The Texas Retail Meat Industry

Structure, Operational Characteristics and Competitive Practices

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Steer and helier beef, primarily fed beef, represented Elmost

HIGHLIGHTS

The retail meat industry has undergone dramatic changes during the last two decades in terms of industry structure, purchasing and merchandising techniques, type and quality of products sold, and meat handling and distribution practices. This study focused on these questions and is the first in a series of three studies designed to analyze the market structure, performance, and competitive practices of the Texas meat industry at the retail, wholesale, and slaughter levels.

Data for this study were obtained through personal interviews with owners and managers of retail grocery firms in Texas for 1974. Respondents were selected on a stratified random sample basis to represent every segment of the retail grocery industry and to provide data for varying sizes of retail firms. Completed questionnaires represented data from firms which handled approximately 70 percent of the total fresh and processed red meat sold by retailers in Texas during 1974.

The Texas retail meat industry is characterized by large, diversified supermarkets which feature mass selling techniques and merchandise meat products on a strict specification basis. In 1974, supermarkets accounted for more than 90 percent of the 1,040 million pounds of fresh and processed red meat merchandised by Texas retail food stores. Grocery firms and affiliated independent groups with 11 or more stores accounted for more than four-fifths of the fresh and processed meat items sold by Texas retail stores during 1974.

Steer and heifer beef, primarily fed beef, represented almost 40 percent of the fresh and processed meat items handled by retailers during 1974. Next in importance were smoked and cured pork, cow and bull beef,

fresh pork, sausage and variety meats, calf, ground meat, lamb, and veal. However, after cow and bull beef and trimmings from other fresh meats were converted to ground meat, it then ranked second with 26 percent of the total.

Texas retailers purchased steer and heifer beef under a strict set of specifications concerning weight, sex, quality and yield grade, trim, and color. Calf and lamb specifications included mostly quality grade and weight. Pork specifications centered primarily on weight ranges for specified cuts and trim.

Approximately 80 percent of the steer and heifer beef sold by Texas retailers was reportedly equivalent in quality to U. S. Choice or higher. However, retail firms with 11 or more stores and those with 4 or more supermarkets reported that 90 percent of the steer and heifer beef merchandised by their stores was equivalent to U. S. Choice or higher. Calf sold by retailers was mostly U. S. Good, while veal and lamb were predominantly U. S. Choice or higher. Cow and bull beef, which is sold mostly as ground meat or sausage items, was generally U. S. Commercial or lower.

Texas retailers purchased almost 80 percent of their meat requirements from suppliers within Texas. These suppliers were almost exclusively packers. Texas suppliers were major sources for all types of meat items except lamb and fresh pork. Fresh pork inshipments originated primarily from Kansas-Nebraska and Iowa, while lamb inshipments originated mostly from Colorado, Oklahoma, South Dakota, and New Zealand.

Two-thirds or more of the total beef, calf, veal, and lamb was purchased in carcass form. Steer and heifer beef not purchased as carcass beef was purchased as quarters, primals or subprimals, while noncarcass cow and bull beef was purchased as boneless beef. Fresh pork was purchased predominantly in wholesale or primal cuts.

Boxed meat purchases by retailers were confined to steer and heifer beef, cow and bull beef, lamb, and fresh pork. About 44 percent of the fresh pork was purchased as boxed meat, followed by boneless cow and bull beef with 27 percent and steer and heifer beef with almost 16 percent.

One-third of the total meat handled by Texas retailers during 1974 was processed in a centralized retail fabrication center prior to store door delivery. Retail firms with 11 or more stores accounted for 90 percent of the meat processed through retailer-owned central warehouse and fabrication facilities. These firms reported that almost 40 percent of their steer and heifer beef, 30 percent of their calf, and more than two-thirds of their cow and bull was processed through centralized retail warehouse and fabrication facilities. Fresh pork was generally not processed through centralized facilities, but one-third of the smoked and cured pork moved through centralized retail fabrication centers for additional slicing and packaging.

Over 70 percent of the retailers used a predetermined markup to set prices for fresh and processed meat items during 1974. The composite markup (gross margin) of heavy beef averaged about 22 percent; it averaged 23 percent for both calf and fresh pork and slightly higher for smoked and cured pork and other processed items.

Meat promotion and advertising has become a standard competitive practice for attracting customers by retailers. More than 57 percent

featured specials on fresh and processed meats on a weekly basis, while another 11 percent featured specials twice per week. Most of the remaining retailers did not feature specials or maintain regular promotional programs.

Price discounts or markdowns during specials varied by type of meat item. However, markdowns by retailers featuring specials on a weekly or more frequent basis ranged from 10 to 30 percent. Over four-fifths of the retailers interviewed found that specials increased total meat sales from 20 to 40 percent.

The effect of meat promotions and specials on total retail sales brought varied responses from retailers interviewed. Forty-five percent found it difficult to estimate the effect of meat specials on total company sales, since such specials were conducted on a weekly or daily basis. However, one-third of the retailers found company sales increasing from 1 to 10 percent as a result of meat specials. Policies of continuous meat specials reflect concern with competitive position in the market and maintenance of sales at desired levels by many retailers.

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THE TEXAS RETAIL MEAT INDUSTRY --STRUCTURE, OPERATIONAL CHARACTERISTICS, AND COMPETITIVE PRACTICES

Raymond A. Dietrich *

The retail meat industry is characterized by rapidly changing technology, highly competitive practices, and continued change in structural and operational characteristics at the firm level. Store numbers throughout the United States, including Texas, continue to decline, while store size and sales volume per store continue to increase. In addition, technological advances are evident in the packaging, shipping, and storage of meat items. Centralized warehousing and meat fabrication centers as well as boxed meat programs are prominent throughout the retail industry.

Changes within the Texas livestock and meat industry, similar to those in the United States, are evident in the production, slaughtering, and distribution sectors. With the development of large scale commercial feedlot operations in Texas, specialized cattle slaughtering and beef processing firms have established plants within the concentrated cattle feeding area in the Texas Panhandle-Plains region. Many of these specialized plants have installed facilities to fabricate carcasses into primals or subprimals for shipment in bags or film wraps as boxed beef directly to retail distribution centers or individual stores. Mushrooming industrial development and a rapidly growing population in the Texas Gulf Coast and North Texas areas have been accompanied by

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increases in numbers and size of large retail organizations which feature mass selling techniques via one-stop shopping in supermarket facilities. Further technological developments in refrigeration and transportation systems, general usage of federal grading standards, and rigid specifications standards have allowed retail organizations to purchase and distribute consistent quality meat items over a larger geographic area.

These developments have precipitated changes at the retail level in marketing and buying practices employed for fresh and processed meat; the type and quality of meat items sold; handling and storage practices and distribution channels employed; and strategies for competing in market outlets. This study will focus on these questions and is the first in a series of three studies designed to analyze the market structure, performance, and competitive practices of the Texas meat industry at the retail, wholesale, and slaughter levels. This study is designed to complement and update a study of the Texas meat industry conducted in 1960 (1).

Data for this study were obtained through personal interviews with owners and managers of retail grocery firms in Texas for 1974. Respondents were selected on a stratified random sample basis as shown in Table 1. Completed questionnaires represented data from firms which handled approximately 70 percent of the total fresh red meat and processed meat sold by retailers in Texas during 1974.

Structural Characteristics of the

The changing structure of the food retailing industry, including innovations in buying and selling at the retail level, has had reverbera-

TABLE 1. GROCERY STORE POPULATION, SAMPLING RATE, STORES REPRESENTED BY COMPLETED QUESTIONNAIRES, BY SELECTED AREAS AND TYPE AND SIZE OF FIRM, TEXAS, 1974

Type and size of firm and	Grocery	Sampling		epresented
location was autas and		rate1/	by completed questionnaires	
silve novement, the	Number	Percent	Number	Percent
Firms with 11 or more stores:	<u>2</u> / 			
Dallas-Ft. Worth, Houston and San Antonio	1,427	100.0	1,237	86.7
Other Texas	447	50.0	226	50.6
Total	1,874	88.1	1,463	78.1
Convenience firms with 11 or more stores:				
Dallas-Ft. Worth, Houston and San Antonio	1,218	100.0	975	80.0
Other Texas	284	33.3	149	52.5
Total	1,502	87.4	1,124	74.8
Firms with less than 11 store and 4 or more supermarkets:	S Is and S Anti-e			
Dallas-Ft. Worth, Houston and San Antonio	54	100.0	36	66.7
Other Texas	106	25.0	23	21.7
Total	160	50.0	59	36.9
Firms with less than 11 store and 1 to 3 supermarkets:				
Dallas-Ft. Worth, Houston and San Antonio	95	33.3	15	15.8
Other Texas	336	10.0	32	9.5
Total	431	15.3	47	10.9
Firms with less than 11 store and no supermarkets:3/	s mobility, is			
Dallas-Ft. Worth, Houston and San Antonio				
Other Texas	373	10.0	16	4.3
Total	567	12.2	40	7.1

^{1/}Sampling rate was based on firms and stratified by area as indicated. Therefore, store numbers represented by the completed questionnaires may exceed the actual sampling rate.

Source: 1973 Directory of Supermarket Grocery and Convenience Store Chains, Chain Store Age.

 $[\]frac{2}{\text{Does}}$ not include convenience stores, but all other retail grocery firms which own or service 11 or more stores.

 $[\]frac{3}{}$ The population numbers in this category appear to be understated.

tries as well as within the food retailing industry. Major changes in the food retailing industry include the chain store movement, the establishment of supermarkets, the affiliation of independent grocers with wholesale groups, and the more recent development of convenience stores. Many retail food stores have followed the lead of large retail chains by integrating backward into wholesaling and processing. Although this integration function has been employed by some of the retail firms in their meat operations, it has been considerably more extensive in the dry grocery products sector. Recently, interest in central processing by retailers has grown, especially in breaking carcasses into primals and subprimals in centralized facilities rather than at individual stores. Other factors which have had an impact on food marketing patterns include the development of food discount stores and the continued existence of specialty food stores as meat markets.

The changing structure of the food retailing industry which was generated by competitive forces within the industry is also a reflection of changing social and economic forces. The retail industry has responded to such forces as a growing population, rapidly rising per capita incomes, increased consumer mobility, increased numbers of women entering the labor force, and improvements in transportation and refrigeration by changes in the number, size, and location of retail stores.

Two trends are predominant in the retail food industry. Total store numbers are declining, while sales volume per store is increasing (Table 2). The decline in store numbers from 1955 to 1973 is evident mostly in the independent sector of the grocery retail industry. Almost 80 percent of the decline in the independent sector was attributed to

TABLE 2. GROCERY STORE NUMBERS AND ANNUAL SALES, AND TYPE OF STORE, UNITED STATES, 1955-1973

[Market : 10 20 10 Total									
		Туре	of store	red i de r., ex:	odawar				
Item	par makai matasa	Independent and at assist annumber and							
and year	Affiliated	Unaffiliated	Total	Chain	Grand Total				
Store numbers:	ສາດປະພາພ ສາເພາຊ ໃສ	obansupa Pilik ,	ales to 1973	E ENGROCIE	13172				
1955	101,000	223,500	324,500	18,800	343,300				
1965	76,000	128,200	204,200	22,850	227,050				
1970	69,400	104,700	174,100	34,200	208,300				
1973	64,070	94,530	158,600	40,960	199,560				
Annual sales:) Ledot and to in	Billion	dollars	ewarket eto	100, n				
1955	15,500	9,655	25,155	14,260	39,415				
1965	31,800	6,100	37,900	27,205	64,925				
1970	39,390	6,950	46,340	42,075	88,415				
1973	48,790	7,950	56,740	56,390	113,130				

Source: Progressive Grocer, Annual Report of the Grocery Industry, April 1974.

arkets.

Characteristics of the Texas Retail Meat Industry

The Texas retail food industry, similar to the national retail in

dustry, has deciined in total store numbers, while sales volume per store

the demise of unaffiliated independent stores, Although affiliated independent stores declined 60 percent during this period, annual sales of these stores more than tripled from 1955 to 1973. Chain stores, firms with 11 or more stores, at the same time more than doubled in numbers, while annual sales quadrupled.

The dominant forces in the retail food sector today are supermarkets (Table 3). Supermarkets accounted for almost 80 percent of the total grocery sales in 1973, while supermarket store numbers made up 20 percent of the total. In 1974, supermarkets were defined as stores with sales of \$1,000,000 or more annually, compared with \$500,000 or more annually before 1974. Under the current definition, supermarkets accounted for 72 percent of the total annual grocery sales in 1974 with supermarket store numbers making up 16 percent of the total (Table 4). Two-thirds of the supermarket sales were accounted for by chains, while independents accounted for the remaining one-third. However, when total grocery sales are considered, grocery receipts were split about equally between chains and independents during 1974.

The growth and continued expansion of supermarkets have special significance to the meat industry since meat constitutes about one-fourth of consumer expenditures in supermarkets (Table 5). In addition, beef, the single most important item merchandised by supermarkets on a sales volume basis, accounts for one-third of the total meat sales by supermarkets.

Characteristics of the Texas Retail Meat Industry

The Texas retail food industry, similar to the national retail industry, has declined in total store numbers, while sales volume per store

TABLE 3. DISTRIBUTION OF GROCERY STORE NUMBERS AND ANNUAL SALES, BY SIZE OF STORE, UNITED STATES, 1965-1973

TABLE IN SUPE		Size of store							
Item and year	Small/	Superette 1/	Supermarket 1/	Total					
	£ £4-1	Perc	ent						
Store numbers:									
58,760									
1965	73.5	12.5	14.0	100.0					
1970	65.5	16.1	18.4	100.0					
1973	60.7	18.8	20.5	100.0					
031.02 20.100	00.7	086,8	3 080,00	0, 22 Tav0					
Annual sales:									
35,200	8.8	0.00% (1.1.) 7.40		d captaga Dill					
1965	16.3	13.0	70.7	100.0					
1970	11.7	12.9	75.4	100.0					
13,900	2.00	080, 4, 1/./1	1000,000,18 2 0	\$2,000,00					
1973	9.9	11.3	78.8	100.0					

 $[\]frac{1}{\text{Small}}$ - sales of less than \$150,000 annually; Superette - sales from \$150,000 to \$500 000 annually; and Supermarket - sales of \$500,000 or more annually.

Source: Progressive Grocer, Annual Report of the Grocery Industry, April 1966, 1971 and 1974, respectively.

TABLE 4. GROCERY STORE NUMBERS AND SALES, VOLUME, BY SIZE AND TYPE OF STORE, UNITED STATES, 1974

-Chies with it or more ecology	Number o	f stores	Total dollar sales		
Type of store and sales volume	Number	Percent	Million dollars	Percent	
Supermarkets	31,430	15.9	93,960	71.8	
Chains (Table of Supercont)	19,690	10.0	58,760	44.9	
\$1,000,000 - \$2,000,000	7,240	3.7	12,300	9.4	
\$2,000,000 - \$4,000,000	8,770	4.4	26,300	20.1	
Over \$4,000,000	3,680	1.9	20,160	15.4	
Independents	11,740	5.9	35,200	26.9	
\$1,000,000 - \$2,000,000	6,100	3.1	10,400	8.0	
\$2,000,000 - \$4,000,000	4,080	2.0	13,900	10.6	
Over \$4,000,000	1,560	.8	10,900	8.3	
Superettes (\$500,000-\$1,000,000)	11,500	5.8	9,675	7.4	
Chains	2,000	1.0	1,600	1.2	
Independents	9,500	4.8	8,075	6.2	
Small stores (under \$500,00)	132,500	66.9	21,880	16.7	
Chains	2,500	1.3	880	.7	
Independents	130,000	65.6	21,000	16.0	
Convenience stores	22,700	11.4	5,320	4.1	
Total	198,130	100.0	130,835	100.0	

Source: Progressive Grocer, Annual Report of the Grocery Industry, April 1975.

TABLE 5. DISTRIBUTION OF CONSUMER EXPENDITURES IN SUPERMARKETS, UNITED STATES, 1960-1974

		Year	* 5005
Departments	1960	1970	1974
erviere en mener en Li. ni bagolévah sanc,	. amaz a abina. bi	-Percent	90,000,000,0
Grocery	47.3	40.5	38.6
Meat	21.9	28.3	23.3
Frozen Foods	3.5	3.4	6.4
Produce	10.0	7.6	7.4
Bakery	6.2	5.0	4.7
Dairy	11.1	10.3	9.5
Ice Cream	1/	1.1	.9
HABA/General Merchandise2/	1/	3.8	4.9
Snack bar/deli.	_1/	e de pals e pals e la	4.3
Total	100.0	100.0	100.0

 $[\]frac{1}{I}$ Included in grocery department.

Source: Progressive Grocer, Annual Report of the Grocery Industry, April 1961, 1971 and 1975, respectively.

compared which 1959 is coffertive of om sumer demands and charging live

 $[\]frac{2}{\text{HABA}}$ refers to health and beauty aids.

has increased. Substantial change has occurred in the Texas retail meat industry since 1960 with respect to type and quality of meat handled, volume per store, promotional and advertising practices, and other operational practices at the firm and store level.

Type of Firms

Current data are not available concerning the types of firms comprising the Texas retail food industry. Data developed in the study revealed that corporate chains, which are defined to exclude convenience chains while including all other types of corporate organizations including affiliated independents, comprised about 20 percent of the Texas retail food firms and more than 40 percent of the retail stores in 1974. These corporate chains accounted for more than 85 percent of the 1,040 million pounds of fresh and processed red meat sold by Texas retailers during 1974.

The retail grocery industry in Texas, as in the rest of the nation, is dominated by supermarkets. Supermarkets, retail firms with \$500,000 or more in sales annually, comprised about 90 percent of the grocery stores by multiunit firms (excluding convenience chains) with one or more supermarkets in Texas during 1974. These supermarkets accounted for more than 90 percent of the fresh and processed meat sold through retail food stores in Texas during 1974.

The Texas retail grocery industry for this study is classified as shown in Table 1. Firms with 11 or more stores $\frac{1}{}$ predominate in the

^{1/}Reference to retail firms with 11 or more stores excludes convenience firms in this study unless convenience firms are specifically mentioned. It does include affiliated independent organizations.

Texas retail food industry. The second most important group on the basis of numbers are convenience firms, but these firms accounted for only a small proportion of the meat items sold at retail.

Volume and Type of Meat Handled

Chain grocery firms and affiliated independent organizations which owned or serviced 11 or more stores accounted for more than 86 percent of the fresh and processed meat items 2/ sold during 1974, followed by firms with less than 11 stores and 1 to 3 supermarkets with almost 8 percent of the total (Table 6). Convenience firms with 11 or more stores made up about one-third of the grocery stores but merchandised less than one percent of the fresh and processed meat in Texas.

Steer and heifer beef, primarily fed beef, represented almost 40 percent of the meat handled by retailers (Table 6). Next in importance were smoked and cured pork, cow and bull beef and fresh pork. The importance of ground meat is understated in Table 6 since much of the cow and bull beef is sold as ground meat. Veal and lamb continue to be low volume items at the Texas retail level.

The kind of meat items handled by retailers in 1974 represented a substantial change from 1959 (1). Total beef in 1959 represented 31 percent of the fresh and processed meat items handled compared with 52 percent in 1974. Calf and veal, primarily calf, made up 23 percent of the total in 1959 compared with 8 percent in 1974. The higher proportion of beef, especially steer and heifer, handled by retailers in 1974 as compared with 1959 is reflective of consumer demands and changing live-

 $[\]frac{2}{\text{"Fresh}}$ and processed meat items" or meat refers to red meat items in this study. Retail connotes items sold for home consumption.

TABLE 6. PERCENTAGE DISTRIBUTION OF VOLUME OF MEAT ITEMS HANDLED, BY SIZE AND TYPE OF FIRM, TEXAS RETAILERS, $1974\frac{1}{2}$

		Type and size of retail firm										
Kind of meat	Grocery firms with ll or more stores	Convenience grocery firms with 11 or more stores	Grocery firms with less than 11 stores and 4 or more supermarkets	Grocery firms with less than 11 stores and 1 to 3 supermarkets	Grocery firms with less than 11 stores and no supermarkets	Total						
			Percer	nt								
Steer and heifer beef	32.6	2/	2.4	3.8	.7	39.5						
Cow and bull beef	11.8	<u>2</u> /	.4	.3	.2	12.7						
Calf	7.4	2/	.5	.5	<u>3</u> /	8.4						
Veal	.1	2/	4/	4/	4/	.1						
Lamb or mutton	.3	2/	4/	4/	4/	.3						
Fresh pork	9.2	2/	.3	.9	.2	10.6						
Cured pork	12.3	4/	.4	.8	.1	13.6						
Ground meat 5/	5.7	4/	<u>4</u> /	.6	<u>4</u> /	6.3						
Sausage, variety and other	6.8	.2	.3	.9	.3	8.5						
Total	86.2	.2	4.3	7.8	1.5	100.00						

 $[\]frac{1}{B}$ Based on purchased meat items.

 $[\]frac{2}{N}$ None reported by respondents interviewed.

 $[\]frac{3}{1}$ Included in steer and heifer beef.

 $[\]frac{4}{\text{Less than .05 percent.}}$

stock production patterns. In 1960, fed cattle marketings represented slightly more than 51 percent of the U. S. commercial slaughter compared with about 77 percent of the total in 1972 and 1973. In 1974 when the fed cattle industry was buffeted by high feed grain prices, relatively low fed cattle prices, and inflationary forces, fed cattle marketings represented about two-thirds of total U. S. commercial beef slaughter. However, by mid 1975 fed cattle marketings represented about the same proportion of U. S. commercial slaughter as they did in the early 1960's.

When the average volume of meat handled per store is analyzed by type and size of store, two interesting observations become apparent (Table 7). Grocery firms with less than 11 stores and 4 or more supermarkets handled the largest total volume of meat per store at 485,000 pounds, followed closely by firms with 11 or more stores handling 471,000 pounds per store. Firms with 4 or more supermarkets but less than 11 stores tended to specialize most heavily in steer and heifer beef, as this type of meat represented more than 55 percent of the total meat items handled by these stores (Table 7). However, steer and heifer beef, mostly fed beef, was the most popular type of meat handled by all retail firms and ranged from 38 percent of the total for firms with more than 11 stores to 55 percent of the total for firms with less than 11 stores and 4 or more supermarkets.

The per capita fresh and processed red meat retail sales in Texas during 1974 were equivalent to more than 86 pounds per person (Table 8). Steer and heifer beef, primarily fed beef, led retail sales volume with 34 pounds per person. Next in importance were smoked and cured pork,

TABLE 7. VOLUME OF MEAT HANDLED PER RETAIL STORE, BY TYPE AND SIZE OF FIRM, AND KIND OF MEAT, TEXAS, $1974^{\frac{1}{2}}$

	Type and size of retail firm									
Kind of meat	Regular grocery firms with 11 or more stores	Convenience grocery firms with 11 or more stores	Grocery firms with less than 11 stores and 4 or more supermarkets	Grocery firms with less than 11 stores and 1 to 3 supermarkets	Grocery firms with less than 11 stores and no supermarkets					
maado m d C			Pounds-							
Steer and heifer beef	178,091	2/	268,482	93,061	13,020					
Cow and bull beef	64,515	2/	46,310	6,779	2,716					
Calf	40,275	2/	54,320	11,488	3/					
Veal g	729	2/	61	258	456					
Lamb or mutton	1,809	2/	2,716	205	636					
Fresh pork	50,276	2/	33,090	22,249	2,736					
Cured pork	67,176	170	43,497	20,006	2,456					
Ground meat	31,136	1 2	1,215	14,793	336					
Sausage, variety and other	37,206	955	35,661	22,960	4,966					
Total	471,213	1,126	485,352	191,799	27,322					

 $[\]frac{1}{B}$ Based on purchased meat items.

 $[\]frac{2}{N}$ None reported by respondents interviewed.

 $[\]frac{3}{1}$ Included in steer and heifer beef.

Table 8. ESTIMATED PER CAPITA FRESH AND PROCESSED RED MEAT RETAIL GROCERY SALES, BY KIND OF MEAT, TEXAS, $1974\frac{1}{2}$

	Bee	f					Smoked		Sausage,	
Item	Steer	Cow	Calf		Lamb or mutton	Fresh pork	and cured pork	Ground meat 2/	variety	Total
GELR	Tel 1861	a gene	ratly,	Tars=	P	ounds	DEEL EVE	Diante K	r slavens	
Per										
capita sales 3/	34.1	10.9	7.2	.1	.3	9.1	11.8	5.5	7.3	86.3

The Texas population was projected to be 12,050,000 in <u>Current Population</u>
<u>Reports</u>, Population Estimates and Projections, Series P-25, No. 533, Bureau of Census, October 1974.

 $[\]frac{2}{}$ The various meat items are shown in their original purchased form. Total per capita ground meat sales were estimated to be 22.8 pounds after cow and bull beef and trimmings from other fresh meats were converted to ground meat.

^{3/}With the exception of smoked and cured pork, ground meat, and sausage, variety and other meats, volume data for the various meat items were estimated by retailers mostly on a carcass weight basis. However, retailers obtained varying proportion of their fresh meats in non-carcass form or cuts as shown in Table 14.

TABLE 9. ESTIMATED U. S. GRADE EQUIVALENTS FOR MEAT SOLD, BY KIND OF MEAT, TEXAS RETAILERS, 1974

	U. S. grade or grade equivalent						
Kind of meat	U. S. Choice or higher		1/	U. S. Commercial and lower2/	Total		
S C Page 1 2 2	by interest		Percent	Nacidate Control of the Control of t			
Steer and heifer beef	78.9	19.3	1.8	$\frac{3}{1}$	100.0		
Cow and bull beef	.1	2.0	18.7	79.2	100.0		
Calf	17.5	75.6	4.6	2.3	100.0		
Veal	72.3	8.7	3/	19.0	100.0		
Lamb	87.4	3/	3/	12.6	100.0		
Ground meat $\frac{4}{}$.2	ST 9U .7	3/	99.1	100.0		

 $[\]frac{1}{T}$ The lamb and mutton is U. S. Utility. There is no U. S. Standard for bull beef. $\frac{2}{T}$ The lamb and mutton is U. S. Cull. There is no commercial grade for calf or veal.

^{3/}None reported by respondents interviewed.

 $[\]frac{4}{}$ Grade distribution is based on purchased ground meat.

cow and bull beef, fresh pork, and calf. Lamb and veal have been and continue to be low sales volume items in Texas retail stores.

Quality of Meat Handled and Grading Practices Employed

Almost 80 percent of the steer and heifer beef sold by Texas retailers in 1974 was equivalent in quality to U. S. Choice or higher (Table 9), compared with 67 percent in 1964 (2). Although cattle feeders curtailed much of their feeding activities in the latter part of 1974 and much of 1975 as a result of unfavorable feeding conditions, these data reflect a generally larger supply of fed beef available for slaughter in 1974 and a greater emphasis on high quality beef by retailers.

More than three-fourths of the calf was estimated to be U. S. Good, while veal and lamb were primarily U. S. Choice or higher. Cow and bull beef, which is sold primarily as ground meat or sausage items, was predominantly U. S. Commercial or lower, as was fresh meat purchased as ground meat.

The quality of meat handled by different size groups of retail firms revealed two distinct patterns. Retail firms with 11 or more stores and those with less than 11 stores but 4 or more supermarkets handled generally a similar quality of meat items (Appendix Tables 1 and 2). Approximately 90 percent of the steer and heifer beef handled by these firms was estimated to be equivalent to U. S. Choice or higher. Other quality similarities were noted for calf, lamb, and ground meat items. In contrast to the two larger types of retail firms, retailers with less than 11 stores but 1 to 3 supermarkets and also those with no supermarkets handled generally a similar quality of meat items (Appendix Tables 3 and 4). This pattern was especially true for steer and heifer beef where the two smaller types of retail firms emphasized U. S. Good.

Retailers estimated that 85 percent of the steer and heifer beef and lamb were rolled with U. S. grades (Table 10), This was generally anticipated since steers, heifers, and lambs generally undergo a feeding or finishing process before slaughter. However, most of the calf, cow and bull beef, and veal were also rolled with U. S. grades. The purchased ground meat was generally ungraded. U. S. grades are not used for pork items, but many pork items are sold under a packer or retail brand, Retailers reported that almost 80 percent of the fresh pork was unbranded, while two-thirds of the smoked and cured pork carried either a packer or retailer brand. Retailers reported a similar branding pattern for fresh and cured pork in 1960, while less than two-thirds of the total beef and calf, and about 43 percent of the lamb were rolled with federal grades at that time (1). Most of the remaining beef, calf, and lamb were packer branded in 1960, in contrast to 1974 when only small proportions of steer and heifer beef and calf were packer branded.

Type of grading or marking by various size groups of retail firms reveals that steer and heifer beef, calf and lamb were rolled predominantly with U, S. grades by all firms (Appendix Tables 5, 6, 7, and 8). The proportion of cow and bull beef rolled with federal grades declined as firm size decreased. Branding patterns for pork items were generally similar for most retail firms with the majority of the fresh pork ungraded, while smoked and cured pork was mostly packer or retailer branded.

Centralized Fabrication and Processing

One-third of the total meat handled by Texas retailers during 1974

TABLE 10. TYPE OF GRADING OR MARKING FOR FRESH AND PROCESSED MEAT, BY KIND OF MEAT, TEXAS RETAILERS, 1974

	Type of grading or marking								
Kind of	U.S.	Private	U. S. graded and private brand	Not graded	Total				
ates semmers. Nos ato saw-ready buts	t of the	frash pork	Percent	Mandaman of the s					
Steer and heifer beef	83.8	10.0	4.9	1.3	100.0				
Cow and bull beef	67.3	.4	2/	32.3	100.0				
Calf	74.6	3.2	12.9	9.3	100.0				
Veal be flavor and bext	58.8	2/	bounged 2/ -s she	41.2	100.0				
Lamb or mutton	85.0	3.1	from Colo 2/10 and	11.9	100.0				
Ground meat $\frac{3}{}$	12.2	2/	South Dak 2/1 and I	87.8	100.0				
Fresh pork	4/	22.2	4/	77.8	100.0				
Cured pork	4/	67.7	$\frac{4}{2}$	32.3	100.0				

 $[\]frac{1}{P}$ Packer or retail brand.

Type of Mide Supplier

 $[\]frac{2}{}$ None reported by respondents interviewed.

^{3/}Purchased as ground meat.

 $[\]frac{4}{\text{Fresh}}$ and cured pork are not U. S. graded.

was processed in a centralized fabrication center before store door delivery. Retail firms with 11 or more stores accounted for 90 percent of the meat processed through retailer-owned or controlled central warehouse and fabrication facilities. These firms reported that almost 40 percent of the steer and heifer beef and 30 percent of the calf sold by their stores were warehoused and processed through their centralized meat fabrication centers. Much of this steer and heifer beef and calf was warehoused for further aging and then processed into saw-ready cuts for store door delivery. More than two-thirds of the cow and bull beef was processed through a centralized, retailer-owned fabrication center. Cow and bull beef is generally processed into ground meat for store door delivery in 1-, 2-, 3- and 5-pound chubs. Fresh pork was generally not processed through centralized retail fabrication centers, although about one-third of the smoked and cured pork sold at the retail level moved through centralized retail fabrication centers for additional slicing and packaging. Approximately 40 percent of the fresh meat purchased as ground meat was reground and/or repackaged into retail-sized packages at centralized retail fabrication centers before store door delivery.

Sources of Meat Supplies

The geographic sources of meat purchases by retailers, as well as sources of meat by type of supplier, varied by type of meat and size of retail firm. However, retailers were dependent on Texas packers for the vast majority of their fresh and processed meat supplies.

Geographic Sources of Meat Purchases

In 1974, Texas retailers purchased almost 80 percent of their total

red meat requirements from Texas sources (Table 11), compared with 83 percent in 1959 (1). Texas suppliers were major sources for all types of meat items except lamb and fresh pork. Texas retailers obtained 75 percent of their steer and heifer beef within the state and relied primarily on Kansas-Nebraska and Iowa for inshipments of steer and heifer beef. Practically all of the calf, cow, and bull meat came from Texas suppliers. Iowa was the major source of veal purchases from out-of-state sources. Most of the fresh pork was obtained from out-of-state suppliers to the north of Texas since Texas supplies are often inade-quate to meet the retail requirements. Some retailers also expressed a preference for fresh pork produced in the Corn Belt because they believed the flavor and texture of this pork was preferred by their customers. Lamb inshipments originated primarily from Colorado and Oklahoma, while "other states" consisted primarily of South Dakota and inshipments from New Zealand despite the fact that Texas is a lamb-exporting state.

Geographic sources of meat purchases by size of retail firm reveals that as the size of retail firms declined, they became more dependent on Texas sources for fresh and processed meat items (Appendix Tables 9, 10, 11, and 12). The larger retail firms, especially those with 11 or more stores, accounted for most of the inshipments of fresh and processed meat items such as veal, lamb, and fresh pork. Colorado and Oklahoma were important out-of-state sources for lamb for retail firms with less than 11 stores.

Type of Meat Supplier

Packers supplied more than 96 percent of the fresh and processed red meat items sold by Texas retailers in 1974 (Table 12), a 10-percent in-

TABLE 11. GEOGRAPHIC SOURCE OF MEAT PURCHASED, BY KIND OF MEAT, TEXAS RETAILERS, 1974

		seas to addend and Geographic source						
Kind of meat	Texas	Okla- homa	New Mexico	Kansas- Nebraska	Colo- rado	Iowa	Other states	Total
— lo-joo m meat fabricati M	ases irv oa centr	darug le ere. Muc	sv to sor	Perc	ent	wol .a	reilggue calt	
Steer and heifer beef	75.2	.1	3.7	6.6	1.4	6.4	6.6	100.0
Cow and bull beef	99.1	<u>1</u> /	1/	<u>1</u> /	1/	1/	.9	100.0
Calf	99.4	1/	<u>1</u> /	<u>1</u> /	1/	1/	.6	100.0
Veal	56.7	1/	1/	<u>1</u> /	1/	43.3	1/	100.0
Lamb or mutton	31.4	12.7	<u>1</u> /	6.8	16.4	.8	31.9	100.0
Fresh pork	40.6	9.9	3.2	19.6	1/	16.2	10.5	100.0
Cured pork	86.6	1.0	1.2	4.1	2/	2.4	4.7	100.0
Sausage variety and other	86.0	0 0 .3	1.1	2.7	1/	4.4	5.5	100.0
Total no instructs	78.9	1.4	2.2	5.9	.7	5.4	5.5	100.0

 $[\]frac{1}{N}$ None reported by respondents interviewed.

 $[\]frac{2}{\text{Less}}$ than .05 percent.

TABLE 12. SOURCE OF MEAT, BY TYPE OF SUPPLIER AND KIND OF MEAT, TEXAS RETAILERS, 1974

sábrionau þrákk þeið edna	Type of supplier						
Kind of meat	Packer	Packer Branch House	Wholesale distributor or jobber	Other	Total		
Lauro de Percusa		3.8	Percent	2f/;R1 z	eldaT		
Steer and heifer beef	98.0	1.2	generally did 8.	1/	100.0		
Cow and bull beef	98.3	a Kalea le: .7	.8	•2	100.0		
Calf	99.9	4.3.1	$-\underline{1}/-\underline{1}$	1/	100.0		
Veal	100.0	1/	$\frac{1}{2}$	1/	100.0		
Lamb or mutton	98.7	1/	1.3	1/	100.0		
Fresh pork	95.9	2.1	2.0	1/	100.0		
Cured pork	93.4	.7	5.9	1/	100.0		
Sausage, variety and other	85.7	.3	8.4	5.6	100.0		
Total	96.2	1.0	2.3	.5	100.0		

 $[\]frac{1}{N}$ None reported by respondents interviewed.

 $[\]frac{2}{\text{Less than .05 percent.}}$

crease over 1959 (1). The remaining meat items originated mostly from wholesale meat distributors or jobbers and packer branch houses.

Grocery firms with 11 or more stores relied almost entirely on packers for fresh and processed meat items (Appendix Table 13). However, grocery firms with less than 11 stores purchased substantial quantities of some meat items, such as lamb, fresh pork, cured pork and sausage, and variety meat items from wholesale distributors and jobbers (Appendix Tables 14, 15, and 16).

Retailers generally did not rely on brokers for obtaining fresh and processed meat items, but local sales representatives arranged for the delivery of about 14 percent of the meat items merchandised by Texas retailers during 1974 (Table 13). Local sales representatives supplied more than 46 percent of the veal sold by Texas retailers in 1974. However, substantial proportions of all types of fresh and processed meat items, with the exception of cow and bull beef, were supplied to Texas retailers by local sales representatives.

Form of Meat Purchases and Sales

Form of Meat Purchases

Form of meat purchases has changed substantially for some meat items during the last decade as a result of technological improvements in film wrapping, vacuum packaging, and boxed meat programs. Retailers estimated that two-thirds or more of their total beef, calf, veal and lamb was purchased in carcass form during 1974 (Table 14). This was not a sharp change from 1959 when Texas retailers obtained 69 percent of their beef, 81 percent of their calf and veal, and 89 percent of their lamb

TABLE 13. PERCENT OF MEAT PURCHASED THROUGH BROKERS AND LOCAL PACKER SALE REPRESENTATIVES, BY KIND OF MEAT, TEXAS RETAILERS, 1974

Kind of meat	Brokers	Local sale representatives		
		Percent		
Steer and heifer beef	.6	14.3		
Cow and bull beef	4.2	Lased Canton 7.7 beased		
Calf carf A . adoo Isaaraq o	1.3	sw ons) aperad 15.1 regram		
Veal	17 (2 46 1/19 (3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	46.2		
Lamb or mutton	5.8	19 Maria 27.6		
Fresh pork	1/	15.3		
Cured pork	ilana ol• 7 mos di rie	13.2		
Sausage, variety and other	4.8	20.8		
Total	1.5	14.2		

 $[\]frac{1}{N}$ None reported by respondents interviewed.

TABLE 14. FORM OF MEAT PURCHASED, BY KIND OF MEAT, TEXAS RETAILERS, 1974

stores; conse	Form of meat purchased							
Kind of meat	Carcass	Quarters	Primals	Sub- primals	Retail cuts	Other 1/	Total	
nters. sup nodgid mort state during 1974 come	oo goldst Lity cut: slaatynd	lidei 698) 9 45 a ret	P	ercent	arcasaet An relai	l flug ba		
Steer and heifer beef	65.9	8.8	15.2	10.1	2/	2/	100.0	
Cow and bull beef	60.7	2.1	.1	.9	2/	36.2	100.0	
Calf	88.1	2.8	9.1	2/	2/	2/	100.0	
Veal	82.7	17.3	2/	2/	2/	2/	100.0	
Lamb or mutton	77.4	.6	13.2	2/	2/	8.8	100.0	
Fresh pork	.8	2/	79.0	19.6	.6	2/	100.0	

^{1/}Boneless.

 $[\]frac{2}{N}$ None reported by respondents interviewed.

and mutton in carcass form, while 76 percent of the fresh pork was purchased in the form of primal cuts (1). Steer and heifer beef not purchased as carcass beef in 1974 was purchased in the form of quarters, primals, and subprimals, while the noncarcass cow and bull beef was purchased as boneless beef. Noncarcass veal was obtained primarily in quarters, whereas lamb was obtained mostly in primal cuts. Almost 80 percent of the fresh pork was bought as primal cuts with the remaining volume consisting primarily of subprimals. These results reveal that the form of meat purchases by retail firms changed only slightly during 1959-74, but the form in which meat is handled internally has changed considerably via centralized retail fabrication centers.

Although some variation existed in the form of meat purchases among varying size groups of retail firms, grocery firms with 11 or more stores purchased a substantially larger proportion of their cow and bull beef in carcass form than did smaller retail firms (Appendix Tables 17, 18, 19, and 20). Centralized warehousing and fabrication facilities were generally more prominent at firms with 11 or more stores; consequently, these firms are often able to accrue savings by fabricating cow and bull carcasses at their centralized fabrication centers.

The increased purchases of primals and subprimals during 1974 compared with 1959 may be attributed largely to the advent of boxed meat programs. Boxed meat purchases by retailers were confined to steer and heifer beef, cow and bull beef, lamb, and fresh pork (Table 15). Almost 44 percent of the fresh pork handled by Texas retailers was purchased as boxed meat, followed by boneless cow and bull beef with 27 percent. Steer and heifer boxed meat purchases represented less than 16 percent of the steer and heifer beef merchandised.

TABLE 15. PERCENT OF MEAT PURCHASED AS BOXED MEAT, BY KIND OF MEAT, TEXAS RETAILERS, 1974

	erglaige me	8 S. c. c. S		Kind	l of meat	E SIO OF		
Item	Steer heifer			and beef	Calf	Veal	Lamb	Fresh
ightly more	cually be	45411454	î çhe.	Ре	ercent	car sale	6 15 E	
Boxed meat								,
purchases	15.6	5	27	. 4	1/	1/	21.4	43.6

 $[\]frac{1}{N}$ None reported by respondents interviewed.

Form of Meat Sales

Fresh and processed meat items are merchandised almost exclusively in the form of retail cuts or ground meat by retailers (Table 16). However, small volumes of steer and heifer beef, about 2 percent, were sold to consumers as home freezer or locker beef. The remaining 98 percent was merchandised as retail cuts or ground meat. Ground meat may accumulate from higher quality cuts as a result of trim and from retail cuts that occasionally are "slow-movers" in the retail counter. This is evidenced by the proportion of ground meat emanating from steer and heifer beef, calf, veal, and lamb. Cow and bull beef is generally purchased by retailers for conversion into ground meat. Total ground meat sales consequently represented about 26 percent of the total fresh and processed meat items sold by Texas retailers.

TABLE 16. FORM OF MEAT SALES, BY KIND OF MEAT, TEXAS RETAILERS, 1974

5 4 5 2 5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	100 4 3 100 4 40 40 40	Form of	meat sales	0 0		
Kind of meat	Carcass	Quarters	Primals	Sub- primals	Retail cuts	Ground meat	Total
	92. 45	2 26		ercent			
Steer and heifer beef	.5	.7	.3	.6	81.6	16.3	100.0
Cow and bull beef	1/	1/	1/	1/	.6	99.4	100.0
Calf	.7	1/	1/	<u>1</u> /	87.5	11.8	100.0
Veal	<u>1</u> /	1/	1/	<u>1</u> /	89.1	10.9	100.0
Lamb or mutton	<u>1</u> /	1/	1/	1/	97.1	2.9	100.0
Fresh pork	<u>1</u> /	1/	.5	1/	99.3	.2	100.0
Cured pork	2/	2/	2/	2/	100.0	<u>2</u> /	100.0
Ground meat 3/	2/	<u>2</u> /	2/	2/	100.0	2/	100.0
Sausage, variety and other	2/	2/	2/	<u>2</u> /	100.0	2/	100.0

 $[\]frac{1}{N}$ None reported by respondents interviewed.

 $[\]frac{2}{Not}$ applicable.

 $[\]frac{3}{\text{Purchased}}$ as ground meat.

More than 55 percent of the ground meat sold by retailers contained a lean to fat ratio ranging from 70 to 79 percent (Table 17). Most of the remaining ground meat contained a lean to fat ratio of 80 to 89 percent. Ground meat with textured vegetable protein (TVP) represented slightly more than 7 percent of the total ground meat sales.

TABLE 17. PERCENT OF GROUND MEAT SALES, BY LEAN MEAT TO FAT RATIO, AND PERCENT OF GROUND MEAT CONTAINING TEXTURED VEGETABLE PROTEIN (TVP), TEXAS RETAILERS, 1974

The same of the sa	Percent
Lean to fat ratio:	
70 to 79 percent	55.7
80 to 89 percent	38.3
90 percent or more	6.0
Total	100.0
Ground meat sales with TVP	7.3

Purchasing and Selling Practices

Meat buying practices of retail firms varied by type and size of firm and also by kind of meat purchased. Pricing practices, especially gross margins, frequency of specials, and amount of markdown from regular prices during specials also varied considerably by type and size of firm and kind of meat.

Meat Purchasing Practices

Texas retail firms purchased fresh and processed meat items on a strict

specification basis. For example, typical steer beef specifications during 1974 were carcass weights ranging from 600 to 700 pounds, U.S.D.A. Choice, and yield grades 2 or 3. Some retailers rejected all carcasses not selected or approved by their buyer, while others relied on suppliers to deliver according to prescribed specifications. The overall carcass weight specifications for steers ranged from 550 to 800 pounds with some firms specifying carcass weights within 50-pound ranges. In addition, numerous retail grade specifications included either the top, the middle, or the lower one-third of the specified grade. Although the predominant majority of the retailers specified U. S. Choice, those accepting U. S. Good generally did not accept carcasses yield-grading lower than U. S. 2, while acceptable weight ranges for such carcasses were often 100 pounds lighter than U. S. Choice steer carcasses. While some of the carcasses quality grading U. S. Good were heifers, many retailers' specifications did not include heifers. Those carcasses not meeting retailer specifications were rejected upon delivery.

Calf specifications by retailers generally centered on U. S. Good, but weight specifications varied widely as did retailers' definitions of calf. For example, the average low and high carcass weight range for calf varied from 290 to 360 pounds, while the overall range varied from 225 to 425 pounds.

The average carcass weight specifications for lamb ranged from 45 to 55 pounds, and the grade specified was U. S. Choice or higher. The overall weights specified for lamb by Texas retailers varied from 35 to 70 pounds during 1974.

Pork specifications included weight ranges for particular cuts and trim. The trim specification used most often was "1/4 inch or less fat

covering," with some retailers accepting a 1/2-inch or less fat covering while others specified a regular trim. Weights specified most often for pork cuts were loins, 14 to 17 pounds; butts, 4 to 8 pounds; spareribs, about evenly divided at 3 pounds or less and 3 to 5 pounds; fresh hams, 14 to 17 pounds; picnics, 6 to 8 pounds; and smoked hams, 17 to 20 pounds.

The majority of the retail firms were dependent upon two to five suppliers for fresh meats, but most acknowledged using two to three times as many suppliers for nonfresh meat items. Slightly more than 52 percent of the retailers acquired their total meat items from 2 to 5 suppliers, 21 percent used 6 to 10 suppliers, 21 percent relied on 11 to 20 suppliers, and the remaining 6 percent used more than 20 suppliers.

Almost all retailers used at least 2 suppliers for their fresh meats to assure adequate supplies, consistent quality, and competitive prices. Some retailers acknowledged using one primary supplier for beef, but they often purchased some beef from a secondary supplier to assure themselves of a backup supply source as the need arose.

Retailers generally acquired nonfresh or processed meat items from 8 to 20 suppliers. Dependency upon a greater number of suppliers for nonfresh meats compared with fresh meat is generally a result of the availability of relatively larger number of brands and specialty items in the nonfresh meat line. In addition, the longer shelf life, or relatively greater nonperishability of nonfresh meats, allows retailers to offer a wider array of nonfresh meat items as well as greater merchandising flexibility.

When retailers were asked who "sets or determines" the prices they pay for fresh or processed meat items, responses varied according to

size and type of retail firm. More than three-fourths of the larger retail firms, those with 11 or more stores and also those with less than 11 stores and 4 or more supermarkets, acknowledged using the National Provisioner "Yellow Sheet" either as a pricing guide or as a direct formula basis in establishing their purchase price. Prices based on a formula basis as related to the Yellow Sheet generally specified (1) F.O.B. point of origin, (2) a specified value above the Yellow Sheet by kind of meat item (normally in cents per pound), and (3) a specified closing date such as, for example, Tuesday. Formula pricing was generally negotiated on a carcass weight basis, on a carload trading price, or on weights of specified cuts. Retailers often also used the Yellow Sheet as a pricing guide in purchasing meat under the "offer and acceptance" method. This method has been fairly common throughout the meat industry for several decades (1, 3). Under this method, packers provide chains with a price list by type of meat for the following week on a weekly basis. Meat supervisors of the retail firms obtain estimates from individual store meat managers concerning the quality and quantities of meat required and place orders with the packers quoting the lowest or best price for delivery on specified dates.

The smaller retailers, those with less than 11 stores and 1 to 3 supermarkets or no supermarkets, almost universally stated that packers or wholesalers set the purchase price for their meat items. Although these retailers have access to wire service price information in their suppliers' offices, they generally did not cite the U. S. Department of Agriculture or other types of commercial price information sources as a pricing guide.

Meat Selling Practices

More than 70 percent of the Texas retailers used a predetermined markup to establish prices for their fresh and processed items during 1974. Retailers generally do not use a consistent markup on all items but attempt to achieve a composite desired gross margin. Most of these retailers relied on detailed cutting tests to establish actual costs for fresh meat items before determining or setting their sales price.

Cutting tests also provide retailers with information concerning trim loss and shrink. Retailers who did not use cutting tests relied primarily on their delivered cost as a basis for determining sales prices. Retailers not using predetermined markups to establish prices for their meat items stated that market competition and movement of the various meat items were their major guidelines in establishing sales prices.

Margins by Texas retailers for fresh and processed meat items varied by type of meat item. For example, composite gross margins 3/ on heavy beef averaged about 22 percent and ranged from 18 to 30 percent. These results are similar to those discovered by Farris in a study of realized retail margins for meat and beef in large U. S. retail food chains (4). The variation in markups for a particular type of meat, such as beef, is often due to specifications regarding trim, weight of the carcass, sex, or type of cut merchandised. Gross margins on calf averaged 23 percent with a range of 18 to 30 percent, fresh pork margins averaged 23 percent and ranged from 20 to 30 percent. Margins on smoked and cured products averaged 25 percent with a range of

^{3/}Gross margin = sales minus cost of goods sold divided by sales.
Markup = sales minus cost of goods sold divided by cost of goods sold.

20 to 33 percent. The margins on processed and variety meat items other than smoked and cured products averaged about 30 percent.

Retailers used several techniques to merchandise meat items which did not move readily and became aged, thereby losing bloom and optimum appeal to customers. Approximately 53 percent of the retailers converted red meat, primarily beef, to ground meat whenever such items were not sold within 2 to 3 days. Some retailers trimmed or resurfaced and repackaged some of their roasts, but if the repackaged items were not sold within one day, the roasts were converted to ground meat or stew meat. In any event, the converted products were merchandised at a lower price than the original product. Almost 33 percent of the retailers generally reduced the price of the various fresh meat items from 20 to 35 percent, in a few instances up to 50 percent, to encourage sales of slow-moving products. Another 14 percent disposed of slow-moving items by selling them to employees at reduced prices, by selling them as pet food, or by giving individual store managers authority to handle or dispose of slow-moving items in the most economical manner. The retailers generally agreed that fresh red meat products must be sold within an allotted time period in their original or converted form or must be disposed of to maintain customer satisfaction.

Promotional and Advertising Practices

Although Texas retail firms advertise and promote fresh and processed products through various media, the prime purpose of such activities was to increase or maintain sales and market position. Most retailers acknowledge that "specialing" and advertising were essential to remain competitive in the market. The concern with competitive position in the

market is reflected in the frequency with which retailers featured or had specials on fresh and processed meat items.

More than 57 percent of the retailers featured specials on fresh and processed meat items on a weekly basis. Another 11 percent featured meat specials twice per week, 6 percent did so on a monthly basis, and 4 percent featured specials on a daily basis. Twenty percent, primarily small country retailers and convenience firms, generally did not feature specials or maintain regular promotional programs. Many firms which featured specials twice per week or on a weekly basis featured such items from 4 to 7 days per week. Specialing, in effect, has become a way of life for retailers who are concerned with their competitive position in the market even though retail meat departments occasionally operate at a loss for short periods.

Retailers relied on newspapers, radio, television and circulars or handbills to promote specials and advertise fresh and processed meat items. Many of the larger retailers used all four media for advertisements, but newspapers, both daily and weekly, were used most frequently by 67 percent of the retailers. The second most common media were circulars or handbills which were used by 37 percent of the firms.

Another 21 percent were dependent upon the radio media, and 16 percent also featured specials on television.

More than 42 percent of the retail firms maintained a standard policy with regard to the percent of gross sales allocated for promotion and advertising of fresh and processed meat items. Fifty-one percent maintained no standard policy of gross sale allocation for such expenditures, and another 7 percent maintained a flexible policy regarding

gross sale allocation for advertising expenditures. Approximately 80 percent of the larger firms, those with 11 or more stores, maintained standard programs for allocation of gross sale revenues for promotion and advertising, while less than one-third of the smaller retailers maintained standard policies regarding gross sale allocation for promotion and advertising.

The percent of gross sales from fresh and processed meat items allocated to promotion and advertising ranged from 0.2 percent to 2 percent during 1974. More than three-fourths of the firms reported that their gross sale allocation for advertising and promotion ranged from 1 to 2 percent, while most of the remaining firms allocated less than 1 percent of their gross sales for advertising.

More than 60 percent of the retail firms featured roasts or round steaks more frequently than other types of meat items. Other featured items in order of importance were pork loins, ground meat, and T-bone or sirloin steaks. In addition to these, bacon, sausage, luncheon meats, brisket, ribs, hind and fore-quarters, and variety meats were often also featured during 1974.

Almost one-half of the firms decreased regular prices from 10 to 20 percent during specials, although markdowns varied considerably for different types of meat items. Another 25 percent decreased prices on an average from 21 to 30 percent. More than 7 percent reported price declines exceeding 40 percent during specials. However, markdowns by retailers who featured specials on a weekly or more frequent basis generally ranged from 10 to 30 percent.

According to 83 percent of the retail firms interviewed, specials increased total meat sales from about 20 to 40 percent. Depending upon

time of month and type of meat items specialed, sales increases from 100 to 200 percent were not unusual for some meat items being promoted through specials. Ten percent of the retail firms indicated that specials had little or no effect on sales, while 7 percent were unable to provide estimates of whether specials increased or decreased meat sales.

The effect of meat promotions and specials on total retail sales brought varied responses from retailers interviewed. Forty percent stated that it was difficult to provide an estimate of the total sales response to meat specials since meat promotion programs were conducted on either a daily or weekly basis throughout the year and often in conjunction with other specials. About 25 percent either did not conduct specials or did so on an infrequent basis, such as at grand openings. Five percent of the firms stated that overall company sales did not change since they conducted specials on a daily basis. Thirty percent of the firms provided estimates of total retail sales increases resulting from meat promotion programs. Of these, 40 percent observed total company sales increases ranging from 1 to 5 percent, 28 percent perceived increases from 6 to 10 percent, and the remaining one—third said total sales increased over 10 percent.

These results suggest that meat promotions and specials have become a standard business practice for many retailers since such programs are conducted on a continuous basis. These programs are considered necessary for either increasing meat or store sales, keeping sales from falling, or maintaining market position. The net results for many retail firms apparently has been an increase in total sales. However, since meat

promotions and specials are conducted on a weekly or daily basis for much of the industry, the increase in total sales as a result of meat specials has become relatively constant at a higher sales plateau. Such higher sales levels have become the expected norm for many of these retailers.

SUMMARY

The Texas grocery industry is characterized by large diversified supermarkets which feature one-stop shopping. These supermarkets are highly departmentalized, they are located and constructed to provide relatively easy accessibility both outside and inside individual stores, and they are competitive in terms of price, quality of product, and services provided.

The growth and expansion of supermarkets has special significance to the meat industry since meat constitutes about one-fourth of the consumer expenditures in supermarkets. In addition, beef, the single most important item merchandised by supermarkets accounts for about one-third of the total meat sales.

In 1974, supermarkets accounted for more than 90 percent of the 1,040 million pounds of fresh and processed red meat merchandised by Texas retail food stores. Grocery firms with 11 or more stores, including affiliated independents, accounted for more than 86 percent of the fresh and processed meat items sold by Texas retail food stores during 1974.

Steer and heifer beef, primarily fed beef, represented almost 40 percent of the fresh and processed red meat items handled by retailers during 1974. Next in importance were smoked and cured pork with 14 percent, cow and bull beef with 13 percent, and fresh pork with 11 percent.

Average volume of meat handled per store provided several interesting observations. Firms with less than 11 stores but 4 or more supermarkets handled the largest volume of meat per store at 485,000 pounds. A close second were grocery firms with 11 or more stores, commonly referred to as large chains, with 471,000 pounds per store. In addition, firms with 4 or more supermarkets and less than 11 stores, primarily local independents and affiliates, specialized most heavily in steer and heifer beef as this type of meat represented more than 55 percent of the total fresh and processed red meat items handled by these stores.

One-third of the total meat handled by Texas retailers during 1974 was processed through a centralized retail fabrication center before store door delivery. Retail firms with 11 or more stores accounted for 90 percent of the meat processed through retail warehouses and fabrication centers. These firms reported processing more than two-thirds of their cow and bull beef, almost 40 percent of their steer and heifer beef, and 30 percent of their calf through centralized warehousing and fabrication facilities.

Approximately 80 percent of the steer and heifer beef sold by Texas retailers was estimated to be equivalent in quality to U. S. Choice or higher in 1974. The larger firms, those with 11 or more stores and also those with 4 or more supermarkets, reported that 90 percent of the steer and heifer merchandised by their stores was equivalent to U. S. Choice or higher. More than three-fourths of the calf sold by retailers was estimated to be U. S. Good, while veal and lamb were primarily U. S. Choice or higher. Cow and bull beef, which is sold mostly as ground meat or sausage items, was predominantly U. S. Commercial or lower.

Texas retailers purchased almost 80 percent of their total red meat requirements from suppliers within Texas in 1974 compared with 83 percent in 1959. These suppliers were almost exclusively packers. Texas suppliers were major sources for all types of meat items except lamb and fresh pork. Inshipments of steer and heifer beef and fresh pork originated primarily from Kansas-Nebraska and Iowa. Iowa was also the major source for out-of-state veal supplies. Lamb inshipments originated mostly from Colorado, Oklahoma, South Dakota, and New Zealand.

Retailers estimated that two-thirds or more of their total beef, calf, veal, and lamb was purchased in carcass form during 1974. Steer and heifer beef not purchased as carcass beef in 1974 was purchased as quarters, primals, and subprimals, while the noncarcass cow and bull beef was purchased as boneless beef. Fresh pork was purchased predominantly in wholesale or primal cuts.

Boxed fresh meat purchases varied by kind of meat item. Almost 44 percent of the fresh pork was purchased as boxed meat compared with 27 percent of the cow and bull beef. Boxed steer and heifer beef represented less than 16 percent of the steer and heifer beef purchased by retailers.

With the exception of cow and bull beef, which was sold as ground meat, four-fifths or more of the remaining fresh meat items were merchandised as retail cuts with the remainder being sold mostly as ground meat. Retailers also convert trim from higher quality cuts and some slow-moving items into ground meat. Consequently, ground meat represented more than 26 percent of the fresh and processed meat items merchandised.

Texas retailers purchased fresh and processed meat items under a strict set of specifications concerning weight, sex where applicable, quality grade and yield grade, trim, and color. For example, typical specifications for steer beef were for carcass weights ranging from 600 to 700 pounds, U. S. Choice, U. S. Yield Grade 3 or lower, and often specifications regarding trim or fat cover and color. The vast majority of the retailers specified U. S. Choice for steer and heifer beef; those accepting U. S. Good often did not accept carcasses yieldgrading lower than U. S. #2. Calf specifications generally centered on U. S. Good, but weight specifications varied widely as did retailers' definitions of calf. Lamb specifications were U. S. Choice or higher with carcass weights ranging from 45 to 55 pounds. Pork specifications included weight ranges for particular cuts and associated trim. Pork trim specifications used most often were 1/4-inch or less fat covering with some retailers accepting a 1/2-inch or less fat covering. Weight specifications varied by type of cut.

More than three-fourths of the larger retailers, those with 11 or more stores and those with less than 11 stores but 4 or more supermarkets, used the National Provisioner Yellow Sheet either as a pricing guide or as a direct formula basis in establishing their purchase price. Retailers often also used the Yellow Sheet as a pricing guide in purchasing fresh and processed items under the offer and acceptance method.

Over 70 percent of the Texas retailers used a predetermined target gross margin to set prices for fresh and processed meat items during 1974. Margins varied between meat items and by type of meat. Margins on heavy beef averaged about 22 percent, it averaged 23 percent for both calf

and fresh pork but averaged slightly higher for smoked and cured pork and other processed items.

Retailers used several techniques to merchandise slow-moving meat items. Approximately 53 percent converted these items, primarily beef, to ground meat whenever such items were not sold within 2-3 days.

Other retailers trimmed and repackaged some of the thicker meat items such as roasts, but if such items were not sold within a day they were converted to ground meat or stew meat. Another 33 percent reduced the price of slow-moving items from 20 to 35 percent and occasionally up to 50 percent to encourage sales of slow-moving meats rather than reface and rewrap such items. Other retail firms gave store managers authority to handle or dispose of slow-moving items in the most economical manner.

Meat promotion and advertising has become a standard business practice for most store managers since the meat department is a major competitive tool. More than 57 percent featured specials on fresh and processed meat items on a weekly basis, while another 11 percent featured meat specials twice per week. Many of these firms featured specialed items from 4 to 7 days per week. Most of the remaining retailers, which were primarily small country retailers or convenience firms, did not feature specials or maintain regular promotional programs.

Over 60 percent of the retail firms featured roasts or round steaks more frequently than other types of meat items. Other items often featured included pork loins and chops, ground meat, ribs, bacon, and luncheon meats.

Price discounts or markdowns during specials varied considerably by

type of meat item. However, markdowns by retailers featuring specials on a weekly or more frequent basis generally ranged from 10 to 30 percent.

Over four-fifths of the retailers found that specials increased total meat sales from 20 to 40 percent. Sales increases from 100 to 200 percent were not unusual for some items being promoted through specials.

The effect of meat promotions and specials on total store sales brought varied responses from retailers. Forty percent found it difficult to provide an estimate since meat promotion programs were conducted on either a daily or weekly basis throughout the year. One-third of the firms said total store sales increased from 1 to 10 percent as a result of specials. Most of the remaining firms either did not conduct specials or did so on an infrequent basis. Although many retailers were unable to estimate total store sale response from meat specials, most of the firms said specials were necessary for either maintaining or increasing sales in the competitive retail industry.

Some of the future considerations and implications for the retail meat industry may be thus defined:

- 1. The expansion and growth of large retail stores, namely supermarkets, will continue but at a slower pace.
- 2. Store numbers will continue declining; however, sales per store and especially store size is expected to increase but at a reduced rate. Supermarkets may face increasing competition from large retail units which feature cost-cutting techniques via warehouse or bulk sales and merchandising facilities.

 Although convenience stores handle only small quantities of red

- meat items, they will likely become more important outlets for selected retail cuts and fast food items.
- 3. Retail firms have and will continue to demonstrate greater flexibility in store design and layout, in location with respect to population density, and in intrafirm policies regarding type, quality, and quantity of various fresh and processed meat items merchandised. This consumer orientation is reflected in the amount of counter space being allocated to various types of beef, such as long-fed beef and short-fed beef (including non-fed beef).
- 4. Centralized warehousing and fabrication facilities have provided cost economies with respect to acquisition, handling, and distribution of fresh and processed meat items. Lack of economies of size may prohibit medium— and smaller—sized retail firms from implementing centralized warehousing and fabrication facilities. However, medium— and smaller—sized retail firms may find it economical to obtain such services on a custom basis from wholesalers or packers whenever such services are deemed necessary.
- 5. Boxed meat programs have generally proven successful as a meat handling and merchandising technique, but continued resistance is anticipated from labor and other self-interest groups.

 Nev rtheless, consumer and regulatory groups may encourage boxed beef because of potential sanitation improvements.
- 6. The intensity of promotions and advertising by the retail grocery industry in competing for customers will not only continue but will likely increase in the future. Meat departments will

continue to be important merchandising and promotional tools to attract and retain customers rather than the profit-centers so often envisioned by various individuals and consumer groups.

APPENDIX TABLES

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APPENDIX TABLE 1. ESTIMATES OF U. S. GRADE EQUIVALENTS FOR MEAT SOLD, BY KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH 11 OR MORE STORES, 1974

	U, S. grade or grade equivalent									
Kind of meat	U. S. Choice or higher		U. S. Standard1/	U. S. Commercial and lower ² /	Total					
			-Percent							
Steer and heifer beef	88.3	11.7	3/	3/	100.0					
Cow and bull beef	3/	3/	16.6	83.4	100.0					
Calf	19.1	76.0	4.9	3/	100.0					
Veal	92.8	2.8	3/	4.4	100.0					
Lamb or mutton	84.8	3/	3/	15.2	100.0					
Ground meat4/	3/	.6	3/ 2000	99.4	100.0					

 $[\]frac{1}{T}$ The lamb and mutton is U. S. Utility. There is no U, S. Standard for bull beef. $\frac{2}{T}$ The lamb and mutton is U. S. Cull. There is no Commercial grade for calf or

APPENDIX TABLE 2. ESTIMATES OF U, S, GRADE EQUIVALENTS FOR MEAT SOLD, BY KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH LESS THAN 11 STORES AND 4 OR MORE SUPERMARKETS, 1974

	U. S. grade or grade equivalent								
Kind of meat	U, S. Choice or higher	U. S. Good		U. S. Commercial and lower ² /	Total				
			Percent						
Steer and heifer beef	89.1	10.9	3/	3/	100.0				
Cow and bull beef	3/	3/	54.6	45.4	100.0				
Calfor sug porr pess	10.5	89.5	3/	3/	100.0				
Veal war and warres per	3/	3/	<u>3</u> /	3/	3/				
Lamb or mutton	100.0	3/	3/	3/	100.0				
Ground meat4/	3/	3/	3/	100.0	100.0				

 $[\]frac{1}{T}$ The lamb and mutton is U. S. Utility. There is no U. S. Standard for bull beef, $\frac{2}{T}$ The lamb and mutton is U. S. Cull. There is no Commercial grade for calf or veal.

 $[\]frac{3}{N}$ None reported by respondents interviewed.

^{4/}Grade distribution is based on purchased ground meat.

 $[\]frac{3}{N}$ None reported by respondents interviewed.

⁴/Grade distribution is based on purchased ground meat,

APPENDIX TABLE 3. ESTIMATES OF U. S. GRADE EQUIVALENTS FOR MEAT SOLD, BY KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH LESS THAN 11 STORES AND 1 TO 3 SUPER-MARKETS, 1974

one cohorces ph tember	U. S. grade or grade equivalent									
Kind of meat	U. S. Choice or higher		U. S. Good		U. S. Standard1/		U. S. Commercial and lower ² /		Total	
	7			-Pe	rcent					
Steer and heifer bee.	7.3		76.5		16.2		3/		100.0	
Cow and bull beef	3/		17.4		3/		82.6		100.0	
Calf	3/		55.2		4.6		40.2		100.0	
Veal	3/		100.0		3/		3/		100.0	
Lamb or mutton	100.0		3/		3/		3/		100.0	
Ground meat4/	7.4		3/		3/		92.6		100.0	

 $[\]frac{1}{2}$ The lamb and mutton is U. S. Utility. There is no U. S. Standard for bull beef.

APPENDIX TABLE 4. ESTIMATES OF U, S, GRADE EQUIVALENTS FOR MEAT SOLD, BY KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH LESS THAN 11 STORES AND NO SUPERMARKETS, 1974

	U. S. grade or grade equivalent								
Kind of meat		2	U. S.	U. S.					
				Percent					
Steer and heifer beef	.3		84.9	14.8	3/	100.0			
Cow and bull beef	3/		28.9	3/	71.1	100.0			
Calf	4/		4/	4/	4/	4/			
Veal	3/		3/	3/	100.0	100.0			
Lamb or mutton	100.0		3/	3/	<u>3</u> /	100.0			
Ground meat 5/	3/		100.0	3/	3/	100.0			

 $[\]frac{1}{2}$ The lamb and mutton is U. S. Utility. There is no U, S, Standard for bull beef.

 $[\]frac{2}{1}$ The lamb and mutton is U. S. Cull. There is no Commercial grade for calf or veal.

 $[\]frac{3}{2}$ None reported by respondents interviewed.

 $[\]frac{4}{\text{Grade}}$ distribution is based on purchased ground meat.

 $[\]frac{2}{}$ The lamb and mutton is U. S. Cull. There is no Commercial grade for calf or veal.

 $[\]frac{3}{N}$ None reported by respondents interviewed.

 $[\]frac{4}{1}$ Included with steer and heifer beef.

^{5/}Purchased as ground meat.

APPENDIX TABLE 5. TYPE OF GRADING OR MARKING FOR FRESH AND PROCESSED MEAT, BY KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH 11 OR MORE STORES, 1974

, eg gargers, es. se seg y pa s		Type of grading or marking							
Kind of meat	U. S. graded	Private brand ¹ /	U. S. graded and private brand	Not graded or branded	Total				
grand mar.	7 2 7		Percent	28°2	700-				
Steer and heifer beef	82.9	11.7	4.7	.7	100.0				
Cow and bull beef	69.7	2/	2/	30.3	100.0				
Calf	75.2	3.6	14.0	7.2	100.0				
Veal	47.1	2/	2/	52.9	100.0				
Lamb or mutton	82.0	3.7	2/	14.3	100.0				
Ground meat	12.2	2/	2/	87.8	100.0				
Fresh pork	3/	22.2	3/	77.8	100.0				
Cured pork	3/	68.1	3/	31.9	100.0				

^{1/}Packer or retail brand.

APPENDIX TABLE 6. TYPE OF GRADING OR MARKING FOR FRESH AND PROCESSED MEAT, BY KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH LESS THAN 11 STORES AND 4 OR MORE SUPERMARKETS, 1974

	4	Type of grading or marking								
Kind of meat	U. S. graded U. S. Private and private brand		Not graded or branded	Total						
			Percent							
Steer and heifer beef	94.7	2/	<u>2</u> / 1.5		100.0					
Cow and bull beef	55.5	3.4	2/	41.1	100.0					
Calf	90.5	2/	4.8	4.7	100.0					
Vea1	2/	2/	2/	2/	2/					
Lamb or mutton	100.0	2/	2/	2/	100.0					
Ground meat 3/	2/	2/	2/	100.0	100.0					
Fresh pork	4/	6.8	4/	93.2	100.0					
Cured pork	4/	95.1	4/	4.9	100.0					

 $[\]frac{1}{P}$ Packer or retail brand.

 $[\]frac{2}{N}$ None reported by respondents interviewed.

 $[\]frac{3}{N}$ Not applicable.

 $[\]frac{2}{N}$ None reported by respondents interviewed.

 $[\]frac{3}{Purchased}$ as ground meat.

 $[\]frac{4}{N}$ Not applicable.

APPENDIX TABLE 7. TYPE OF GRADING OR MARKING FOR FRESH AND PROCESSED MEAT, BY KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH LESS THAN 11 STORES AND 1 TO 3 SUPERMARKETS, 1974

Packet or recall brane	Type of grading or marking									
Kind of meat	U. S. graded	Private brand1/	U. S. graded and private brand	Not graded or branded	Total					
Tound meac	73.0		Percent	47.3						
Steer and heifer beef	87.8	2/	9.5	2.7	100.0					
Cow and calf beef	27.6	10.3	2/	62.1	100.0					
Calf	56.6	2/	2/	43.4	100.0					
Veal Veal	100.0	2/	2/	2/	100.0					
Lamb or mutton	100.0	2/	2/	2/	100.0					
Ground meat 3/	7.4	2/	<u>2</u> /	92.6	100.0					
Fresh pork	4/	18.2	4/	81.8	100.0					
Cured pork	4/	51.7	4/	48.3	100.0					

 $[\]frac{1}{P}$ Packer or retail brand.

APPENDIX TABLE 8. TYPE OF GRADING OR MARKING FOR FRESH AND PROCESSED MEAT, BY KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH LESS THAN 11 STORES AND NO SUPERMARKETS, 1974

		Type of grading or marking								
Kind of meat	U. S. graded	Private brand1/	U. S. graded and private brand	Not graded or branded	Total					
			Percent		170010					
Steer and heifer beef	63.5	21.7	2/	14.8	100.0					
Cow and bull beef	2/	2/	2/	100.0	100.0					
Calf	3/	3/	3/	3/	3/					
Veal	100.0	2/	2/	2/	100.0					
Lamb or mutton	100.0	2/	2/	2/	100.0					
Ground meat	40.2	2/	2/	59.8	100.0					
Fresh pork	4/	69.1	4/	30.9	100.0					
Cured pork	4/	75.2	4/	24.8	100.0					

 $[\]frac{1}{P}$ Packer or retailer brand.

 $[\]frac{2}{N}$ None reported by respondents interviewed

 $[\]frac{3}{\text{Purchased}}$ as ground meat.

 $[\]frac{4}{N}$ Not applicable.

 $[\]frac{2}{N}$ None reported by respondents interviewed.

 $[\]frac{3}{1}$ Included with steer and heifer beef.

 $[\]frac{4}{N}$ Not applicable.

APPENDIX TABLE 9. GEOGRAPHIC SOURCE OF MEAT PURCHASED, BY KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH 11 OR MORE STORES, 1974

APPENIX TAN	LE LI.	Novice of		Geographic	source	valle,	ro cr'ibra	7001
Kind of meat	Texas	Okla- homa	New Mexico	Kansas- Nebraska		Iowa	Other states	Total
Service Manager	81.8	7 2 7	FA PL	eler Wh	oleka le	100	T	The o
	86 ch	8-4	Tigota	Percen	t	74		
Steer and heifer beef	74.1	.1	4.2	6.0	1.6	5.9	8.1	100.0
Cow and bull beef	99.7	1/	1/	1/	1/	1/	.3	100.0
Calf	99.4	1/	1/	1/	1/	1/	.6	100.0
Veal	44.3	1/	1/	1/	1/	55.7	1/	100.0
Lamb or mutton	34.3	7.2	1/	8.1	11.4	.9	38.0	100.0
Fresh pork	35.0	10.1	3.5	21.8	1/	17.6	12.0	100.0
Cured pork	86.5	1.0		3.2	1/	2.6	5.3	100.0
Sausage, variety and other	82.9	0879.97 .3	1.4	3.4	1/	5.3	6.7	100.0
Cotal	77.9	1.4	2.5	5.8	.7	5.4	6.3	100.0

None reported by respondents interviewed.

APPENDIX TABLE 10. GEOGRAPHIC SOURCE OF MEAT PURCHASED, BY KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH LESS THAN 11 STORES AND 4 OR MORE SUPERMARKETS, 1974

	86.15	7.1	14.2	Geographic	source	. 7	1,0	100'0
Kind of meat	Texas	Okla- homa	New Mexico	Kansas- Nebraska	Colo- rado	Iowa	Other states	Total
Agrand provides as a	00 7	5	17.	-51	- 0	71	000000	TOTAL
				Percen	t			
Steer and heifer beef	68.6	1/	1/	5.7	1/	25.7	1/	100.0
Cow and bull beef	96.3	1/	1/	1/	1/	1/	3.7	100.0
Calf	100.0	1/	1/	1/	1/	1/	1/	100.0
Veal	100.0	1/	1/	1/	1/	1/	1/	100.0
Lamb or mutton	6.9	1/	1/	1/	93.1	1/	1/	100.0
Fresh pork	63.6	3.2	1/	2.6	1/	30.6	1/	100.0
Cured pork	93.6	.8	1/	3.9	1/	1.7	1/	100.0
Sausage, variety					E Water		-	
and other	99.0	. 7	1/	1/	1/	1/	.3	100.0
Total	78.6	.3	1/	3.7	.5	16.5	. 4	100.0

 $[\]frac{1}{N}$ None reported by respondents interviewed.

APPENDIX TABLE 11. GEOGRAPHIC SOURCE OF MEAT PURCHASED, BY KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH LESS THAN 11 STORES AND 1 TO 3 SUPERMARKETS, 1974

The state of the s	V/A	5 3		Geographic	source	10,0		
Kind of meat	Texas	0kla- homa	New Mexico	Kansas- Nebraska	Colo- rado	Iowa	Other states	Total
BALLY and heller	36.5	17 2		Percen		7.7	4.3	
	35.0	7017	777	rercen	I	1111	15:0	10010
Steer and heifer beef	84.0	1/	2.7	13.3	1/	1/	1/	100.0
Cow and bull beef	76.8	1/	1/	<u>1</u> /	1/	1/	23.2	100.0
Calf	100.0	1/	1/	1/	1/	1/	1/	100.0
Veal	100.0	1/	1/	1/	1/	1/	1/	100.0
Lamb or mutton	1/	1/	1/	1/	100.0	1/	1/	100.0
Fresh pork	84.4	8.4	1.0	6.2	1/	1/	1/	100.0
Cured pork	81.8	1/	1/	17.6	1/	.6	1/	100.0
2507								
Sausage, variety and other	100.0	1/	1/	1/	1/	1/	1/	100.0
Total	86.6	1.0	1.6	9.7	.1	.1	.9	100.0

 $[\]frac{1}{N}$ None reported by respondents interviewed.

APPENDIX TABLE 12. GEOGRAPHIC SOURCE OF MEAT PURCHASED, BY KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH LESS THAN 11 STORES AND NO SUPERMARKETS, 1974

			71	Geographic s	source			
Kind of meat	Texas	Okla- homa	New Mexico	Kansas- Nebraska	Colo- rado	Iowa	Other states	Total
r mass fraction	3374		11	Percent		313		100.0
Steer and heifer beef	100.0	1/	1/	1/	1/	1/	1/	100.0
Cow and bull beef	100.0	1/	1/	1/	1/	1/	1/	100.0
Calf	2/	2/	2/	2/	2/	2/	2/	2/
Veal	100.0	1/	1/	1/	1/	1/	1/	100.0
Lamb or mutton	24.7	74.1	1/	1/	1/	1.2	1/	100.0
Fresh pork	76.9	22.9	1/	1/	. 2	1/	1/	100.0
Cured pork	99.4	1/	1/	1/	.6	1/	1/	100.0
Sausage, variety and other	92.6	1/	1/	1/	1/	3.9	3.5	100.0
Total	94.5	4.1	1/	1/	.1	. 7	.6	100.0

 $[\]frac{1}{N}$ None reported by respondents interviewed.

 $[\]frac{2}{2}$ Included with steer and heifer beef.

APPENDIX TABLE 13. SOURCE OF MEAT, BY TYPE OF SUPPLIER AND KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH 11 OR MORE STORES, 1974

		Тур	e of supplier		
Kind of meat	Packer	Packer branch house	Wholesale distributor or jobber	Other	Total
Currental princip	7770		Percent		
Steer and heifer beef	98.2	1.3	.5	1/	100.0
Cow and bull beef	98.5	. 7	.8	1/	100.0
Calf	99.9	.1	1/	1/	100.0
Veal	100.0	1/	<u>1</u> /	1/	100.0
Lamb or mutton	100.0	1/	1/	1/	100.0
Fresh pork	97.5	2.5	1/	1/	100.0
Cured pork	96.4	.8	2.8	1/	100.0
Sausage, variety and other	91.6	.3	1.2	6.9	100.0
Total	97.5	1.1	1,46.76.801	.6	100.0
					-

 $[\]frac{1}{N}$ None reported by respondents interviewed

APPENDIX TABLE 14. SOURCE OF MEAT, BY TYPE OF SUPPLIER AND KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH LESS THAN 11 STORES AND 4 OR MORE SUPERMARKETS, 1974

	20.00	Туре	e of supplier		
Kind of meat	Packer	Packer branch house	Wholesale distributor or jobber	Other	Total
TRACE A TO			-Percent		
Steer and heifer beef	94.4	1/	5.6	1/	100.0
Cow and bull beef	98.0	1/	2.0	1/	100.0
Calf	100.0	1/	1/	1/	100.0
Veal	1/	1/	1/	1/	1/
Lamb or mutton	100.0	1/	1/	1/	1/
Fresh pork	88.7	1/	11.3	1/	100.0
Cured pork	100.0	1/	1/	1/	100.0
Sausage, variety and other	98.0	1/	2.0	1/	100.0
Total	95.7	1/	4.3	1/	100.0

 $[\]frac{1}{N}$ None reported by respondents interviewed.

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APPENDIX TABLE 15. SOURCE OF MEAT, BY TYPE OF SUPPLIER AND KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH LESS THAN 11 STORES AND 1 TO 3 SUPERMARKETS, 1974

A Minne Consider the sea	Type of supplier									
Kind of meat	Packer	Packer branch house	Wholesale distributor or jobber	Other	Total					
			-Percent							
Steer and heifer beef	99.2	. 8	1/	1/	100.0					
Cow and bull beef	91.6	1/	1/	8.4	100.0					
Calf	100.0	1/	1/	1/	100.0					
Veal	100.0	1/	1/	1/	100.0					
Lamb or mutton	46.0	1/	54.0	1/	100.0					
Fresh pork	82.6	1/	17.4	1/	100.0					
Cured pork	50.0	1/	50.0	1/	100.0					
Sausage, variety and other	54.0	1/	45.4	.6	100.0					
Total	85.4	. 4	13.8	.4	100.0					

 $[\]frac{1}{N}$ None reported by respondents interviewed.

APPENDIX TABLE 16. SOURCE OF MEAT, BY TYPE OF SUPPLIER AND KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH LESS THAN 11 STORES AND NO SUPERMARKETS, 1974

		Туре	of supplier		
Kind of meat	Packer	Packer branch house	Wholesale distributor or jobber	Other	Total
group born			Percent		1981
Steer and heifer beef	95.1	1/	4.9	1/	100.0
Cow and bull beef	100.0	1/	1/	1/	100.0
Calf	2/	2/	2/	2/	2/
Veal	100.0	1/	1/	1/	100.0
Lamb or mutton	100.0	1/	1/	1/	100.0
Fresh pork	93.7	1/	6.3	1/	100.0
Cured pork	82.1	1/	17.9	1/	100.0
Sausage, variety and other	72.5	1/	27.5	1/	100.0
Total	90.3	1/	9.7	1/	100.0

 $[\]frac{1}{N}$ None reported by respondents interviewed.

 $[\]frac{2}{2}$ Included with steer and heifer beef.

APPENDIX TABLE 17. FORM OF MEAT PURCHASED, BY KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH 11 OR MORE STORES, 1974

		Form of meat purchased									
Kind of meat	Carcass	Quarters	Primals	Sub- primals		Other	Total				
			Pe	rcent							
Steer and heifer beef	65.7	7.1	14.8	12.4	1/	1/	100.0				
Cow and bull beef	64.9	1.7	1/	1/	1/	33.4	100.0				
Calf	86.8	2.9	10.3	1/	1/	1/	100.0				
Veal	97.8	2.2	1/	1/	1/	1/	1,00.0				
Lamb or mutton	83.5	.7	15.8	1/	1/	1/	100.0				
Fresh pork	1/	1/	77.3	22.7	1/	1/	100.0				

 $[\]frac{1}{N}$ None reported by respondents interviewed.

APPENDIX TABLE 18. FORM OF MEAT PURCHASED BY KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH LESS THAN 11 STORES AND 4 OR MORE SUPERMARKETS, 1974

			Form of	meat purch	ased		
Kind of meat	Carcass	Quarters	Primals	Sub- primals	Retail cuts	Other	Total
			Ре	rcent			
Steer and heifer beef	67.6	20.2	12.2	1/	1/	1/	100.0
Cow and bull beef	1/	1.3	1/	1/	1/	98.7	100.0
Calf	95.6	4.4	1/	1/	1/	1/	100.0
Veal	1/	1/	1/	1/	1/	1/	1/
Lamb or mutton	100.0	1/	1/	1/	1/	1/	100.0
Fresh pork	1/	1/	96.9	3.1	1/	1/	100.0

 $[\]frac{1}{N}$ None reported by respondents interviewed.

APPENDIX TABLE 19. FORM OF MEAT PURCHASED, BY KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH LESS THAN 11 STORES AND 1 TO 3 SUPERMARKETS, 1974

		Form of meat purchased									
Kind of meat	Carcass	Quarters	Primals	Sub- primals	Retail cuts	Other	Total				
			Pe	rcent							
Steer and heifer beef	65.8	14.4	19.8	1/	1/	1/	100.0				
Cow and bull beef	6.4	5.1	4.8	1/	1/	83.7	100.0				
Calf	99.8	.2	1/	1/	1/	1/	100.0				
Veal	100.0	1/	1/	1/	1/	1/	100.0				
Lamb or mutton	100.0	1/	1/	1/	1/	1/	100.0				
Fresh pork	8.9	1/	85.4	1/	5.7	1/	100.0				

 $[\]frac{1}{N}$ None reported by respondents interviewed.

APPENDIX TABLE 20. FORM OF MEAT PURCHASED, BY KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH LESS THAN 11 STORES AND NO SUPERMARKETS, 1974

		Form of meat purchased								
Kind of meat	Carcass	Quarters	Primals	Sub- primals	Retail cuts	Other	Total			
			Pe	rcent						
Steer and heifer beef	67.5	14.8	17.7	1/	1/	1/	100.0			
Cow and bull beef	1/	26.0	1/	71.1	1/	2.9	100.0			
Calf	2/	2/	2/	2/	2/	2/	2/			
Veal	1/	100.0	1/	1/	1/	1/	100.0			
Lamb or mutton	1/	1/	1.3	1/	1/	98.7	100.0			
Fresh pork	1/	1/	98.5	1/	1.5	1/	100.0			

 $[\]frac{1}{N}$ None reported by respondents interviewed.

 $[\]frac{2}{I}$ Included with steer and heifer beef.

APPENDIX TABLE 21. FORM OF MEAT SALES, BY KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH 11 OR MORE STORES, 1974

	Form of meat sales									
Kind of meat	Carcass	Quarters	Primals	Sub- primals	Retail cuts	Ground meat	Total			
The section	<u> </u>			Percent						
Steer and heifer beef	.4	.7	.4	.6	82.3	15.6	100.0			
Cow and bull beef	1/	<u>1</u> /	1/	1/	1/	100.0	100.0			
Calf	.8	<u>1</u> /	1/	1/	87.2	12.0	100.0			
Veal	1/	1/	1/	1/	96.2	3.8	100.0			
Lamb or mutton	<u>1</u> /	1/	1/	1/	96.7	3.3	100.0			
Fresh pork	1/	1/	.5	1/	99.3	.2	100.0			
Cured pork	2/	2/	2/	2/	100.0	2/	100.0			
Ground meat 3/	2/	2/	2/	2/	100.0	2/	100.0			
Sausage, variety and other	2/	<u>2</u> /	<u>2</u> /	<u>2</u> /	100.0	2/	100.0			

 $[\]frac{1}{N}$ None reported by respondents interviewed.

APPENDIX TABLE 22. FORM OF MEAT SALES, BY KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH LESS THAN 11 STORES AND 4 OR MORE SUPERMARKETS, 1974

Kind of meat	Form of meat sales						
	Carcass	Quarters	Primals	Sub- primals	Retail cuts	Ground meat	Total
			F	ercent	1136		
Steer and heifer beef	.1	.3	<u>1</u> /	1.2	85.6	12.8	100.0
Cow and bull beef	1/	1/	1/	1/	. 4	99.6	100.0
Calf	1/	1/	1/	1/	88.1	11.9	100.0
Veal	1/	1/	1/	1/	1/	1/	1/
Lamb or mutton	1/	1/	1/	1/	97.2	2.8	100.0
Fresh pork	1/	1/	<u>1</u> /	1/	100.0	1/	100.0
Cured pork	2/	2/	2/	2/	100.0	2/	100.0
Ground meat 3/	2/	2/	2/	2/	100.0	2/	100.0
Sausage, variety and other	2/	2/	<u>2</u> /	<u>2</u> /	100.0	2/	100.0

 $[\]frac{1}{N}$ None reported by respondents interviewed.

 $[\]frac{2}{N}$ Not applicable.

 $[\]frac{3}{\text{Purchased}}$ as ground meat.

 $[\]frac{2}{N}$ Not applicable.

 $[\]frac{3}{Purchased}$ as ground meat.

APPENDIX TABLE 23. FORM OF MEAT SALES, BY KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH LESS THAN 11 STORES AND 1 TO 3 SUPERMARKETS, 1974

Kind of meat	Form of meat sales								
	Carcass	Quarters	Primals	Sub- primals	Retail cuts	Ground meat	Total		
	Percent								
Steer and heifer beef	.4	.2	<u>1</u> /	<u>1</u> /	76.6	22.8	100.0		
Cow and bull beef	1/	1/	1/	1/	6.6	93.4	100.0		
Calf	1/	<u>1</u> /	<u>1</u> /	1/	90.0	10.0	100.0		
Vea1	<u>1</u> /	1/	<u>1</u> /	1/	100.0	1/	100.0		
Lamb or mutton	1/	<u>1</u> /	<u>1</u> /	<u>1</u> /	100.0	1/	100.0		
Fresh pork	1/	1/	<u>1</u> /	<u>1</u> /	99.4	.6	100.0		
Cured pork	2/	<u>2</u> /	2/	<u>2</u> /	100.0	2/	100.0		
Ground meat $\frac{3}{}$	2/	<u>2</u> /	2/	2/	100.0	2/	100.0		
Sausage, variety and other	<u>2</u> /	<u>2</u> /	<u>2</u> /	<u>2</u> /	100.0	2/	100.0		

 $[\]frac{1}{N}$ None reported by respondents interviewed.

APPENDIX TABLE 24. FORM OF MEAT SALES, BY KIND OF MEAT, IN TEXAS GROCERY FIRMS WITH LESS THAN 11 STORES AND NO SUPERMARKETS, 1974

Kind of meat	Form or meat sales								
	Carcass	Quarters	Primals	Sub- primals	Retail cuts	Ground meat	Total		
	Percent								
Steer and heifer beef	6.9	7.8	1/	1/	63.8	21.5	100.0		
Cow and bull beef	1/	.3	<u>1</u> /	<u>1</u> /	37.7	62.0	100.0		
Calf	<u>2</u> /	2/	2/	2/	2/	2/	2/		
Veal	<u>1</u> /	1/	1/	1/	50.0	50.0	100.0		
Lamb or mutton	1/	1/	1/	1/	100.0	1/	100.0		
Fresh pork	1/	1/	1/	1/	100.0	1/	100.0		
Cured pork	<u>3</u> /	<u>3</u> /	<u>3</u> /	<u>3</u> /	100.0	3/	100.0		
Ground meat4/	<u>3</u> /	3/	<u>3</u> /	<u>3</u> /	100.0	<u>3</u> /	100.0		
Sausage, variety and other	<u>3</u> /	<u>3</u> /	<u>3</u> /	<u>3</u> /	100.0	<u>3</u> /	100.0		

 $[\]frac{1}{N}$ None reported by respondents interviewed.

 $[\]frac{2}{N}$ Not applicable.

 $[\]frac{3}{2}$ Purchased as ground meat.

 $[\]frac{2}{I}$ Included with steer and heifer beef.

 $[\]frac{3}{N}$ Not applicable.

 $[\]frac{4}{}$ Purchased as ground meat.