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Consumer Attitudes and Handling Practices of Retailers for Lamb, Mutton and Goat

TEXAS AGRICULTURAL EXPERIMENT STATION
R. D. LEWIS, DIRECTOR, COLLEGE STATION, TEXAS

SUMMARY

Information regarding families, their consumption of and attitudes toward lamb, mutton and goat was obtained through personal interviews with 966 householders in San Antonio and 1,721 in Waco. Information on general availability, retailers' merchandizing practices and attitudes toward lamb, mutton and goat was obtained through personal interviews with 116 fresh meat retailers in San Antonio. The survey of Waco families was conducted during the fall and winter of 1956 and the surveys of retail stores and homemakers in San Antonio were conducted during the summer and fall of 1957.

Only 53 percent of the 116 fresh meat retailers interviewed in San Antonio had handled lamb, mutton or goat anytime during the 12 months previous to date of interview. Most nonhandlers are small, independent stores that sell limited quantities of beef, pork and other fresh meat. Four in 5 nonhandlers gave lack of demand as the reason for not handling lamb and 1 in 7 stated that the price was too high for their customers. Other reasons given include too much waste in the carcass and insufficient capital to handle all kinds of meat.

During the month previous to interview, 37 store owners sold an average of 386 pounds of lamb per store, 20 retailers sold an average of 237 pounds of mutton and 11 sold an average of 259 pounds of goat meat. Most mutton and goat handlers are local independent meat retailers while meat retailers in chain stores reported selling about six times more lamb on the average than local independent retailers.

Most San Antonio retailers obtain their lamb and mutton from local slaughter houses or local meat packing plants.

Good grade of lamb carcasses is the preferred grade of three-fifths of the independent retailers, and Choice grade is the preference of 55 percent of the retailers in chain stores. Prime grade of lamb and mutton is disliked because it contains too much fat and the price usually is too high. Most retailers prefer lamb carcasses weighing about 40 pounds and mutton carcasses weighing 45 pounds.

Fifty percent of the retailers reported that they advertise lamb in newspapers an average of three or four times per year, while 24 percent reported advertising lamb through radio, and 27 percent of the retailers in chain stores reported using television to advertise lamb. Almost half of the respondents stated that the cost of advertising lamb on radio and television was too high and one in five reported that previous advertising had failed to result in sufficiently increased sales to merit further attempts. Most smaller handlers feel that their stock and volume of sale are too small to warrant advertising lamb.

Only 1 in 3 handlers had lamb or mutton on display at the time of interview, although 4 in 10 reported having special displays of lamb during the winter and spring, seasons of higher than average sales. Most handlers using promotional efforts reported some increase in their lamb and mutton sales.

Meat retailers sold only about one-twelfth as much lamb, mutton and goat as they did beef and about one-seventh as much pork.

Thirty-five percent of the 966 San Antonio housewives reported using lamb an average of once every 12 days and 16 percent of the 1,721 Waco housewives used lamb an average of once every 24 days during the 12 months before the interview.

Consumption of lamb, mutton and goat is higher among Latin-Americans than it is among Anglo-Americans. Persons who had lamb served to them in their parents' homes at an early age are twice as likely to use lamb as are those who did not eat lamb as a child.

Irrespective of nationality, housewives in the older age group, those with higher education and those whose husbands have higher incomes, are more likely to eat lamb.

The characteristics of lamb most appealing to housewives who stated that they like it are its flavor, texture, ease of preparation, distinctive aroma, small amount of waste, variety of preparation and its healthfulness.

While only one in three lamb users reported any dislikes for lamb, the dislikes mentioned most frequently were disagreeable odor, too much fat, dislike for taste and too expensive.

Efforts to promote increased consumption of lamb and mutton should be directed toward (1) getting a larger percentage of meat retailers to stock more lamb and mutton, (2) giving greater store display space to lamb and mutton, (3) reducing the price of the better cuts to bring them more in line with comparable cuts of beef, veal and pork, (4) obtaining more frequent advertising and putting more emphasis on general promotion and (5) showing housewives how to prepare lamb which will result in a better flavor and a more agreeable odor.

Consumer Attitudes and Handling Practices of Retailers for Lamb, Mutton and Goat

RANDALL STELLY*

TEXAS IS A PROLIFIC PRODUCER, but a poor consumer, of lamb and mutton.

The 5.2 million sheep and lambs on Texas farms and ranches in January 1957, constituted 17 percent of the 31 million in the United States and were almost twice that of California, the next largest producer. The 2.8 million lambs produced annually in Texas represent 14 percent of the total U. S. lamb crop.

However, only about 1.6 percent of the U. S. consumption of lamb and mutton is consumed in Texas, which ranks thirty-second among the states in consumption per person. The average Texan consumes less than one-third as much lamb and mutton as the average consumer in the United States. The consumption per person in Texas was 1.4 pounds compared with 4.5 pounds for the nation in 1954.

The 2½ million sheep and lambs marketed by Texas sheep growers during 1957 represented a total dressed weight of about 125 million pounds. About 11 million pounds, or less than 9 percent of this total, were consumed in Texas. The remaining 91 percent was shipped out of the State either to the northeastern part of the country in the form of dressed lamb (54 percent) or to feedlots for finishing (46 percent).

U. S. consumption of sheep and lamb decreased from 6.4 pounds per person in 1930 to 4.3 pounds in 1956, compared with an increase in beef consumption from 48.2 pounds per person to 83.0 pounds for the same period. Poultry consumption also increased from 16.9 pounds per person in 1930 to 28.9 pounds in 1956.

Consumption of lamb and mutton usually is greater in areas where there is a concentration of white-collar or professional workers, people preferring Kosher foods and people from eastern Mediterranean countries. Consequently, use of lamb is greatest in the New England, Middle Atlantic and Pacific Coast sections of the country, and least in the East South-Central and West South-Central States.

The six New England States—Maine, New Hampshire, Massachusetts, Rhode Island and Connecticut—composing 6 percent of the population in the United States, consume 12.5 percent of the lamb and mutton, but produce only .2 percent of the sheep and lamb. This indicates that residents of those states obtain about 98 percent of their lamb and mutton from other states.

*Assistant professor, Department of Agricultural Economics and Sociology.

The three Middle Atlantic States of New York, New Jersey and Pennsylvania have 19.5 percent of the population but consume 36 percent of the lamb and mutton eaten annually in the United States. Since these states produce only 1.1 percent of the sheep and lamb, about 97 percent of the sheep and lamb consumed in those states is brought in from other states.

Along the Pacific Coast, California, Oregon and Washington contain 10.4 percent of the population and consume 21.3 percent of the lamb and mutton. However, these three states produce only 13 percent of the sheep and lamb and bring in from other states about 34 percent of their annual consumption.

The 12 states in the New England, Middle Atlantic and Pacific Coast areas have 36 percent

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of the U. S. population and consume 70 percent of the lamb and mutton eaten annually in the United States. They produce only 13.4 percent of the sheep and lamb in the United States and obtain about 81 percent of their lamb and mutton from other states.

This indicates a need for expanding consumer demand for lamb and mutton in other regions of the country to reduce the dependence on the New York and California markets.

PROCEDURE

Information regarding the characteristics of families, their consumption of and attitudes toward lamb, mutton and goat was obtained through personal interviews with 966 householders in San Antonio and 1,721 in Waco. Information on general availability, retailers' merchandizing practices and attitudes toward lamb, mutton and goat was obtained through personal interviews with 116 fresh meat retailers in San Antonio. The survey of Waco families was conducted during the fall and winter of 1956 and the surveys of retail stores and homemakers in San Antonio were conducted during the summer and fall of 1957.

OBJECTIVES

The National Wool Act of 1954 was enacted to encourage the production of shorn wool through an incentive price program. It also provides that part of the incentive payments to growers be set aside to establish an advertising and sales-promotion program designed to increase the demand for lamb and wool products. Producers approved this proposal and, through the American Sheep Producers Council, Inc., are actively engaged in a campaign to spread the demand for lamb.

Past attitudes of Texas housewives against lamb may be changing because of an influx of population from other areas with different meat-eating habits. Changes in handling and preparation methods may eliminate existing prejudices if enough people are given the opportunity to try lamb. Many meat retailers accept the prejudice toward lamb and make little or no effort to promote or test its sale potential.

This study was undertaken for the following purposes:

1. To determine the general nature of consumer demand for lamb and mutton in two selected Texas cities, San Antonio and Waco.

2. To measure the effect of family background, racial and ethnic extraction, age, income and other factors and family characteristics on lamb and mutton consumption.

3. To determine the effect of relative price, general availability and homemakers' knowledge of preparing lamb as factors relating to lamb consumption.

4. To ascertain the general attitudes of housewives toward lamb, mutton and goat and the extent of prejudices, if any.

5. To obtain information on practices and attitudes of meat retailers toward lamb, mutton and goat, extent of promotion, price and general availability of these meats as factors affecting sales.

TABLE 1. TYPE OF STORE HANDLING LAMB AND MUTTON AND MEAT RETAILING FACILITIES, SAN ANTONIO

Item	Type of store, number			All stores, percent
	Independent	Chain	Total	
Lamb handlers[1]				
Self-service facilities only	0	4	4	6.6
Service facilities only	28	6	34	55.7
Both facilities	1	7	8	13.1
Total lamb handlers	29	17	46	75.4
Mutton handlers				
Self-service facilities only	1	0	1	1.6
Service facilities only	11	0	11	18.1
Both facilities	1	0	1	1.6
Type of service not indicated	2	0	2	3.3
Total mutton handlers	15	0	15	24.6
All lamb and mutton handlers				
Self-service facilities only	1	4	5	8.2
Service facilities only	39	6	45	73.8
Both facilities	2	7	9	14.7
Type facilities not indicated	2	0	2	3.3
Total	44	17	61	100.0

[1]Of the lamb handlers, 3 handled lamb, mutton and goat; 5 handled goat and lamb, and 12 handled mutton and lamb during the 12 months previous to interview.

RETAIL STORE PRACTICES

The study of retail store practices in San Antonio was analyzed to determine differences in (1) types of stores handling lamb, mutton and goat meat, (2) type of meat handled, (3) purchasing practices and preferences with respect to carcass and wholesale cuts and grade and weight of cuts, (4) seasonality of sales and (5) promotion policies and practices in selling lamb, mutton and goat meat.

Types of Retail Stores

Retail meat stores included in this study were classified according to (1) type of store (whether independently owned or chain stores); (2) meat retailing facilities offered customers (whether self-service, butcher service or combination of facilities); (3) whether they were handlers or nonhandlers of lamb, mutton or goat during the previous 12 months; (4) according to whether they were primarily lamb or mutton handlers (depending upon relative volume handled of each). The stores handling lamb or mutton are classified according to these categories in Table 1.

Of the 116 fresh meat retailers interviewed in San Antonio, 61, or about half, handled either lamb, mutton or goat during the 12 months prev-

TABLE 2. NUMBER OF WEEKS LAMB AND MUTTON WAS HANDLED BY MEAT RETAILERS, SAN ANTONIO, JUNE 1956 TO JUNE 1957

Type of meat and type of store	10 weeks or less: Number stores	10 weeks or less: Average number weeks	11 to 25 weeks: Number stores	11 to 25 weeks: Average number weeks	26 to 51 weeks: Number stores	26 to 51 weeks: Average number weeks	Every week of the year: Number stores	Every week of the year: Average number weeks	Total[1]: Number stores	Total[1]: Average number weeks
Lamb										
Independents	5	6	4	16	7	42	13	52	29	35
Chains	3	5			1	30	13	52	17	43
All stores	8	6	4	16	8	41	26	52	46	38
Mutton										
Independents	7	5	3	19	3	34	13	52	26	33
Chains	1	4							1	4
All stores	8	5	3	19	3	34	13	52	27	32

[1]Some retailers gave information on both lamb and mutton.

ious to date of interview, and 55, or 47 percent, did not handle this type of meat.

Of the 61 handlers, 44, or 72 percent, were local independent meat retailers and 17, or 28 percent, were chain stores. All 55 retail meat stores classified as "nonhandlers" were independent stores with butcher service meat markets. Most nonhandlers are relatively small stores that have limited total meat sales.

About 4 out of 5 nonhandlers of lamb, mutton or goat stated that insufficient customer demand was the reason for not stocking these meats. About 1 in 7 stated that the price of lamb is too high for their customers. Other reasons given included too much waste in the carcass and insufficient capital to handle all kinds of meats. Most retailers gave more than one reason for not handling either lamb or mutton.

Meats Handled

Slightly more than half of the handlers interviewed reported handling only one of the three meats while only 1 in 15 reported handling all three. Mutton and goat meats are handled mainly by independent retailers.

Lamb was handled in 47, or 77 percent, of the stores in the sample, mutton in 34 stores, or 56 percent and goat in 11 stores, or 18 percent. Of the 47 meat retailers handling lamb, 26, or 55 percent, handled only lamb, 17, or 36 percent, handled mutton and lamb and 4 retailers handled lamb, mutton and goat. Seven of the 34 mutton retailers handled mutton only, 6 sold mutton and goat, while 17 sold lamb and mutton and 4 sold all three meats. Of the 11 stores selling goat, 1 handled only goat, 6 handled mutton and goat, and 4 handled lamb and mutton in addition to goat. Twenty-seven, or 44 percent, of the 61 retailers interviewed handled two or more meats.

Information concerning the number of weeks during the year that lamb and mutton were handled, was obtained from 46 lamb handlers and 27 mutton handlers. Lamb handlers reported they had handled lamb an average of 38 weeks while mutton handlers stated they had handled mutton an average of 32 weeks during the year previous to date of interview, Table 2.

Information on volume handled was obtained from 37 lamb handlers, 20 mutton handlers and 11 goat handlers. During the month previous to interview, these meat retailers reported selling 14,270 pounds of lamb or an average of 386 pounds per store, 4,748 pounds of mutton or an average of 237 pounds per store and 2,844 pounds of goat meat or an average of 259 pounds per store, Table 3. Most mutton and goat handlers are local independent meat retailers. Only one

TABLE 3. VOLUME OF SALES PER MONTH OF LAMB, MUTTON AND GOAT AND OTHER MEATS, RETAIL STORES, SAN ANTONIO[1]

Kind of meat	Independents: Number stores reporting	Independents: Volume	Independents: Average volume per store	Chains: Number stores reporting	Chains: Volume	Chains: Average volume per store	All stores: Number stores reporting	All stores: Volume	All stores: Average volume per store
		Volume in pounds per month							
Beef	14	36,500	2,610	15	136,875	9,125	29	173,375	5,980
Veal	24	50,500	2,105	9	98,520	8,867	33	149,020	3,950
Calf	24	88,692	3,696	6	45,350	7,725	30	134,042	4,468
Pork	37	28,450	767	15	119,250	7,950	52	147,700	2,840
Poultry	36	43,720	1,214	15	74,250	4,950	51	117,970	2,319
Fish	19	8,460	445	13	30,030	2,310	32	38,490	1,203
Lamb	22	2,820	128	15	11,450	763	37	14,270	386
Mutton	19	4,723	249	1	25	25	20	4,748	237
Goat	11	2,844	259				11	2,844	259
Lamb, mutton and goat[2]	35	10,387	297	15	11,475	765	50	21,862	437

[1]Volume of "other meats" includes average monthly sales for the 12 months previous to interview; volume of lamb, mutton and goat sales includes volume sold during the month previous to interview.
[2]Nine independent handlers and two in chain stores did not furnish information on volume of sales.

TABLE 4. CARCASS GRADE OF LAMB AND MUTTON PREFERRED BY MEAT RETAILERS, SAN ANTONIO

Carcass grade	Type of retailer			
	Independent		Chain	
	Lamb	Mutton	Lamb	Mutton
	— — — Number retailers — — —			
Prime	1		1	
Choice	3	1	9	
Good	15	8	6	1
Utility	5	4		
Cull	1	1		
Total	25	14	16	1
Total handlers	29	26	17	1

chain store meat retailer reported handling a small volume of mutton. However, meat retailers in chain stores reported selling about six times more lamb on the average than local independent retailers. They also reported selling more of all other meats. Lamb, mutton and goat accounted for only about 3 percent of total meat sales of independent retailers and 2 percent of total sales by chain stores.

Purchase of Carcasses

Twenty-two of the 29 independent lamb retailers and 25 of the 26 independent mutton retailers, plus all 17 retailers in chain stores, stated they usually purchased whole carcasses. Of the 37 independent store owners who gave the source of their lamb and mutton supply, 20 stated that they obtained their supply from local slaughter houses, 11 from local meat packers or packing plants, 5 from cold storage plants and 1 obtained his supply from a meat wholesaler operating from the stockyards building. Fourteen of the 16 chain store owners obtained their lamb and mutton carcasses from local slaughter houses and 2 from local meat packers or packing plants.

Grade and Weight

Concerning carcass grade of meat purchased, only one independent and one chain store owner gave Prime as either their first or second choice of grade. Three out of 5 independent retailers stated Good as their first or second choice of either lamb or mutton carcasses and 1 out of 5 preferred Utility grade.

Only 3 out of 25 independents who stated grade preferences indicated Choice as their first preference. This survey indicates that meat retailers in chain stores prefer slightly higher grades of lamb than retailers in the independent stores. Nine out of 16 chain store owners stated they usually purchase Choice grade of lamb and 6 usually purchase Good grade, Table 4. Reasons given most frequently by store owners for not handling Prime grade are that lamb and mutton carcasses of this grade contain more fat than their customers like and the price of the Prime grade is too high for their customers.

Most meat retailers interviewed appear to prefer purchasing lamb carcasses weighing about 40 pounds and mutton carcasses weighing about 45 pounds, Table 5. Chain store owners apparently prefer slightly heavier carcasses. Very few lamb and mutton handlers like carcasses weighing less than 30 pounds or more than 50 pounds.

TABLE 5. WEIGHT OF LAMB AND MUTTON CARCASSES PURCHASED BY MEAT RETAILERS, SAN ANTONIO

Weight of carcasses	Independents		Chains		All stores	
	Lamb	Mutton	Lamb	Mutton	Lamb	Mutton
Pounds	— — — Number of stores purchasing — — —					
30 and less	6	4	1		7	4
31 to 40	9	8	6		15	8
41 to 50	5	9	7	1	12	10
51 to 60	2	5	1		3	5
Total	22	26	15	1	37	27
Average weight of all carcasses, pounds	37	44	42	45	39	44

Wholesale Cuts

About 50 percent of the independent meat retailers and 2 out of 3 retailers in chain stores stated that they purchase wholesale cuts of lamb. Wholesale cuts purchased most often by independent retailers are leg, rack or rib chops and shank of lamb while chain store meat retailers reported buying mostly leg of lamb and lamb patties (ground) in wholesale cuts or volume. In purchases of wholesale cuts of lamb and mutton, both independent and chain retailers indicated a tendency to buy higher grades than when they buy whole carcasses. This reflects a tendency among lamb and mutton wholesale dealers to cut up a larger proportion of the better grade carcasses for disposition as wholesale cuts.

However, the grades indicated in carcass purchases appear to conform closely with the choice of retailers as reflected in "consumers" preferences concerning grade. The question was asked, "Which grade of lamb would you handle if you had an unlimited supply of all grades?" Two out of 3 independent retailers stated they would handle Good grade and 4 out of 7 retailers in chain stores stated they would handle Choice grade, while 3 out of 7 would handle Good grade.

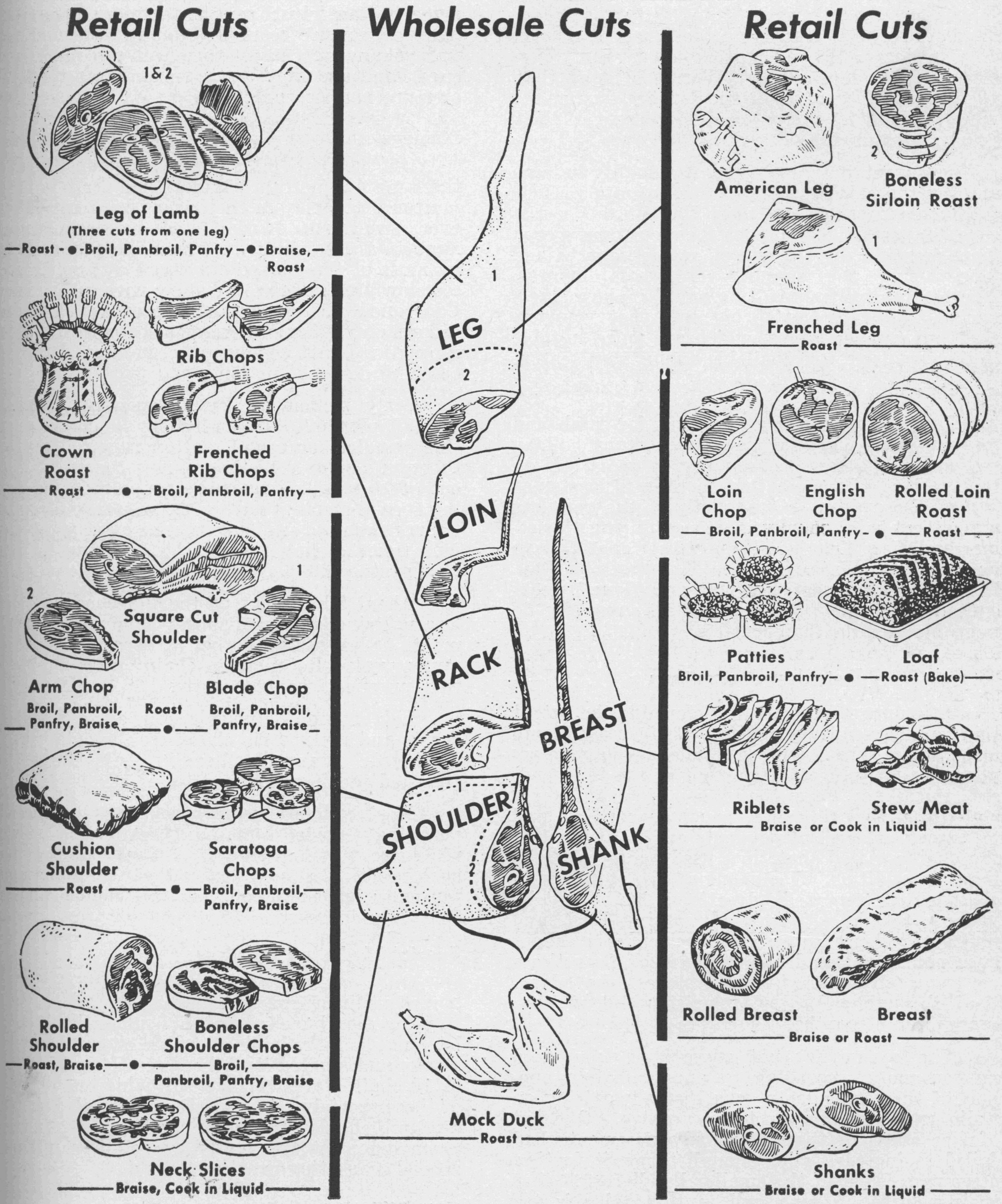
Preferred Cuts

Concerning rating of different cuts according to the amount they normally sell, responses given by handlers indicate that leg of lamb, loin chops and shoulder roasts are higher in demand than other cuts. This factor is reflected in kinds of wholesale cuts usually purchased by those handlers purchasing them. Wholesale and retail cuts of lamb are shown in Figure 1.

The following cuts were given a Low to Very Low demand rating by 3 in 4 retailers who gave ratings of the different cuts: breast of lamb, neck, shank, stew meat and patties.

Seasonality of Sales

Most meat market supervisors in chain stores stated that they have almost uniform sales of lamb and mutton throughout the year. Only a



Courtesy of the National Livestock and Meat Board and Swift and Company.

Figure 1. Wholesale and retail cuts of lamb and suggested ways of preparing them.

third of the chain stores sold as much as 40 percent of their yearly volume during either the spring or the winter. However, independent handlers reported a rather high degree of seasonality in both lamb and mutton sales. Sixty percent of the independent retailers sold more than 40 percent of their lamb and mutton during the winter; about 10 percent sold 40 percent of their yearly sales during the spring.

Many retailers indicating seasonality in lamb and mutton sales could not give definite reasons for such variation. Of those that did offer reasons, 50 percent stated that their customers cook more meat during the winter or cool months and less during the summer or warm months. Another reason frequently given for above average sales during the spring was that younger, and thus smaller lambs, which are more suitable to the consumer, are available during that season.

Special Days

Larger than average demand for lamb and mutton during special days or certain holiday seasons also affects seasonality in sales. More than a third of the retailers mentioned Easter as one of those days. One-fourth of the retailers stated that sales usually increased during Christmas and New Year holidays. Other special days or occasions mentioned were Thanksgiving Day, Labor Day, Independence Day and "long" weekends during which their customers generally do more barbecuing than usual.

Retailer Promotion

Attempts were made to determine the extent that handlers endeavor to promote increased lamb and mutton sales. Of the retailers who gave replies on this subject, 40 percent of the independents and 70 percent of the retailers in chain stores stated that they used newspaper advertising, and 19 percent of the independents and 33 percent of the chains stated that they used radio advertising. In addition, 27 percent of the retailers in chain stores reported advertising lamb on television. Of the retailers advertising lamb and mutton, independents used newspapers about once per month and chains three or four times per year. Retailers in chain stores who advertised through radio and television did so once every 2 or 3 months.

The reason for not advertising lamb and mutton more, according to approximately one-half of the respondents, was that advertising on radio or television was too expensive. One out of five stated that previous advertisements had failed to increase sales enough to merit further attempts. Most of the smaller handlers felt that their volume of lamb and mutton sales is too small (and they do not carry sufficient stock) to warrant advertising.

The special promotion given to lamb and mutton by stores at the time of interview included leg of lamb on special, patties wrapped in bacon on display, prepackaged lamb cuts, assorted fresh and frozen lamb cuts on display, large signs inside and in front of the store advertising lamb cuts, price reductions on Fridays and Saturdays and special features advertising barbecued lamb and mutton. Some retailers used two or more of these practices.

Displays

On the date interviewed, only one-third of the lamb and mutton handlers had fresh lamb or mutton on display in their meat counters. However, two-thirds of the handlers were keeping lamb in frozen meat lockers. The reason given by most of these handlers was that lamb moved too slowly to be kept on display with other meats. Consequently, these cuts are taken out of freezer lockers only when customers ask for them. Such a practice is not conducive to maintaining or increasing demand for lamb and mutton.

Sixty percent of the independent handlers and 80 percent of the retailers in chain stores that handled lamb and mutton reported putting them on display sometime during the year. Four out of 10 retailers in both groups reported having special displays during the winter and spring. Others reported utilizing special displays at various times during the year but during no particular season.

About 30 percent of the independent handlers utilizing special displays have them once a month or less while another 30 percent have them every week. Retailers in chain stores employed this practice less frequently.

Leg of lamb or mutton, loin chops, shoulder roasts and rack or rib chops are the cuts usually displayed. A few handlers in chain stores also reported putting lamb patties on display.

Most handlers using special displays or advertising reported some increases in sales attributable to these practices. Some reported that such practices almost double their lamb and mutton sales but most reported less than a 50-percent sales increase.

Special Marketing Practices

Only one out of 10 independent stores reported utilizing special marketing practices such as promoting boneless rolled shoulder, lamb choplets, mock duck, lamb shoulder chops, lamb leg steaks and stuffed lamb breast. However, 6 out of 10 chain stores reported utilizing one or more of these special practices. Boneless rolled shoulder, lamb shoulder chops or lamb leg steaks were promoted most frequently by retailers utilizing special marketing practices.

Cuts Difficult to Sell

Most retailers reported one or more cuts of lamb and mutton which were difficult to sell. Forty-two percent reported that the neck was the most troublesome cut to sell. About 12 percent mentioned the brisket or breast, ribs, shank,

TABLE 6. VOLUME SOLD AND SALE PRICE OF COMPARABLE CUTS OF LAMB, BEEF AND PORK, MEAT RETAIL STORES, SAN ANTONIO, SUMMER 1957

Retail cut	Stores reporting	Total volume sold during week previous to interview	Average volume sold per store reporting	Average sale price per pound[1]
	Number	Pounds	Pounds	Cents
Leg of lamb	25	450	18	67
Beef rump roast	31	2,789	90	57
Cured ham	29	6,412	221	68
Lamb loin chops	24	504	21	91
T-bone or porterhouse	35	4,436	127	82
Pork chops (center cut)	38	3,985	105	81
Lamb rack roast	11	176	16	80
Beef rib roast	29	3,122	108	63
Pork rib loin roast	24	1,514	63	63
Breast of lamb	21	420	20	30
Beef brisket	33	3,842	116	32
Shank of lamb	10	140	14	38
Beef stew meat	31	2,138	69	36
Lamb shoulder roast	29	1,595	55	50
Beef blade and/or crown roast	21	994	47	49
Pork boston butt and/or picnic	28	5,111	182	55
Lamb patties (ground)	27	1,593	59	50
Beef (ground)	11	488	44	51
Pork (fresh sausage)	43	16,045	373	51
Lamb stew meat	35	1,645	47	49
Beef short ribs	14	467	33	38

[1]Weighted average prices prevailing in the stores surveyed at time of interview.

shoulder and stew meat. Most meat retailers reported that they usually reduced the price of these cuts drastically below cost, or ground the meat into lamb or mutton patties along with reducing the price to dispose of these slow-moving cuts.

Volumes Sold and Prices

A large percentage of housewives interviewed stated that they did not purchase lamb because the retail price is too high compared with other meats. During the retail store survey an attempt was made to compare the volume sold by retailers during the week previous to interview and the retail price prevailing in those stores for comparable cuts of lamb, beef and pork, Table 6. With the exception of lamb loin chops, lamb rack roast and stew meat, the average price of lamb cuts in the stores included in the survey appeared to be in line with prices of comparable cuts of beef and pork at the time of interview.

ATTITUDES OF HOUSEWIVES

Information concerning consumption of lamb, mutton or goat was obtained from 1,721 housewives in Waco and 959 housewives in San Antonio. Thirty-five percent of the housewives interviewed in San Antonio and 16 percent of those in Waco had used lamb, mutton or goat sometime during the 12 months before date of interview. The average user interviewed in San Antonio used lamb, mutton or goat about once every 12 days and those in Waco used it about once every 24 days. Housewives in both cities who reported they had not used lamb, mutton or goat at least once during the 12 months previous to date of interview were classified as "nonusers," and those who had served it one or more times were classified as "users."

Characteristics of Lamb Users and Nonusers

Attempts were made to determine the influence of family background, national and racial extraction, age, income and environment or individual consumption and attitudes toward lamb.

Factors Affecting Lamb Consumption

The survey indicated that consumption of lamb, mutton or goat is slightly higher among persons born in Mexico or who are otherwise Latin-Americans than it is among Anglo-Americans. Although 6 out of 10 housewives interviewed in San Antonio were Anglo-Americans, only 3 in 10 of these were classified as users. However, while only 25 percent of the housewives were of Latin-American origin, 4 in 10 of these were classified as users.

Eating habits acquired during childhood appear to be more closely associated with lamb and mutton consumption than does national or racial extraction. Of the housewives interviewed in both cities, only 3 in 10 nonusers stated that lamb was used in the homes of their parents while 7 in 10 stated that it was not used. Among users, more than three-fourths said it was used in the homes of their parents.

San Antonio and Waco housewives in the older age group, those with a higher education and those whose husbands have higher incomes are more likely to eat lamb than are the younger housewives and those having lower incomes and education, Table 7. This was true of Anglo-Americans as well as Latin-Americans.

TABLE 7. RELATIONSHIP BETWEEN USE OF LAMB AND CHARACTERISTICS OF RESPONDENTS[1]

Characteristics	Lamb users		Lamb nonusers		Total	
	Number	Percent	Number	Percent	Number	Percent
Age, years						
Under 50	143	31	318	69	461	100
50 and more	195	41	276	59	471	100
Total	338	36	594	64	932	100
Income level						
Low	184	19	779	81	963	100
Medium	262	21	973	79	1,235	100
High	141	33	288	67	429	100
Total	587	23	2,040	77	2,627	100
Education						
Grammar school	171	19	719	81	890	100
High school	248	21	951	79	1,190	100
College	174	34	341	66	515	100
Total	593	23	2,011	77	2,604	100

[1]Information regarding income and education include all respondents in San Antonio and Waco. Information on age was obtained only from respondents in San Antonio.

While 4 in 10 housewives over 50 years old were classified as users, only 3 in 10 of those under 50 were so classified. Twice as large a proportion of housewives with a college education reported using lamb as did those with either high school or grade school education. The study also indicated that 20 percent more of the families in the higher income bracket were lamb users than were those having medium and low incomes.

Likes and Dislikes about Lamb

Housewives were asked questions concerning the characteristics of lamb which they liked and disliked.

Sixty-nine percent of the housewives classified as users stated that members of their families like lamb. The characteristics of lamb most appealing to users were its flavor, mentioned by 6 in 10 users; its healthfulness, mentioned by 4 in 10 users; and its texture, mentioned by slightly more than 10 percent of the users. Another 20 percent of the users gave a number of general reasons for liking lamb, such as ease of preparation, the variety it adds to meals, its distinctive aroma and the small amount of waste in lamb cuts. Most housewives gave more than one reason for liking lamb.

In describing the flavor characteristic of lamb, housewives used such adjectives as "distinctive," "pleasant," "good," "full or rich," "delicate," "strong" and "sweet." Concerning texture, the terms used most frequently were "tender," "juicy," "lean" and "not greasy."

Lamb users also were asked what dislikes, if any, they or members of their family had toward lamb. Only one housewife in three reported any dislike. Mentioned most frequently were "disagreeable odor," "too expensive," "too much fat" and "do not like the taste."

Objections of Nonusers to Lamb

Three in 10 nonusers interviewed in Waco and about 4 in 10 of those in San Antonio stated that they had used lamb or mutton previously. As to the reasons for not having used them at least once during the 12 months previous to date of interview, 4 in 10 of those former users in Waco and 2 in 10 in San Antonio stated that one or more members of the family disliked the taste. About 1 in 10 in both cities gave one of the following reasons for having discontinued using lamb: the product usually is priced too high, some members of the family do not like the odor and the stores in which they purchase their meats do not handle it.

Although only about 50 percent of former lamb consumers gave specific reasons for not using lamb, their answers indicated a possible course of action to increase consumption. Such action should include the following: (1) have a larger percentage of meat retailers stocking more lamb, (2) give greater store display space to lamb and mutton, (3) obtain more frequent advertising and put more emphasis on general promotion, (4) reduce the price of the better cuts to bring them more in line with comparable cuts of beef, veal and pork and (5) inform housewives as to proper ways of preparing lamb that will result in better flavor and a more agreeable odor.

Influence of Promotional Efforts

During the interview of San Antonio housewives, an attempt was made to determine the extent that lamb and mutton users may be influenced to buy through promotional efforts by retailers. Lamb users in San Antonio were asked if they sometimes buy lamb and mutton because of advertisements on radio, TV or in newspapers, displays in retail meat stores, or through suggestions by a clerk or butcher. Of the 339 housewives classified as lamb users, 1 in 4 stated that newspaper advertising sometimes brought their attention to lamb; 1 in 5 recalled that store displays influenced their decision to buy lamb; and about 1 in 10 referred to radio or TV advertising and to suggestions by the butcher as reasons for their decisions to buy lamb.

It is significant that more than 6 in 10 lamb users interviewed in San Antonio stated that they sometimes decided to buy lamb because of one or more of the four promotional efforts used by meat retailers. This suggests that greater promotional activities by retailers may result in larger sales volumes.

Seasonality of Use

About 15 percent of the housewives in San Antonio and 8 percent of those in Waco serve lamb to their families during certain seasons of the year. Most housewives expressing seasonality in their use of lamb stated that they usually purchase lamb during the spring and winter. The reasons given most frequently were that lamb is cheaper and has a better flavor during the late winter and early spring. This relates closely to the information obtained from meat retailers concerning seasonal variations in their lamb and mutton sales.

Availability

About one in four lamb users in each city reported that lamb is not available throughout the year in the stores where they purchase their meat supplies. These housewives indicated that lamb generally was not available during the fall and winter.

Opinions of Price

Housewives in both cities were asked to state their opinion regarding the price of lamb compared with the price of beef. Forty-six percent of lamb users in San Antonio and 54 percent of those in Waco stated that lamb generally was priced higher than beef in the meat stores they

TABLE 8. COMPARISON OF FLAVOR AND TEXTURE OF LAMB WITH BEEF AND PORK, SAN ANTONIO

Rating of lamb	Texture				Flavor			
	Beef		Pork		Beef		Pork	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Better than	103	30	105	31	112	33	110	32
As good as	184	54	152	45	173	51	146	43
Poorer than	39	12	51	15	44	13	57	17
Do not know and no answer	13	4	31	9	10	3	26	8
Total	339	100	339	100	339	100	339	100

patronized. However, 27 percent of the housewives in Waco reported that lamb and beef prices were about equal, and 7 percent stated that lamb usually is priced lower than beef. In San Antonio 23 percent of the housewives interviewed stated that generally the price of these two meats was about the same and 12 percent stated that lamb generally was priced lower than beef. Nineteen percent of lamb users in Waco and 12 percent of those in San Antonio did not give their opinion on the relative prices of beef and lamb.

No relationship was apparent between levels of income and the proportion of housewives who reported lamb prices higher, about equal or lower than beef.

Grade

The question was asked, "Is the lamb you buy sold on a graded basis?" Ninety-four percent of San Antonio housewives and 95 percent of those in Waco who gave a definite reply answered, "yes." These comprised 43 percent of Waco housewives and 45 percent of those in San Antonio. However, about 52 percent of all lamb users in each city could not answer this question definitely. Of those who gave "yes" as their definite answer, 10 percent of the San Antonio users and 51 percent of those in Waco stated that the grade of lamb was Prime, 59 percent of the San Antonio and 28 percent of the Waco housewives reported Choice as the grade; and 31 percent of the San Antonio and 21 percent of the Waco housewives stated that they usually purchase Good grade of lamb. This reflects the preference among San Antonio meat retailers for Choice grade of lamb and mutton carcasses.

Other Factors Relating to Acceptability

To obtain information from lamb users that would indicate the relative acceptability of lamb as compared to beef, San Antonio housewives were asked to state their opinion of the texture and flavor of lamb compared to beef and pork, their opinion of the relative food values and prices, and their knowledge of and confidence in their skill in preparing lamb compared to beef and pork.

Flavor and Texture

The information obtained indicated that San Antonio lamb consumers compare lamb favorably with beef and pork in both texture and flavor, Table 8. In these two categories lamb was reported as good or better than beef by 84 percent of the users and as good or better than pork by 75 percent of the users.

Food Value

A housewife's opinion of the relative food value of several items in the grocery basket sometimes affects her decision to substitute one item for another. In the case of meat, other factors being equal, opinion of relative food value may be a factor in a housewife purchasing one type of meat in preference to another.

Information obtained from lamb users indicates that 57 percent of the housewives interviewed in San Antonio and Waco think that lamb has as much or more food value than beef, 55 percent expressed the opinion that lamb has as much or more food value than veal and 56 percent of the lamb users interviewed in San Antonio believe that lamb has as much or more food value than pork, Table 9.

Knowledge and Ease of Preparation

A housewife's knowledge of preparing a particular type of meat or the difficulty in preparing it often may affect her decision to serve it to her family. Of the 339 lamb users interviewed in San Antonio, 65 or 19 percent, stated that lamb was more difficult to prepare than either beef or pork and 270, or 80 percent, stated that lamb was not more difficult to prepare. Four housewives did not give an answer on this subject. Eight out of 10 users also stated that lamb

TABLE 9. OPINION OF FOOD VALUE OF LAMB COMPARED WITH BEEF, VEAL AND PORK

Meat and opinion	Waco users		San Antonio users	
	Number	Percent	Number	Percent
Beef				
More	49	18	93	27
Same	92	34	122	36
Less	62	23	50	15
Do not know	66	25	74	22
Total	269	100	339	100
Veal				
More	49	18	118	35
Same	79	30	91	27
Less	51	19	34	10
Do not know	90	33	96	28
Total	269	100	339	100
Pork				
More			120	35
Same			35	10
Less			73	21
Do not know			111	33
Total			339	100

is not more time consuming to prepare than either beef or pork.

Seventy-three percent of the lamb users interviewed in Waco and 78 percent of those in San Antonio reported that they know how to prepare lamb as well as or better than they do beef. However, one-fourth of the Waco users and one-fifth of the San Antonio users stated that they did not know how to prepare lamb as well as they did beef. The proportion of housewives who reported their knowledge of preparing lamb was either better, as good, or not as good as their knowlege of preparing beef did not vary greatly with respect to education, nationality and racial extraction.

Reasons for not Serving More Lamb

Sixty percent of the 339 users interviewed in San Antonio stated that they would like to serve more lamb to their families. Of those who gave reasons for not serving lamb more often than they do, 52 percent reported that they considered lamb too expensive to serve more often. One-fourth stated that they cannot always find it in the meat stores where they shop, and 16 percent reported that one or more members of the family did not like it. Among other reasons given were that good quality lamb is not available, dislike the cuts available in the stores, do not know how to cook it, have no time to cook it, and have to buy too much at one time—cuts are too large.

Cuts Used and Weights Preferred

Six in 10 lamb users interviewed in San Antonio reported that they used leg of lamb an average of twice during the 12 months previous to date of interview. Another 28 percent stated they used loin chops an average of three times. A smaller number of housewives reported using breast of lamb an average of four times, shoulder roast five times and lamb patties an average of four times. The average weights of lamb cuts that these consumers reportedly prefer are: leg, 2.5 pounds; chops, 10.5 ounces; breast, 2 pounds; and patties, 6.4 ounces.

Purchasing lamb and mutton carcasses of the grade and size in greatest demand and cutting those carcasses into the preferred cut-size and weight may be a step forward in promoting increased lamb and mutton consumption.

IMPORTANCE OF MILITARY PURCHASES

Since the San Antonio area is a relatively important military center, information was obtained on lamb and mutton consumption by military personnel eating at military posts or otherwise patronizing military commissaries.

Information obtained indicates that military personnel stationed in and around San Antonio are very low lamb consumers. Officials concerned with meats procurement indicated that military families who purchase at military commissaries in the area consume less than 3 pounds of lamb per family per year. Indications also are that military personnel eating at mess halls have such a universal dislike for lamb that when it is placed on military menus by military headquarters, local officials make substitutions for it.

Military officials attribute the dislike of military personnel for lamb to the fact that many troops spent several months or years in England and other heavy lamb and mutton-eating countries during World War II. The reasoning is that they were given so much lamb and mutton that many of them developed a psychological dislike for it.

Military officials report no problem in obtaining an unlimited quantity of lamb through the Armed Forces Quartermaster Market Center, or from local purchases which they are allowed to make, should a requisition for a shipment of lamb not be filled.

POSSIBILITIES FOR INCREASING AND EXPANDING DEMAND

Lamb and mutton apparently have not received their due share of advertising and promotion by meats retailers. The American Sheep Producers Council, Inc. is actively engaged in an advertising and sales promotion campaign designed to spread and increase the demand for lamb. During the summer of 1956 that organization, with the assistance of private advertising agencies and food editors, conducted a lamb advertising and promotion campaign in a California city to test consumer reaction to lamb promotion. The basic results of that study were:

1. The retail store analysis suggests an interconnection between display space, point-of-sale advertising and overall promotion. These factors are so interrelated that adequate space and point-of-sale advertising must accompany the general promotional campaign for the promotional effort to be successful.

2. Lamb has three characteristics which are outstanding in their appeal to users. Seven in 10 liked it because of its flavor; 4 in 10 mentioned its healthfulness; and 3 in 10 mentioned its tenderness. About 1 in 4, however, expressed some dislike for its flavor; 1 in 5 said the price was too high and a similar proportion felt that lamb was too fat and greasy. As reasons for not using lamb, about 4 nonusers in 10 said they considered the flavor unpleasant, 2 in 10 referred to the odor as disagreeable and another 2 in 10 said that some other member of the family objected to eating lamb.

Thus, there is close correlation between the findings of this California study and results of the San Antonio and Waco consumer survey.

The California study further indicated that lamb sales increased during the promotion campaign in those retail stores where increased display space was given to lamb, in stores where lamb promotional material was used and in those stores which used newspaper advertising and reduced lamb prices. A 1-percent change in the proportion of display space allocated to lamb was associated with .9-percent change in sales.

Demand in Relation to Advertising and Promotion

In any effort through promotion or advertising designed to increase the demand for lamb, both the characteristics of consumers and the nature of demand for lamb must be considered. The aim of all advertising or other promotional activities is to influence demand for the product in such a manner that an increased amount will be sold at the same price or the same amount will be sold at higher prices. If, through promotional or other efforts, greater demand can be created for a product, the result will be that more will be sold at any given price. The objective with lamb and mutton should be to spread and increase the demand, and to make the demand less sensitive to price changes.

The consumption of products for which the elasticity of demand is relatively large has greater possibility of being increased through advertising and promotion provided the consumers' value concept of the commodity can be changed, and they are made aware of the value of the product to them. A number of studies indicate that the demand for lamb ranges from moderately to highly responsive with respect to price changes. One analysis indicates that when prices fluctuate within the middle range a 1-percent increase in the price of lamb results in a decrease in consumption of about 2 percent, and when prices are either very high or low, a 1-percent increase in price would result in a decrease in consumption of about 4 percent. More recent analysis, which includes extremes in price fluctuations, indicates that a 1-percent increase in price results in a 2-percent decrease in lamb consumption.

The demand for lamb appears relatively elastic. Therefore, increased purchases of this meat may be influenced through promotional efforts designed primarily to increase its utility so that consumers will be willing to pay more for it. Advertising and promotion of lamb also should emphasize those favorable characteristics of lamb concerning consumer opinion, attitudes and impressions while attempting to dispel consumers' misconception about lamb.

Other Considerations

Meat retailers and others in the livestock industry may be concerned with whether an increase in lamb and mutton consumption due to promotional efforts will result in increased total consumption of meat, or if it will result in a shift in consumption from other meat to lamb and mutton. The answer is not available, but probably some of both would result. However, the United States per capita consumption of lamb and mutton is so small compared with the consumption of all other meat that, assuming no increase in total meat consumption, increasing per capita consumption of lamb and mutton 100 percent would not decrease total consumption of other meat by more than 1.4 percent.

The availability of lamb in the retail stores included in the survey is such that if demand is to be increased a greater proportion of meat retailers should handle it and they should handle the quality desired by consumers. Any promotional campaign should have the support and cooperation of retailers and should be broader than single cities. Since many retailers have not pushed lamb sales, the industry should lead in promoting that product. Greater success might be forthcoming if promotion campaigns first are started intensively in the heavy consuming areas and moved into lighter consuming areas later.

ACKNOWLEDGMENTS

Appreciation is expressed to the management of the 116 fresh meat retailing establishments interviewed in San Antonio, Texas, for furnishing information on their meat handling practices and to consumers interviewed in Waco, Texas, and San Antonio, for their cooperation in furnishing information on their lamb and mutton consumption habits.

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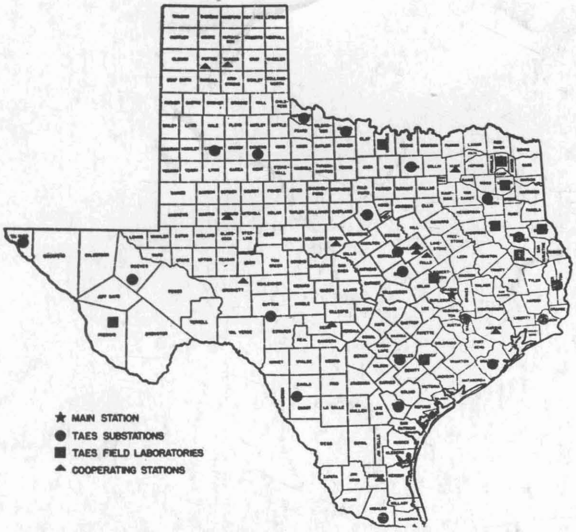

Location of field research units of the Texas Agricultural Experiment Station and cooperating agencies

State-wide Research

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The Texas Agricultural Experiment Station is the public agricultural research agency of the State of Texas, and is one of ten parts of the Texas A&M College System

ORGANIZATION

IN THE MAIN STATION, with headquarters at College Station, are 16 subject-matter departments, 2 service departments, 3 regulatory services and the administrative staff. Located out in the major agricultural areas of Texas are 21 substations and 9 field laboratories. In addition, there are 14 cooperating stations owned by other agencies. Cooperating agencies include the Texas Forest Service, Game and Fish Commission of Texas, Texas Prison System, U. S. Department of Agriculture, University of Texas, Texas Technological College, Texas College of Arts and Industries and the King Ranch. Some experiments are conducted on farms and ranches and in rural homes.

OPERATION

THE TEXAS STATION is conducting about 400 active research projects, grouped in 25 programs, which include all phases of agriculture in Texas. Among these are:

Conservation and improvement of soil	Beef cattle
Conservation and use of water	Dairy cattle
Grasses and legumes	Sheep and goats
Grain crops	Swine
Cotton and other fiber crops	Chickens and turkeys
Vegetable crops	Animal diseases and parasites
Citrus and other subtropical fruits	Fish and game
Fruits and nuts	Farm and ranch engineering
Oil seed crops	Farm and ranch business
Ornamental plants	Marketing agricultural products
Brush and weeds	Rural home economics
Insects	Rural agricultural economics

Plant diseases

Two additional programs are maintenance and upkeep, and central services.

Research results are carried to Texas farmers, ranchmen and homemakers by county agents and specialists of the Texas Agricultural Extension Service

AGRICULTURAL RESEARCH seeks the WHATS, the WHYS, the WHENS, the WHERES and the HOWS of hundreds of problems which confront operators of farms and ranches, and the many industries depending on or serving agriculture. Workers of the Main Station and the field units of the Texas Agricultural Experiment Station seek diligently to find solutions to these problems.

Today's Research Is Tomorrow's Progress