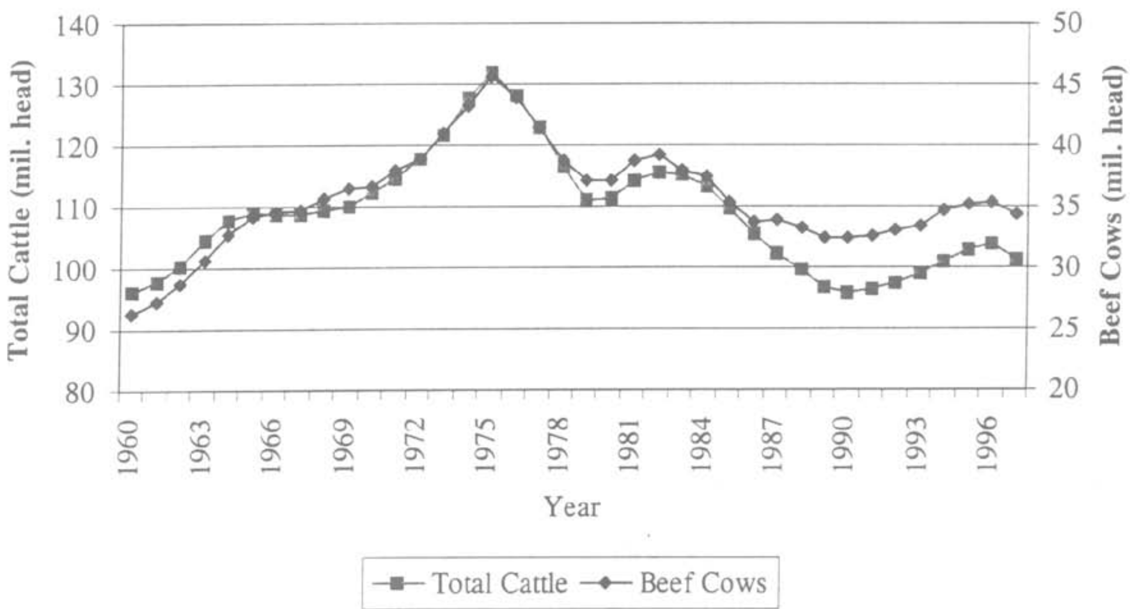

Figure 4. Total Cattle Beef Cow Inventory Numbers, January 1, 1960-97

The argument in favor of just getting the product cheaper at retail so that it would be more price competitive weakens a bit when you look at the plot of the ratio of Choice beef prices to a chicken price series that reflects weighted average prices of major chicken cuts. That plot is shown in Figure 5 and indicates that the ratio is trending down over time. This means that beef is getting cheaper relative to chicken, contrary to the perceptions of many observers in the beef sector. Anything that would allow those beef prices to continue to come down and still allow a

profit at the producer level would be an advantage, of course. That is what being price competitive at the consumer level is all about, and it takes increased efficiency and lower costs to get that done. The question is whether or not this is the most important way the industry is going to be able to solve its market share problems. In my opinion, the answer is "no." *It is not the price level that is the major problem at the consumer level, and the demand plots and what we are learning from the beef quality audit efforts are clearly indicating that to be the case.* It is the level of quality, the inconsistency of that available quality level, persistent concerns about fat/cholesterol, and the lack of convenience in preparation for the modern on-the-go consumer that appear to be the problems.

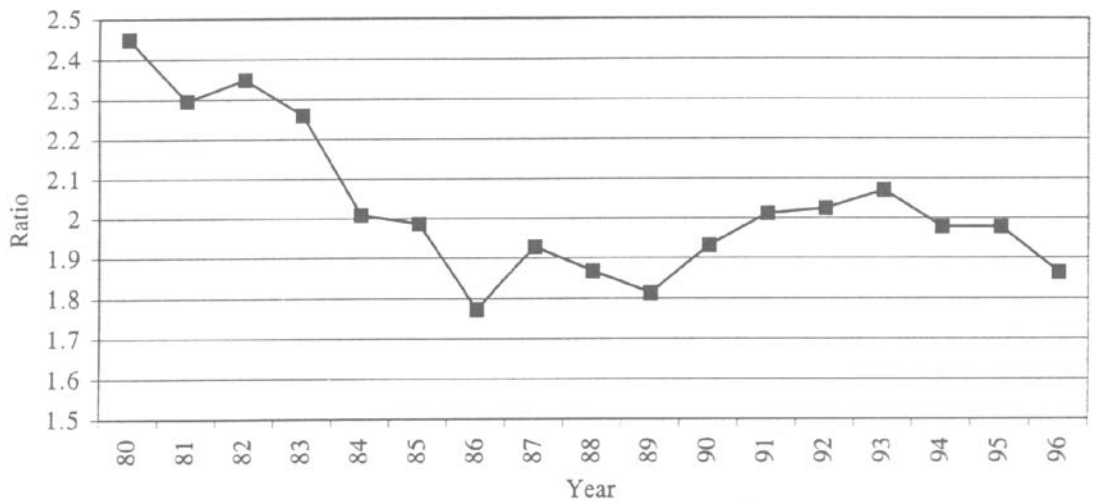

Figure 5. Ratio of Beef to Chicken Prices, 1980-96

One question that immediately emerges, then, is "why haven't we moved to a more nearly consumer-friendly status?" If the need is for quality management to get the product failure rate down and to move the product offering toward what the modern consumer wants, why hasn't this been done? That is a complex issue for the industry, but the answer may lie primarily in the profit- center mentality that is suggested by Figure 6. What is implied here is that each profit center between the producer and the final consumer has, to some extent, its own profit function or its own objective function. The combination of those largely independently determined objective functions may or may not create an effective industry agenda in terms of being consumer driven and making the investments in the right types of things over time. In fact, it appears that quite the converse is true. New product offerings in beef run about half the level that is offered on an annual basis in chicken alone. Dollars spent on new product work and market development work are small compared to the size of the industry. Significant factions in the industry do not really want to see a move toward value-based pricing because they are selling inferior slaughter cattle at or near a single price each week. *It would appear that none of the profit centers between the producer and the consumer see it as their job to push for value-based pricing, to renovate and modernize the product offering, and to move to a consumer-driven status, and therein lies a major issue.* We can't be critical of the middlemen who, because of the way the industry is

organized, cannot see a clear and justifiable economic reason to spend millions of dollars on product and market development work. But the victims of this long-standing tendency to not reinvest in the future of the industry are abundantly clear: they are the producers.

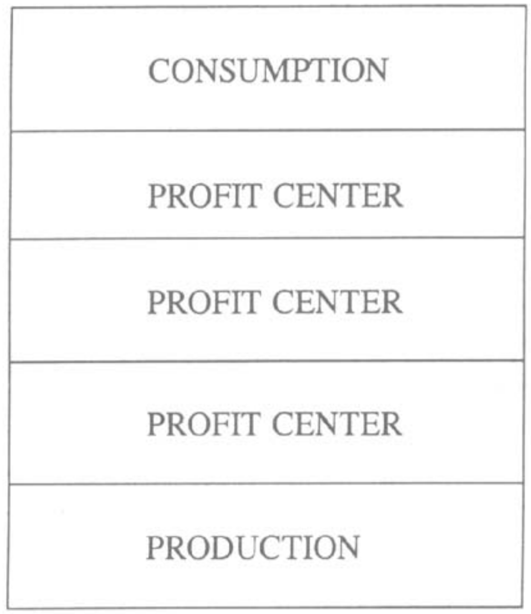

Figure 6. Demonstration of the Various Profit Centers in the Beef Industry

Coming out of all this, what we have is something of a forced race between two different ways of resolving some of the issues, changing the product offering, and modernizing the industry. One competitor in this race is the traditional open market pricing system. It appears increasingly that this system has failed in the sense that it has not priced to value and has not generated the types of signals that would prompt coordinating what is offered and prepared by this massive industry with what the modern consumer wants and is willing to pay for. There is still lots of variation in eating quality within the Choice grade, with up to 20 percent of the Choice product not measuring up in terms of tenderness and an attractive eating experience. But the grades will get changed only if the industry demands change, and the short-term profit center mindset keeps the different sectors from coming together and looking for change. Price discovery in the open market exchange system is bad, not just because of a lack of negotiation between buyer and seller, but because we are no where close to pricing to value and are selling everything on averages.

Because that price system has failed, we see various types of alliances and other approaches to controlling supply, both in terms of quantity flow and quality, starting to emerge. In pork, where we find a sector that appears to be poised to become much more competitive for market share, the traditional pricing system in many quarters has been replaced by vertical integration, where the processor owns the producing facilities, or contractual coordination, where

the processor still dictates genetics and the various quality parameters. It appears that the alliances that are starting to form in beef could handle as many as 4-5 million cattle within just a few years. While that is going to be positive for the industry insofar as it does accomplish some quality control, changes the product, and moves toward a more consumer-friendly status, the approach also raises questions of access to market by independent producers and entrepreneurs in the business. *What we are probably going to see is a continued erosion of the share of the cattle that are moving through the traditional open-market pricing system and increases in the number of cattle being handled in various forms of alliances. This situation, I believe, is being forced by the ineffectiveness of the pricing system, the lack of precision in the modern sets of grades, and the continued inability or refusal of the industry to identify and bring into price some of the product attributes that influence the quality of the eating experience at the consumer level.*

It is an interesting present situation, then, as we look forward to where the industry might be going. There is a need to be as cost efficient and price competitive as possible, but the overwhelming need appears to be one of modernizing the product offering and moving it toward what the modern consumer wants and is willing to pay for. It is in that context that we need to look at both short and intermediate-run strategies as to what the industry might do and then, beyond that, turn and look at long-run strategies and what the future of the industry holds across the next decade or two.

SHORT AND INTERMEDIATE-RUN STRATEGIES

Genetics will change the nature of the product being offered in the long run. But what we see is a very slow pace of change in the genetics because the pricing signals and the economic incentives have simply not been present. This way of solving the industry's problem is further complicated by the fact that a significant number of the beef cows in the United States are in the hands of relatively small and often part-time producers who really have very little economic reason to care about the genetics and quality of the product they are offering. We will come back and talk about the genetic issue as part of the longer-term solution, but the industry cannot afford to wait for genetic selection to solve the problems of inconsistent quality and inferior eating experiences that plague the current fresh beef offering.

In the rest of the 1990s and the first decade of the next century, it is imperative that significant and major progress be made in taking what the industry is offering in the form of a largely heterogeneous supply of fed cattle and turning it into a consumer-friendly product offering. This is going to take money spent on product development. It will require, for example, that we find consumer-acceptable product possibilities from the beef chuck instead of having to grind the chuck and put it in ground product where the burgers at the fast food institutions continue to be sold at fire sale prices. You cannot finance a robust and growing beef industry on 99¢ Arch Deluxes. *We have to find a product (and products) that has more value to the modern consumer and attract the consumer dollars needed to refinance and refurbish the beef sector.* That means money spent on product development, and that also means emphasis on moving toward a set of grades and descriptive standards that capture the important factors that determine final eating quality in the product--especially but not limited to tenderness.

One short and intermediate-run strategy, then, is to immediately move check-off dollars into new product work and market development work. That will require some shifting of the dollar spent on the generic advertising program versus product development, but the two approaches need not be seen as being competitive. *It may be much easier to have an impact with advertising dollars if those dollars are trumpeting the availability of a new and consumer-friendly product or product offering as compared to just extolling the advantages of beef in a generic or general context.*

Industry leaders will need to work out the mechanics of an approach, but something like a matching fund program, where private firm dollars spent on product and market development work would be matched at some level by check-off dollars, might make some sense. Anything to increase the commitment of the private firms in this area, and we are seeing some slight progress in increased interest among even the larger processors in recent months, would be very important. *The dollars spent as a percentage of sales on product development work in the beef sector need to be increased substantially to move back up to what is already occurring in poultry, is starting to occur in pork, and for many years has occurred in other commodity sectors such as the citrus and dairy sectors*. The money spent on research and development in the beef sector has always been exceedingly small when compared to other sectors and has not been, arguably, anything like sufficient to keep the industry growing and vibrant. This has to change to establish a base for future prosperity and growth.

LONGER-RUN STRATEGIES

In the longer run, and this strategy can be pursued while the product and market development strategies are being fulfilled, the genetic pool in the beef sector needs to be focused and moved toward a quality-controlled and consumer-friendly status. This is going to be a longer-run effort to be sure because it involves the vested interest of purebred associations, commercial herd owners, genetic suppliers, and many other sectors of the industry. It is going to be difficult for some particular breed advocates to recognize the need to either change the genetics in that breed or combine it with some other breed in an effective and modernized cross-breeding program to generate the quality level and consistency of quality that is going to be needed. *It may well be that much of this progress in the longer-term context is going to come within the confines of the alliances because the open-market pricing system is showing no signs in late 1997 of moving to a status that would really prompt changes in genetics.* Fed cattle are sold within an hour or two a week and many of them are sold at the same price. Auction prices at the barns around the country for feeder cattle and even the special graded feeder cattle sales that are operated in many states show prices across pens of cattle that vary little or none. It is not at all unusual to see a pen of No. 2 muscled feeder cattle bring more than a pen of comparable weight No. 1 muscled cattle in the same breed. Certainly, the price discounts associated with the 2s (or small frame or double large frame cattle) are minimal and are not anything like sufficient to drive home a message to the producer that he needs to change the type of calf and feeder animal that he is producing.

In the longer run, then, producer groups need to get behind the need for supporting product and market development work. They need to make sure that that type of work gets done,

even to the point of using their check-off dollars to stimulate the work and help prompt the private sector to step up and be aggressive in this area. At the same time, they need to help their member producers understand the need to change the genetics over time. If it takes getting involved in an alliance to get that message across because the pricing system is still failing us in terms of the capacity to price to value, then you have to think about getting that done. Thus, producers at the county, state, and national levels need to reflect carefully on where the industry is headed and get behind the strategies that are going to modernize the product offering and move us back toward a competitive sector over time.

The individual producer will also face some interesting and perhaps difficult decisions in a longer-run context. There is no question that it is now difficult for the producer who knows the value in his cattle to get a price that reflects that value. Retained ownership is one way, but that is not a final solution and often extends the risk exposure for the cow-calf person and/or the stocker operator. And if the advantage gained in the feedlot under retained ownership is nothing but superior conversions and excellent daily gains, there is still no guarantee these cattle are producing what the modern consumer wants.

Individual producers will have to decide whether or not they are going to continue to try to rely on the pricing system to give them appropriate value or whether or not they will seek membership in some sort of an alliance as the only way to secure those proper values. If this situation continues to face the individual because the grades have not been modified and refined and the price discovery system continues to struggle in terms of pricing to value, then the longer-term solutions are probably going to be very slow in arriving. Many individuals will have some reservations about giving up individual freedoms and getting involved in a group effort to ensure being rewarded in accordance with the true value of their cattle and, more importantly, prepare a product that fits a market segment at the consumer level and command more of the consumer's dollars. *In the long run, it will be whether the industry can find a way to command more of those consumer food dollars as a way of financing and revitalizing the industry that will determine which way this sector goes.*

SOME CLOSING THOUGHTS

Producers are going to have to recognize that the offerings at the top end of the system for their product are out of sync. They are obsolete. They are characterized by excessive product failure in the form of inferior eating experiences even in the Choice product. The product is not as convenient as the modern consumer wants. The food preparer who starts to think about the evening meal at 5:00 p.m. as they leave work and board the commuter train is not going to find many appealing alternatives in the current offering from the fresh beef counter. Once they exhaust what they might be able to do by stopping by the deli and/or the frozen entrée section, there are not many other beef offerings amenable to the microwave, and that is the appliance in which most meals are prepared. This product offering simply has to be changed, and whatever needs to be done to change it has to be accomplished.

And do not be misled here by the widely discussed resurgence of the steakhouses. Consumers *are* eating out, showing a willingness to pay for convenience. But that willingness to

spend on beef is not being seen in other consumption channels. Even the fast food chains have been forced to a price discount on a burger offering to keep the offering up. It is the burger, not the chicken breast sandwich, that is being offered at giveaway prices. All of the different consumption channels need to come along together, and that is not happening.

The key need in the short and intermediate run is to ensure that product and market development work gets done. I believe this will require some balancing of how check-off dollars are spent between generic advertising and either developing new products and markets and/or promoting those new developments. Producers sit on committees that decide how the dollars are spent, and I am afraid they will continue to be too slow to recognize the importance of modernizing the product offering.

There may also be a strong need for the industry to take a look at whether or not the check-off revenues need to be increased. As the industry gets smaller, the alliances develop, and vertically integrated systems evolve, there are fewer market transactions and the dollars collected for use are decreasing sharply. When you take the nominal dollars or the dollars in which we measure the annual check-off budget and adjust them for inflation over time, you have no more than about 50 percent of the money to spend on this issue that was available when the check-off program was started in the 1980s.

There are clearly some difficult decisions facing producers and producer groups. It is important that you recognize where you stand, what it is going to take to change that situation, look beyond the current better calf prices that have come because corn is cheaper again, and recognize that the long-run well-being of the industry is being determined today, this year, and the in remaining few years left before the year 2000. We need to make significant progress in terms of moving toward being consumer friendly and having strategies in place to modernize this product offering and get it under total quality control before the year 2000, or the future of this industry has to be shaded toward the negative and in a direction none of us like.