Extent and Value of Retail Beef Brands

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Developing retail beef brands may be a means of increasing beef demand and targeting niche markets. Relatively little is known about the extent of fresh beef branding and the value consumers place on retail brands. This Extension Fact Sheet reports on research conducted to determine the value of retail beef brands, special labeled products, and other retail beef attributes (such as fat content, grade, packaging alternatives, etc.) (Dutton, 2007). Specifically, the intent is to report on the nature of retail beef brands in the two largest urban population centers in Oklahoma along with a larger, more diverse urban center (Denver, Colorado).

Procedure and Data

Information on retail beef products was collected July-August 2006 from a sample of retail stores in each of three metropolitan areas; Oklahoma City, Tulsa, and Denver. Cities selected in the three metropolitan areas were: **Oklahoma City:** Oklahoma City, Edmond, Midwest City, Yukon, and Moore; **Tulsa:** Tulsa, Sand Springs, Broken Arrow, Owasso, and Sapulpa; **Denver:** Denver, Arvada, Aurora, Lakewood, Littleton, and Westminster. In addition to each store's name, type, and location, data were collected from selected retail meat packages. Information collected was exactly what would be available to any shopper. Information included price, product name, fat content (ground products only), grade (roasts and steaks only), package type (foam tray, case ready, etc.), discounts (if any), expiration date, brand, and any special labels (no hormones added, no antibiotics added, all natural, etc.). In total, information was collected on 462 ground beef packages, 175 roast packages, and 750 steak packages.

A statistical model was used to identify price differences for a given characteristic, holding other characteristics constant. This procedure allows identifying and measuring price differences attributable to each specific product characteristic.

Extent and Value of Retail Brands

Considerable information regarding the extent and value of branded products is shown in Table 1. The extent of branded beef products varied by product type (ground products, roasts, and steaks) and metropolitan area.

Extent of Brands

Beef products were divided into five brand categories. "Special" brands were those that carried special labels including all natural or no hormones added (such as Coleman Natural). However, note that not all products with a special label were branded products. "Program" brands were those that were breed specific, often national brands (such as Certified Angus Beef). "Store" brands were those unique to a certain store or store chain (such as Homeland). "Other" brands were those that could not be classified into one of the other brand categories. Lastly, packages placed in the "Generic" category had no brand designation. Throughout this fact sheet, branded beef refers to the first four brand categories and excludes the generic category.

Ground beef products comprised a third (33.3 percent) of all beef in the study. Branded beef represented 33.8 percent of ground beef products in Denver, 20 percent in Tulsa, and 15.4 percent in Oklahoma City. Overall, brands accounted for 22.5 percent of ground products. Store brands were more common in Oklahoma City; store brands and special brands were found equally in Denver; and program brands were more common in Tulsa. Although stores were randomly picked for inclusion in the study, findings are influenced by the stores actually surveyed in each metropolitan area.

Fewer roasts were found than ground beef or steaks. This finding is not surprising since roast purchases are seasonal and roast sales are lower in summer than in winter. Roasts accounted for 12.6 percent of all beef packages in the study. Branded roasts accounted for 64.3 percent of roasts in Denver, 42.2 percent of roasts in Tulsa, and just 4.5 percent of roasts in Oklahoma City. Across the three metropolitan areas, 46.3 percent of roasts carried a brand name. Store brands were most common in Denver and program brands in Tulsa.

More steak packages were studied than ground products or roasts. Steaks comprised more than half (54.1 percent) of all packages in the sample. Brands were more common across the three metropolitan areas for steaks than the other two product categories. Of all steak packages, 50.4 percent carried a brand name. Steak brands represented 66.2 percent of steaks in Denver, 51.6 percent of steaks in Tulsa, and 34.0 percent of steaks in Oklahoma City. Store brands were most common in Denver and Oklahoma City, whereas program brands were most common in Tulsa.

Across all product types and metropolitan areas, 40.6 percent of all packages were branded and 59.4 percent were generic. Of branded products, 51.5 percent carried a store brand, 25.8 percent a program brand, 11.4 percent an "other" brand, and 11.2 percent a special brand.

Value of Brands

Brands accounted for 44.0 percent and generic beef 56.0 percent of the total dollar value of retail beef products in the study. The percentage of total dollar value shown in Table 1 is similar in most cases to the percentage calculated based on number (frequency) of packages. For example, in Denver for ground products, the percentage of store branded packages was 14.7 percent and the percentage of total value for store branded packages was 14.8 percent.

Brand Frequency by Selected Attributes

Data on branded and generic beef products were sorted into various groups. The following discusses products by store type, quality, package type, and special labels.

Store Type

As part of the sampling process, stores were divided into four categories; specialty stores (such as Whole Foods), supermarkets (such as Safeway), discount stores (such as Wal-Mart), and warehouse or club stores (such as Costco). More than 90 percent of package observations came from supermarkets (52.5 percent) and discount stores (40.0 percent).

For the most part, specialty stores only carried products with special label brands. Supermarkets were more apt to carry branded beef, frequently including a store brand. Store brands were most common in Denver and Oklahoma City while program brands were most common in Tulsa. Less than half of beef products found in supermarkets in each metropolitan area was generic beef. However, generic beef was most common in discount stores where less than 5 percent was branded beef. Across all store types, most types of retail stores carried one to two brands, though some carried no branded beef and three national chains carried four brands.

Product Quality

Product quality differs for product groups. Quality for ground products was considered to be based on fat or lean content. Categories were less than 5 percent fat (96 percent or higher lean), 5 to 10 percent fat (90 to 95 percent lean), 11 to 15 percent fat (85 to 89 percent lean), 16 to 20 percent fat (80 to 84 percent lean), and 21 percent or more fat (79 percent or less lean), versus no indication of fat or lean content. Table 2 shows the distribution of ground products by fat content.

Branded beef tended to be leaner than generic beef. Further, branded beef more likely carried a designation for fat or lean content than generic beef. When no fat or lean content was indicated, most was generic beef. Ground beef that was 16 percent or more fat (groups 16 to 20 percent and >20 percent fat) tended to be generic beef. In the leaner groups, 15 percent or less fat (85 percent or more lean), there was a mix of generic and brands but a higher percentage of branded beef than for the more fatty or less lean categories.

Product quality for roasts and steaks was related to the U.S. Department of Agriculture (USDA) quality grade designation. USDA quality grades for young beef, in descending order as applied by USDA are; Prime, Choice, Select, and

Table 1. Percentage of observations and value for retail beef products, by brand categories.[a]

		Ground Products		Roast Products		Steak Products	
Metropolitan Area	Brand Category	Percent of Observations	Percent of Value	Percent of Observations	Percent of Value	Percent of Observations	Percent of Value
Denver	Special	14.7	13.3	11.4	7.8	9.1	10.8
	Program	0.0	0.0	1.4	3.0	1.3	0.9
	Store	14.7	14.8	44.3	48.5	50.2	53.0
	Other	4.4	3.1	7.1	6.0	5.6	4.1
	Generic	66.2	68.8	35.7	34.7	33.8	31.2
Tulsa	Special	3.5	3.1	0.0	0.0	1.1	1.2
	Program	15.9	14.9	26.5	19.4	33.1	30.6
	Store	0.0	0.0	12.0	12.6	13.5	12.8
	Other	0.6	0.5	3.6	3.3	4.0	3.7
	Generic	80.0	81.5	57.8	64.7	48.4	51.7
Oklahoma City	Special	2.6	2.3	0.0	0.0	0.4	0.7
	Program	0.0	0.0	0.0	0.0	0.4	0.8
	Store	9.0	11.0	0.0	0.0	25.8	23.9
	Other	3.8	2.8	4.5	7.1	7.4	8.9
	Generic	84.6	84.0	95.5	92.9	66.0	65.7

[a] Percentages are of metropolitan area totals.

Table 2. Extent of branded retail ground beef products by fat content[a]

Metropolitan Area	Brand Category	Fat Content <5%	5-10%	11-15%	16-20%	>20%	None Indicated
		Frequency					
Denver	Special	30.0	17.5	35.7	8.1	2.9	100.0
	Program	0.0	0.0	0.0	0.0	0.0	0.0
	Store	40.0	12.5	28.6	8.1	11.8	0.0
	Other	0.0	5.0	14.3	5.4	0.0	0.0
	Generic	30.0	65.0	21.4	78.4	85.3	0.0
Tulsa	Special	0.0	16.0	20.0	2.3	0.0	0.0
	Program	42.9	0.0	40.0	2.3	0.0	34.9
	Store	0.0	0.0	0.0	0.0	0.0	0.0
	Other	0.0	0.0	0.0	2.3	0.0	0.0
	Generic	57.1	84.0	40.0	93.2	100	65.1
Oklahoma City	Special	0.0	10.0	3.3	7.7	0.0	0.0
	Program	0.0	0.0	0.0	0.0	0.0	0.0
	Store	0.0	30.0	0.0	53.8	2.3	0.0
	Other	0.0	5.0	10.0	7.7	0.0	2.7
	Generic	0.0	55.0	86.7	30.8	97.7	97.3

[a] Percent of fat content totals for each metropolitan area.

Standard. Beef products that had no designation of quality were placed in a "none indicated" category. Table 3 shows the distribution of roasts and steaks by quality. Across all roast and steak products and metropolitan areas, products not having a quality designation represented 69.4 percent of the total. Thus, consumers received little help in purchasing quality beef other than the product name, brand or special label, and visual appraisal of the product.

A considerable percentage of branded beef carried no designation of quality. In this case, the brand name may serve as a substitute for the USDA quality grade in consumers' minds. Further, some branded products have quality requirements even though the products may not be labeled as such (for example, Certified Angus Beef). Thus, consumers may rely on the brand to purchase the quality of beef they want, whether or not they understand the USDA quality

Table 3. Extent of branded retail beef roast and steak products by USDA quality grade.[a]

Metropolitan Area	Brand Category	USDA Quality Grade Standard	Select	Choice	Prime	None Indicated
		Frequency				
Denver	Special	0.0	0.0	1.2	0.0	13.1
	Program	0.0	0.0	3.5	0.0	0.0
	Store	50.0	0.0	20.0	0.0	60.6
	Other	0.0	0.0	20.0	0.0	0.5
	Generic	50.0	0.0	55.3	0.0	25.8
Tulsa	Special	0.0	0.0	0.0	0.0	1.5
	Program	0.0	0.0	68.4	100.0	0.5
	Store	0.0	0.0	0.0	0.0	23.6
	Other	0.0	100.0	7.4	0.0	0.0
	Generic	0.0	0.0	24.3	0.0	74.4
Oklahoma City	Special	0.0	0.0	0.0	0.0	0.4
	Program	0.0	0.0	0.0	0.0	0.4
	Store	0.0	0.0	0.0	0.0	27.5
	Other	0.0	0.0	62.5	100.0	1.3
	Generic	0.0	100.0	37.5	0.0	70.3

[a] Percent of quality grade totals for each metropolitan area.

grade system. When no quality was designated, it was typically generic product (56.8 percent of the observations) or a store brand (37.3 percent). At the other extreme, Prime beef was all branded beef, though there were few Prime product observations in our sample. Choice beef generally carried a retail brand other than a store brand or no brand. Denver had more Choice beef which was unbranded or carried a store brand than either Tulsa or Oklahoma City. In Tulsa, most Choice beef carried a program brand.

Package Type

Packaging is important to consumers. Consumers prefer some package types for convenience and cleanliness. Further, packaging affects shelf life and product quality. Packaging is important to stores because it affects in-store retail costs. Beef products in this study came in several package types (Table 4).

Chub packages apply only to ground beef. Chub packaging represented 29.3 percent of ground products in Denver, 20.0 percent of ground products in Tulsa, and 25.8 percent of ground products in Oklahoma City. Most chub packaging was generic or unbranded (90.0 percent).

The most common packaging type across all beef products was the traditional foam tray representing 54.6 percent of all beef packages in the sample. A majority of products in foam trays were branded (54.2 percent). Store brands accounted for 32.5 percent and program brands 15.3 percent of foam tray packages. Other branded products were in a variety of package types. A high percentage (87.5 percent) of case ready product was generic beef.

Special Labels

Special labels consisted of "no antibiotics added," "no hormones added," "all natural," "source verified," and "guaranteed quality." Special labels were found on 21.8 percent of all products. More than three-fourths of those (79.5 percent) were of two types; all natural (46.7 percent) and guaranteed quality (32.8 percent).

Generic products carried the most special labels. Nearly half of all products with special labels (49.3 percent) were generic or unbranded. Among branded products carrying a special label, 89.5 percent of all observations, the distribution was a store brand (35.3 percent), special brand (33.3 percent), or program brand (20.9 percent).

Product Prices by Brand Categories

Table 5 shows average prices across all metropolitan areas for each product in the study by brand category. Prices varied widely within product and brand categories. Ground beef was priced higher than ground chuck for all but one brand category. Round roasts were priced above chuck roasts across all brand categories. Ribeye steaks were the highest priced steaks, followed by T-bone steaks.

In all but one instance, generic beef was priced lower than any brand category. The exception was for round steak, where the average program brand was priced below the average generic product. In many cases, the average generic product price was half as much or more of the average price for a brand category.

Of brand categories, program brands had the lowest average price for six of eight products and store brands were

Table 4. Extent of branded retail products by package type[a]

		Package Type				
Metropolitan Area	*Brand Category*	*Chub[b]*	*Foam Tray*	*Case Ready*	*Custom Cut*	*Vacuum Sealed*
				Frequency		
Denver	Special	0.0	3.1	9.5	63.5	33.3
	Program	0.0	0.8	0.0	1.9	6.7
	Store	26.8	52.7	16.2	9.6	13.3
	Other	0.0	7.0	1.4	3.8	20.0
	Generic	73.2	36.4	73.0	21.2	26.7
Tulsa	Special	0.0	0.0	5.3	0.0	6.3
	Program	0.0	38.6	0.7	78.8	0.0
	Store	0.0	15.0	1.3	0.0	16.3
	Other	0.0	1.4	3.3	0.0	37.5
	Generic	100.0	45.1	89.5	21.2	50.0
Oklahoma City	Special	2.5	0.5	1.3	0.0	16.7
	Program	0.0	0.5	0.0	0.0	0.0
	Store	0.0	32.2	3.4	50.0	0.0
	Other	0.0	8.2	2.7	10.0	50.0
	Generic	97.5	58.7	92.6	40.0	33.3

[a] Percent of brand category totals for each metropolitan area.
[b] Ground products only.

Table 5. Average prices by product and brand category

Brand Category	Ground Beef	Ground Chuck	Chuck Roast	Round Roast	Ribeye Steak	Round Steak	Sirloin Steak	T-bone Steak
				($/lb.)				
Special	4.90	4.74	5.12	6.19	15.02	10.44	10.70	14.32
Program	3.57	2.67	3.03	3.80	9.28	3.60	5.06	9.12
Store	3.14	2.65	3.43	3.85	9.56	4.09	4.71	9.20
Other	4.02	4.62	3.69	4.75	10.42	5.32	7.24	10.12
Generic	2.50	2.31	2.91	3.46	8.38	3.84	4.54	7.84

priced lowest for the other two products. Special brands had the highest price for each product.

Value of Retail Beef Attributes

One of the primary objectives of this research was to determine the value consumers placed on various retail beef attributes, such as brands, special labels, packaging, etc. Many factors affect retail beef prices. Therefore, a statistical model was employed to determine the value for specific product and store attributes. Selected results are discussed here.

Metropolitan Area

Beef prices were consistently less expensive in Tulsa and Oklahoma City than in Denver. Prices were about $0.45/lb. lower in Tulsa and Oklahoma City for ground products, $0.80/lb. lower for roasts, and $1.25/lb. lower for steaks.

Product Type

Price differences between products were generally as expected. Ground beef was $0.15/lb. lower than ground chuck, and chuck roasts were $0.57/lb. less than round roasts. Round steak was $4.14/lb. lower and ribeye steak, and sirloin steak was $3.59 lower than ribeye steak. T-bone and ribeye steak were priced about the same.

Fat Content

Quality attributes also were priced generally as expected. Consumers paid a premium ($1.05/lb.) for ground products with fat content less than 10 percent (90 percent or more lean) compared with ground products with no identified fat content. At the other extreme, products with fat content greater than 20 percent were discounted $0.23/lb. relative to ground products with no identified fat content.

Consumers paid more for higher quality roasts and steaks as well. Choice roasts were priced $0.23/lb. higher on average than roasts with no grade designation. Similarly for steaks, consumers paid $2.79/lb. more for Prime steaks compared with steaks having no grade designation.

Brand

Price premiums for branded beef ground products ranged from $0.30 to $1.45/lb. compared with generic ground products. By contrast, there were no discernable price differences between branded and unbranded roasts. For steaks, price premiums were found for three brand categories (special, program and other), ranging from $0.71/lb. to $5.87/lb. compared to generic steaks. No price difference was found between generic steak and store branded steak.

Other Findings

Ground beef prices were lower in discount and warehouse club stores than specialty stores, whereas steak prices in supermarkets were higher than in specialty stores. Consumers generally paid a premium for cleaner, less messy packaging. Products packaged in foam trays were usually discounted compared with custom wrapped, vacuum packaged, or case ready products. Larger package sizes were associated with lower per-pound prices, indicating volume discounting.

Summary and Conclusions

The beef industry has long thought expansion of branded beef products was a means of increasing beef quality and consistency at retail, thereby leading to increased demand for beef. This study found a significant amount of branded beef in Denver, Tulsa, and Oklahoma City. Across all product types and metropolitan areas, 40.6 percent of retail beef products sampled was branded. On a dollar basis, brands accounted for 44.0 percent of the total dollar value of retail beef products in the study. Of branded products, 51.5 percent carried a store brand. Much of that store branded beef carried no designation of quality. There was some evidence branded beef is priced higher than generic beef after accounting for several factors affecting retail prices. However, price differences were not consistent across brands and product categories.

An overall conclusion is that considerable opportunity exists for new or expanded brand labeling of beef at retail. In addition, no strong evidence surfaced that brands, overall, imply to consumers higher quality beef products.

References

Dutton, Jennifer M. "Estimating the Value of Brand and Attributes for Retail Fresh Beef Products." Unpublished M.S. thesis, Oklahoma State University, July 2007.

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