

*Customer Satisfaction II:*

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THE  
VALUE  
OF  
TENDER  
BEEF





# HOW MUCH DO CONSUMERS VALUE BEEF TENDERNESS?



*That's the question posed in "Customer Satisfaction II: The Value of Tender Beef."*

*While earlier Customer Satisfaction studies established the link between tenderness and overall beef satisfaction, this study helped place a more concrete value on tenderness.*

*The objective of the project was to determine the potential for tender beef to enhance overall customer satisfaction with beef as measured by:*

- 1. Satisfaction with tenderness, overall palatability scoring and nutritional perceptions;*

- 2. Price/value placed on tender beef;*
- 3. Purchase frequency intentions; and*
- 4. Competitiveness against other proteins.*

*Sample steaks from carcasses producing steaks used in the study were mechanically assessed for tenderness, and sorted to allow evaluation by consumers.*

*Participants prepared and consumed the steaks in their own homes. Preparation methods varied, and study participants did not know in advance which steak was the tender steak.*





Results from the study, conducted with shoppers at a major retail store chain in the Denver area, were extraordinary. Tender steaks were preferred by a 3-1 margin, scoring a 7 on a 0 to 10 tenderness scale, with 0 being not at all tender and 10 being very tender. Control steaks scored a 4.9 on the scale. In addition, the tender steaks scored significantly higher on flavor, juiciness, leanness and for overall satisfaction, with a ranking of 7.1 compared to 5.5 for control steaks.

Steaks were eaten and evaluated in 532 households by 887 adults. Sixty-four percent of the respondents stated they would definitely or probably buy the tender steak instead of the steak they typically buy. Nearly half of the respondents (48 percent) said the tenderness guarantee was very important to their purchase plans, while 40 percent said it was somewhat important.

More significantly, 34 percent said they would pay more per pound for the tender steak — a surprising statistic, since consumers are usually reticent to express a willingness to pay

more. (Fifty cents a pound higher appears to be the upper threshold for the premium that would be paid, with willingness to buy dropping off rapidly above that level.)

Overall, the results of this study show that consumers would find a guaranteed steak very enticing.

The product was found to provide a significantly better eating experience in the home, which is an excellent predictor of repeat purchases.

The consumer expressed a strong interest in seeing the product retailed.

*“It is rare to find a product that meets with such resounding praise from the consumer, both at the concept level and following an in-home trial.”*

*“Overall, there is an opportunity for a packer or retailer to establish a very valuable product in the consumer’s eye if they deliver on the tenderness promise.”*

*“Tender Select is a winner. It is the type of product the industry should pursue to enhance the stature of beef with the consumer, and build future sales volume.”*

*(All quotes are from Sterling-Rice Group and Talmey-Drake, project coordinators.)*



**IN-STORE AND  
IN-HOME TESTING:**

*After focus groups were finished a very large sample was recruited for the main body of the study.*

**SAMPLE  
SIZE**

**RANDOM TELEPHONE  
SCREENING RECRUITMENT  
for Study Participants**

*Beef eaters 21+ years of age,  
primary or joint shoppers*

*Usually shop at any of the  
major grocery chains*

**1,036  
HOUSEHOLDS**

**IN-STORE SHOPPING &  
Tender Beef Concept  
Evaluation**

*King Soopers' customers  
also screened in store for  
study participation*

*Shoppers were asked to  
conduct a "normal meat  
shopping trip"*

**759  
HOUSEHOLDS**

**HOME PREPARATION  
Tasting and Evaluations**

*Participants, a secondary  
adult, and a child  
recorded their reactions  
to Tender Steak and  
commodity steak in  
post-use diaries*

*Post-use telephone  
interviews conducted with  
the primary participant*

**523  
HOUSEHOLDS  
(887  
ADULTS)**

**FOLLOW-UP  
In-Store Shopping  
Trip (Tender Select  
preference indicated)**

**124  
HOUSEHOLDS**

**PROJECT AT-A-GLANCE\*:**

**Research Team:** *National Cattlemen's Beef  
Association/Quality Team  
Talmey-Drake Research & Strategy, Inc.  
(Analysis)  
Sterling-Rice Group  
(Project Design and Coordination)*

**Timeline:** *Aug. 18, 1997 to Oct. 11, 1998*

**Initial Focus Groups:** *Conducted in Denver, Colo.,  
to determine testing language.*

**IN-STORE AND IN-HOME TESTING:**

**The Beef:** *Yield Grade 3 or better;  
USDA Select carcasses  
Source: Monfort (Con Agra) Plant in  
Grand Island, Neb.*

**Control/Test Steaks:** *1-inch strip steaks tested  
Shear test 36 hours postmortem  
Less than 33 lbs = tender  
Greater than 50.6 pounds = control*

**Shopper Location:** *King Soopers stores in Denver, Colo. area  
Respondents lived within 2 miles of 4 test stores*

**Participants:** *65 percent female  
80 percent married  
64 percent between ages of 35 and 54  
Consumed beef 6.5 times in 2-week  
period (average)*

*\*For more specific information, review the Study Methodology  
and Specifics.*



## STUDY METHODOLOGY/RESULTS:

(From Executive Summary)

### INITIAL FOCUS GROUPS

In preparation for the primary study, two focus groups were held, primarily to determine the language for describing tender beef in the in-store portion of the test. One group featured heavy beef eaters, and the other moderate consumers of beef. These two focus groups were conducted on Aug. 18, 1997 in Denver.

The focus groups generated a discussion on the methodology to be utilized for the primary study. Moderate beef consumers were more interested in the tender beef premise than heavy beef consumers. They were less knowledgeable about techniques for cooking beef satisfactorily.

Consequently, recruiting for the primary study was broadened to include moderate and light beef consumers. In addition, a decision was made to evaluate a select grade product because consumers indicated that buying beef that was both lean and tender was a very attractive proposition. This dovetailed well with the objectives of King Soopers, the study's retail partner.

### THE PRIMARY STUDY

Researchers began recruitment Aug. 24, 1998, contacting 1,036 households to be part of the primary study. The recruits were invited to one of four King Soopers stores, and offered a \$25 incentive to participate. From Aug. 27 to Sept. 29, 759 of these households visited one of the stores, where they shopped the case, responded to a concept test and received two test steaks to try at home.

A total of 503 households that prepared the steaks could be contacted for analysis. A group of 124 of these households were invited back to one of two stores from Oct. 2 to Oct. 11 for further questioning.

Yield Grade 3 or better, USDA Select carcasses were candidates for steaks evaluated in respondent homes. Carcasses were selected at the Monfort plant (Con Agra) in Grand Island, Neb., and subjected to a tenderness classification system developed at USDA's Meat Animal Research Center.

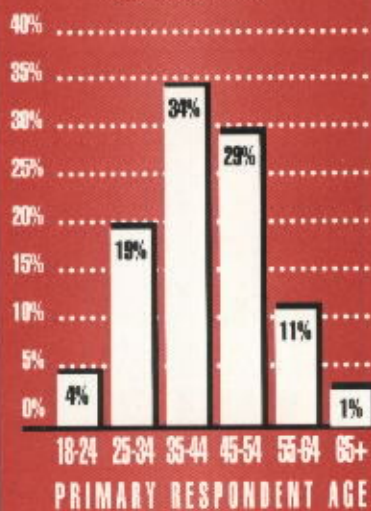
A 1-inch strip steak was obtained from the strip loin, cooked to medium and evaluated using a slice shear test. Those with a slice shear value of under 15 kg. (33 lbs.) at 36 hours postmortem were marked as tender





## PARTICIPANT DEMOGRAPHICS

Participants represented a wide range of age groups.



primals. This translates to 8 lbs. with 14 days of age. If the slice shear value exceeded 23 kg. (50.6 lbs., or 10 lbs. or more with 14 days aging), the strip loin was marked as a control primal.

All primals identified for the study then received 14 days of aging. The tender strip loins were divided into two groups. The first group was packaged in Cryovac (vacuum) packaging to distribute to the stores for placement in the meat case. All shoppers to the store during the test period could purchase this product while shopping.

The loins were merchandised as New York strips, T-bones and Porterhouse steaks. A frame card was placed in the case near the product and all were labeled with a Tender Select sticker. King Soopers assigned unique PLU codes to the product so that sales figures could be tracked.

A second batch of tender product was cut into 1-inch strip steaks and frozen. A pin to identify the steak during cooking was placed in the packaging with the steak (ex. R0199). A paired control strip steak was then wrapped with a second pin (ex. L0199). An effort was made to assure the two steaks had a comparable appearance.

## PARTICIPANT RECRUITMENT

While the majority of the 1,036 households were recruited over the phone, sampling was supplemented with shoppers that qualified for the study. Those respondents that did not eat beef at least one time in an average 2 week-period were excluded from the study, as were 1-person households making less than \$20,000 and 2+ households making less than \$30,000.

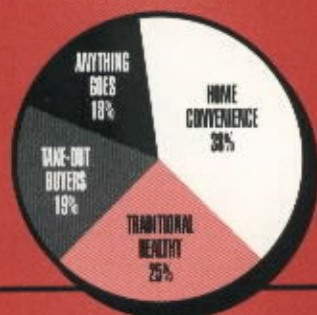
The respondents all lived within a 2-mile radius of the four test stores. Only 31 percent of the respondents were solely King Soopers shoppers. Those between the ages of 21 and 75 were recruited.

Only those who were "primary" shoppers or had "joint responsibility" for shopping were selected. Sixty-five percent of the initially recruited respondents were female, and nearly 80 percent were married.

Based on the screening criteria used, the sample skewed higher in income and was better educated than the general population, which is typical for the geographic areas surrounding the states involved. Sixty-four percent of the sample population was between the ages of 35 and 54. Post-study analysis found limited variation in response by income level or by gender.

## ATTITUDINAL SEGMENTATION

Participants represented a wide range of cooking styles and temperaments.



**HOME CONVENIENCE~**  
Prepare meals at home,  
often using microwave

**TRADITIONAL & HEALTHY~**  
Concerned about nutrition, often  
cook traditional meals at home

**TAKE-OUT BUYERS~**  
Often buy pre-prepared foods

**ANYTHING GOES~**  
Not concerned about health,  
nutrition or cost of food



## HISTORICAL MEAT CONSUMPTION OF SAMPLE POPULATION

On average, the sample population reported eating meat 11.4 times in an average 2-week period (any meal, in-home or in foodservice locations). An additional 2.2 seafood occasions were reported.

Of the 11.4 meat meals, 6.5 were "any" beef and 3.2 were beef cuts. A second question on cut versus hamburger consumption reported an even 50/50 split between hamburger and beef cut occasions. Of the prior 10 meals, seven were reported to be in-home meals and three were foodservice.

Respondents were classified as heavy, medium or light beef consumers. Roughly 1/3 of the sample could be classified into three subgroups based on meat consumption. Heavy users (31 percent of respondents) consumed beef eight or more times, on average, in a 2-week period; medium users (33 percent) five to seven times and light users (36 percent) 1-4 times.

## THE STORE VISIT: SHOPPING THE CASE

Upon arrival at the store, the respondent was asked to conduct a typical case shopping experience. The incentive was not mentioned at this point to minimize the potential that the shopper would upgrade their purchases due to the extra money. Individuals shopping the store that wanted to participate were screened and allowed to participate if they qualified.

Tender Select product was store-wrapped and placed in the case. Strips and T-bones were available at all stores. Due to limited demand, Porterhouse steaks were not always available.

A frame card notified the shopper of the product. Tender Select labels were placed on each cut to enhance ease of visibility. Most importantly, the product was priced at a 50 cent premium to the comparable store cut. Tender Select was not merchandised in any other way, receiving no advertising or recommendations from store staff.

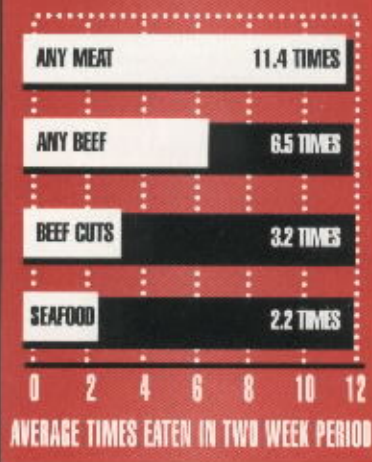
During the test period there was a normal amount of discounting and merchandising activities for the commodity store product. Despite the price surcharge, the Tender Select product sold quite well during the test period. (Specific sales data is proprietary to King Soopers.)

## PROTEIN RANKING AND CONCEPT QUESTIONS

After shopping the case, each respondent was asked to rank beef, chicken and pork on the following attributes: tenderness, juiciness, flavor, nutrition, versatility, consistency

### TOTAL MEAT USAGE

*In an average 2 weeks respondents reported eating meat (excluding seafood) over 11 times, beef was 50% of the meat consumed.*



### PARTICIPANTS - TYPE OF STEAKS PURCHASED

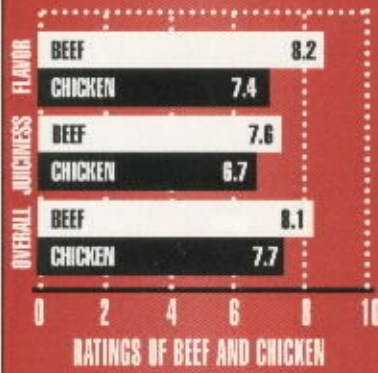
*Out of the last 10 beef cuts purchased, ribeyes and sirloins are the most popular, followed by tenderloins and t-bones.*





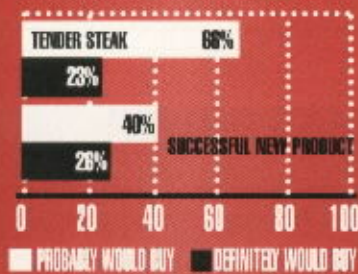
## PROTEIN RATINGS

Our respondents voted "average beef purchased" better than chicken on juiciness, flavor and "overall".



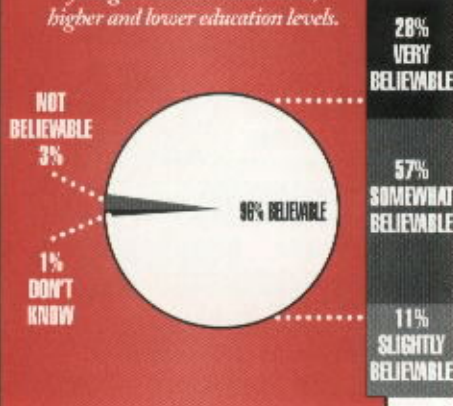
## IN-STORE CONCEPT REACTIONS: PURCHASE INTENT

Overall, concept interest was remarkably high. Nearly 9 of 10 consumers reacted positively in terms of intent to buy. Results far exceed comparative measures for other new grocery products.



## IN-STORE: BELIEVABILITY OF TENDERNESS CLAIM

Consumer appeal for Tender Beef is generated in part to believability of the claim. High believability is evident across all key consumer subgroups, such as: Heavy, medium, and light beef consumers, males and females, younger and older consumers, higher and lower education levels.



and overall satisfaction provided. This data later provided a base for examining the "chicken lover" subgroup, those who rate chicken highly for overall satisfaction, as well as for several other product attributes.

Beef was reported to outperform chicken on flavor, juiciness and overall satisfaction. Chicken scored higher on nutrition and versatility. The two proteins were tied on tenderness and consistency. Enhancing tenderness thus appeared to be a promising way to enhance the perception of beef versus chicken.

Concept testing is a typical methodology used to test the appeal of new products. The respondents were shown a card with a stock picture of a strip steak and three paragraphs describing a Tender Select product. The concept read as follows:

### Introducing Tender Select

- ◆ A great steak always makes for a great dinner. And now there's a way to know that incredible looking steak you buy at the store will be a tender eating steak when it's ready for dinner.
- ◆ Introducing Tender Select. The only steaks selected are those guaranteed to cook up tender and lean. There's no better proof.
- ◆ Tender Select is now available at King Soopers. Just look for the tender beef display. Strip steaks, tenderloins, T-bones and porterhouse steaks are available.

Eighty-nine percent of the respondents indicated an interest in purchasing this type of product. This is extremely high relative to most successful new products brought to the market. Thirty-five of the respondents noted this would be an incremental beef purchase; the remainder saw it as a replacement for some of their current beef purchases.

Ninety-five percent of the respondents said the concept was believable. This is a very important measure that indicates a heightened probability of trial. Respondents predicted that Tender Select would represent almost 30 percent of their beef purchases. (This increased to 42 percent after eating the steaks.)

## PRODUCT PLACEMENT AND STEAK PREPARATION

A total of 759 respondents then received their two steaks to sample at home. An accompanying sheet explained that the two steaks would "bloom" once they were defrosted and the packages opened. The importance of the two pins in keeping the two steaks clearly separated was explained.

One-half of the sample received a diary instructing them to try steak L first, the other half were to try steak R first. Separate diaries were provided for the second adult in the household and for children, if they wanted to participate. A doneness chart was also provided so that the respondents could provide an accurate reading on the degree to which the steaks were cooked.



In 83 percent of the households two adults evaluated the steaks. Ninety percent of the second adults were the spouse or the "significant other."

Eighty percent of the respondents grilled their steaks. And 80 percent were satisfied with the degree of doneness. Other preparation techniques for the steaks varied from one respondent to the other.

## STEAK EVALUATION

The tender steak was preferred by a 3-1 margin, validating the selection process and the fact that a superior consumer eating experience can be delivered. Heavy, medium and light users all had a similar 3-1 preference, as did men and women.

The consumers answered dozens of questions after testing the two steaks. Over and over, the responses to these questions validated the value they place in tenderness.

The tender steak was scored a 7.0 on a 0 to 10 tenderness scale, with 0 being not at all tender and 10 being very tender. This compares to a 4.9 for the control steak. A "halo effect" occurred, with consumers ranking the tender steaks significantly higher on flavor, juiciness, leanness and overall satisfaction. The overall satisfaction score was 7.1 for the tender steak, versus 5.5 for the control steak.

Purchase interest was high, with 64 percent of the respondents stating they would definitely or probably buy the tender steak instead of the steak they typically buy. Thirty-four percent of the study respondents indicated they would pay more per pound for the tender steak — surprising since consumers are usually very reticent to express a willingness to pay more. Fifty cents a pound higher appears to be the upper threshold for a premium paid, with willingness to buy dropping off rapidly above that level.

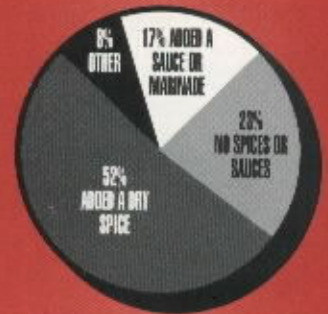
## BRANDING AND RETAIL LOYALTY

Another series of questions were asked about the branded associations consumers would assign to a line of Tender Select steaks, if available in the meat case. In addition to being lean and tender, consumers agreed — by a significant margin — that such a line of product would be of more consistent quality, higher quality and would provide more consistent results. They agreed the product is likely to taste better, would appeal to the whole family, is worth more, inspires confidence in the way it is produced, and is from a company that is more likely to introduce new, innovative and convenient products. Consumers were neutral on whether this product would be more nutritious than regular steaks.

Ninety percent of respondents said they would "like their grocery store to carry a line of guaranteed tender beef." Eighty-one percent said they would buy more of their beef at that retailer, and a surprising 65 percent said they would buy all of their beef at that retailer.

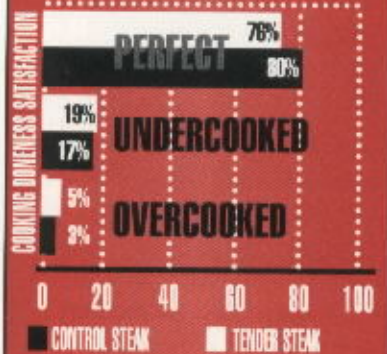
### POST-USE: PRODUCT PREPARATION

Half of the participants added a dry spice to the steaks at cooking time.



### POST-USE: PRODUCT PREPARATION

More than three in four participants cooked the test steaks the way they like them. All steaks were prepared together, and were cooked equally.



### POST-USE: PRODUCT ATTRIBUTE RATINGS

Tender Steak significantly outperformed regular steak on tenderness ranking.



### POST-USE: PRODUCT ATTRIBUTE RATINGS

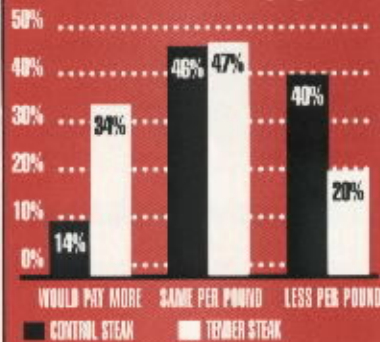
In addition, the tender steak had a halo effect...pulling up juiciness, flavor and overall satisfaction ratings.





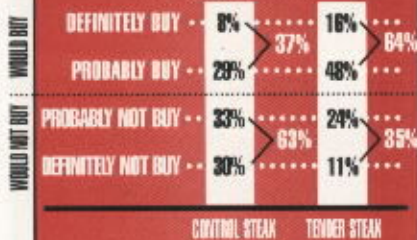
## POST-USE: VALUE PERCEPTION

While consumers often react with hesitation about paying more for grocery products, many expressed the perception that the tender steak was worth more per pound.



## POST-USE: PRODUCT PURCHASE INTENT

Purchase intent for tender steak is very high – nearly two-thirds say they definitely or probably would buy. The strongest indication of consumer purchase interest – those saying “definitely” would buy – is double for tender vs. regular steak (16% vs. 8%).



## POST-USE: PRICE ELASTICITY

Price elasticity becomes highly constrained past \$0.50 for Tender Select. 40% of those who tried both steaks reported being willing to pay a \$0.50 per pound premium for Tender Select steaks. Willingness to pay (WTP) for Tender Select steaks is significantly greater than for control steaks.



## FOLLOW-UP STORE VISIT AND ANALYSIS

One hundred twenty-four of the respondents that preferred the tender steak at home were asked back to the store to answer additional questions. After being re-introduced to the Tender Select concept and being told it was the steak they preferred in their in-home trial, they were asked how many of their next 10 beef cut purchases would be likely to be Tender Select. The average response was 4, which could be considered a 40 percent share.

Tender Select delivered its promise in numerous ways, based on a series of questions about the eating experiences of respondents interviewed in the follow-up visit. Nearly a third of them said they would eat more beef if Tender Select was available. Thirty-four percent indicated they would consider buying Tender Select instead of chicken.

Several name options were tested with this group. Tender Select was the preferred name, with Tender Supreme, Guaranteed Tender, Tender Lean, Certified Tender and Extra Tender all scoring well.

In the follow-up store visit, the tenderness guarantee associated with the concept was considered very important by 48 percent of the respondents and somewhat important by 40 percent.

Several additional support points were tested to see if they could serve as the “reason to believe” that this product would be tender. Being “naturally tender” or in the top 1/3 for tenderness tested well. In the earlier focus groups,

## POST-USE: TENDER BEEF PRODUCT ASSOCIATIONS

Agreement with key product associations is consistently high across all attributes. Results are also consistent across important customer subgroups, such as heavy, medium, and light beef consumers.

	STRONGLY AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	STRONGLY DISAGREE
IS MORE LIKELY TO BE TENDER	46%	41%	7%	3%
IS MORE LIKELY TO BE LEAN AND TENDER	43%	43%	7%	2%
HAS MORE CONSISTENT QUALITY	32%	50%	9%	2%
IS A HIGHER QUALITY BEEF PRODUCT	30%	52%	9%	3%
IS MORE LIKELY TO PRODUCE CONSISTENT RESULTS	30%	51%	8%	3%
IS MORE LIKELY TO TASTE BETTER	30%	50%	11%	3%
APPEALS TO THE WHOLE FAMILY	23%	52%	12%	5%
	<b>AGREE</b>		<b>DISAGREE</b>	

## POST-USE: TENDER BEEF USAGE ASSOCIATIONS

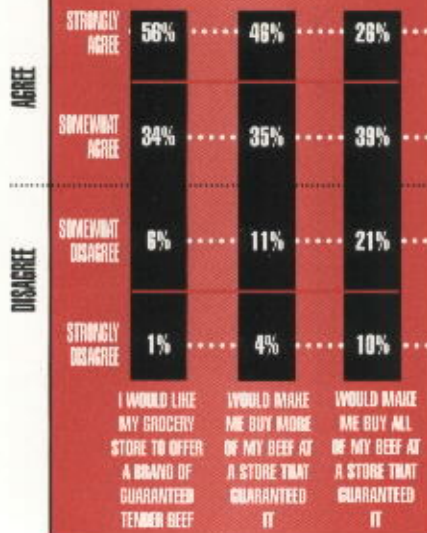
Tender steak brand generates a host of additional positive consumer perceptions. Impact on nutritional perceptions somewhat lower – steak tenderness is linked with fat – a perception the product must combat in-market.

	STRONGLY AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	STRONGLY DISAGREE
EASIER TO GET GOOD RESULTS	23%	50%	15%	5%
IS WORTH MORE	21%	50%	16%	6%
IS GUARANTEED TO BE GOOD	25%	46%	15%	5%
INSPIRES MORE CONFIDENCE IN THE WAY IT IS PRODUCED	21%	47%	18%	5%
IS MORE LIKELY TO BE LOW-FAT	20%	41%	23%	6%
IS MORE LIKELY TO INTRODUCE NEW, INNOVATIVE AND CONVENIENT PRODUCTS	17%	42%	20%	6%
IS MORE LIKELY TO BE MORE NUTRITIOUS	12%	38%	28%	8%
	<b>AGREE</b>		<b>DISAGREE</b>	



## POST-USE: ASSOCIATIONS FOR GROCERY STORE OFFERING TENDER STEAK

Grocery stores can seize substantial market opportunities by carrying, promoting and selling tender beef. Given beef's prominence as an important staple item, messages about guaranteed tender beef will be very attractive to grocery shoppers.



## NEXT 10 BEEF CUT PURCHASES-HOW MANY TENDER SELECT?

After eating two steaks at home, the 124 respondents asked back to the store indicated a higher planned frequency for buying Tender Select.

"IF TENDER SELECT WAS AVAILABLE IN YOUR LOCAL GROCERY STORE, OUT OF YOUR NEXT 10 PURCHASES OF BEEF CUTS, HOW MANY DO YOU THINK WOULD BE TENDER SELECT?"



consumers clearly objected to any description of an electronic sorting technology.

All subgroups examined at the conclusion of the study preferred the Tender Select product. This included light, medium and heavy users; men and women; and people of differing incomes. Using Multiple Correspondence Analysis, a more powerful analysis tool, a higher likelihood to purchase Tender Select was found among the respondents classified as medium users, especially males.

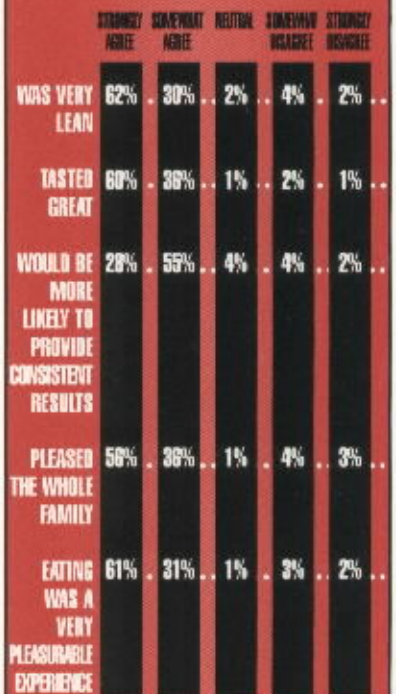
A sub-segment classified as "chicken lovers" (those ranking chicken attributes more highly) was found to like Tender Select at the same level of preference as a beef lover group.

## Overall Recommendation

The beef industry should continue to develop this product further, and test it in a much wider in-store setting. The retail partner has much to gain and should be willing to share sales information. This type of test would help determine which cuts are best merchandised as Tender Select, the potential to increase beef's market share and the impact on overall customer satisfaction.

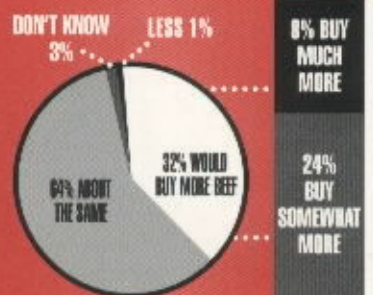
## FOLLOW-ON REACTION TO TENDER SELECT STEAK EATEN AT HOME

A series of questions asked about the eating experience indicates that Tender Select delivered. Note that 92% found eating the Tender Steak to be a 'pleasurable experience'.



## POST-USE: STEAK PURCHASE RATE IF TENDER BEEF AT STORE

Almost one-third of all consumers say they will increase their rate of purchasing beef if tender steak is available. This consumer attitude is likely to create heavier beef consumption.







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