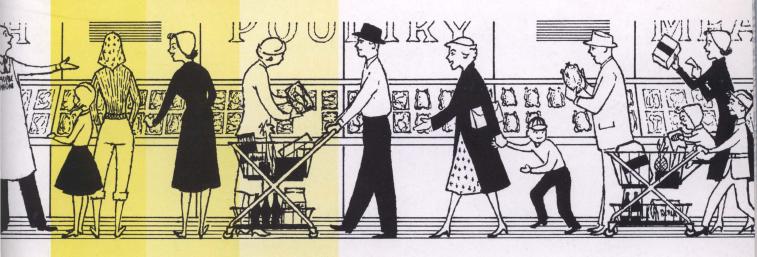


Preferences of
Chain Food Store
Shoppers
in Buying Chicken

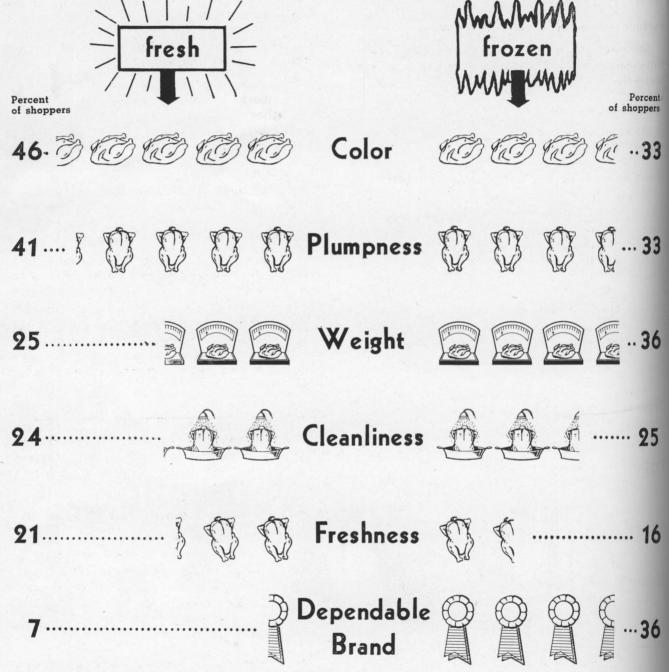




TEXAS AGRICULTURAL EXPERIMENT STATION R. D. Lewis, director, college station, texas



## Shoppers' Considerations in Chicken Buying



What the shoppers look for when buying a chicken. (Percent includes all shoppers giving first or second consideration to these characteristics.)

## Summary and Recommendations

#### WHAT IS FOUND

#### Factors looked for in selecting chickens

In order of importance they are skin color, plumpness, weight, freshness, cleanliness and brand name.

#### Broiler skin color preferred

As many shoppers want yellow-colored broilers as they do light-colored broilers.

#### Brand name as a merchandising factor

When buying fresh chicken, only about 5 percent of the shoppers considered the brand name. More attention is paid to brand on cut-up prepackaged chicken. When buying frozen chicken, brand name was important to 3 out of 10 shoppers.

#### Size of chicken preferred

Barbecuing	or	broiling—1 to 2½	pounds
Frying—		2 to 2½	pounds
Baking-		3½ to 5	pounds
Stewing-		1 to 5	pounds

# Types of chickens shoppers prefer according to use

according to	use	
Use	Type of chicken	Percent preferring
Frying	Whole dressed	46
	Whole cut-up	45
	Parts	9
Barbecuing	Whole dressed	82
	Whole cut-up	14
	Parts	4
Broiling	Whole dressed	80
	Whole cut-up	15
4	Parts	5
Baking	Whole dressed	97
	Whole cut-up	3
Stewing	Whole dressed	49
	Whole cut-up	39
	Parts	12

#### Frequency of buying chicken

Two-thirds of the shoppers buy chicken about once a week. One in six buys oftener than once

a week. One in five buys only monthly or less frequently.

# Frequency of buying chicken as related to characteristics of the shopper's family

Low-income shoppers, as well as Negro and Latin-American families, buy more frequently than other shoppers because of limited refrigerator storage space and the economy of poultry meat prices.

High-income shoppers are more particular about plumpness in chicken; they can afford to buy more at a time, and they store it longer.

#### Home storage of chickens

Ninety percent of the customers keep a chicken 3 days or less before it is cooked. Half of the shoppers store chickens in the freezer compartment of their refrigerator. One in four places it in the meat drawer of the refrigerator. One in ten simply puts it on a shelf in the refrigerator. Only 7 percent store chickens in a deep freeze cabinet. Eleven percent of the shoppers had a deep freeze cabinet.

#### Home freezer space available for frozen foods

Fifty pounds or more of freezer space is available to 42 percent of the high income shoppers, 23 percent of the medium income and 12 percent of the low income shoppers.

#### Consumer attitudes toward frozen chicken

Half of the shoppers that had recently bought frozen chicken were dissatisfied with it. The main complaint was that it was flavorless.

#### WHAT IS RECOMMENDED

Check the skin color preferences of shoppers in individual stores.

Feature especially plump broilers in the high-income area stores.

Feature a special display of 1 to 2½-pound fryers especially cut for barbecuing or broiling.

Emphasize the tie-in between a brand name, high quality and freshness in cut-up prepacked fresh chicken. Customers are more brand receptive on cut-up chicken packages.

Frozen chicken orders should be geared so that stock is not kept more than 1 or 2 months before sale. Meat flavor decreases noticeably after 90 days according to consumer panel taste tests. Promote brand name as related to a guaranteed fresh frozen bird held for a very short storage period.

Assure shoppers that cut-up chicken is really fresh. Many buy whole chickens to cut-up because they think cut-up chickens at the store may be from leftover supplies.

Cut up broilers the way shoppers want them. Many buy whole chickens and cut them up because they do not like the way they are pre-cut.

A recent survey in Dallas, Texas, indicates that broilers cut-up into 10 or 13 pieces are preferred by many shoppers over the more common retail store method of cutting for only 6 pieces.

Price specials on broilers provide a good customer attraction. Most consumers buy weekly and very few try to store chicken for later use.

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# Preferences of Chain Food Store Shoppers in Buying Chicken

G. J. MOUNTNEY, R. E. BRANSON and H. V. COURTENAY\*

Through the success of modern food merchandising and a modern broiler industry, tender flavorful broiler-fryer chickens appear year-round on the dinner tables of American homes and public eating places. The strides made in expanding the consumer market for broilers are indicated by the rapid increase in the use of this food.

Americans consume about 1 pound of chicken for every 6 pounds of red meat. In 1940 the average consumption of broilers was only about 2 pounds per person. By 1957 the average was 19 pounds, Figure 1. Meantime the consumption of old type farm flock chickens and hens declined from 12.2 to 6.4 pounds per person. Total consumption of all forms of chicken grew from 14.1 pounds in 1940 to 25.6 pounds in 1957. This is an increase of 45 percent. During the same period, consumption of red meats increased from 142.4 pounds to approximately 160 pounds, an increase of only 12 percent.

This publication presents information from a consumer survey designed to provide retailers with added information regarding shoppers' preferences for chicken and the criteria they use in making selections. It is a companion publication to Texas Agricultural Experiment Station Bulletin 895, "Consumer Attitudes and Preferences Regarding Chicken," which was prepared for broiler producers, their promotional organizations and processors.

## What the Shopper Looks for When She Buys Fresh Chicken

Most shoppers in chain food stores look for six things, other than price, when buying a chicken. They are, in order of importance, the color of the skin, plumpness, weight, freshness, cleanliness and brand name. The relative importance of these characteristics to shoppers is shown on page 2.

#### Skin Color

Nearly half of the shoppers mentioned skin color as their first or second consideration when

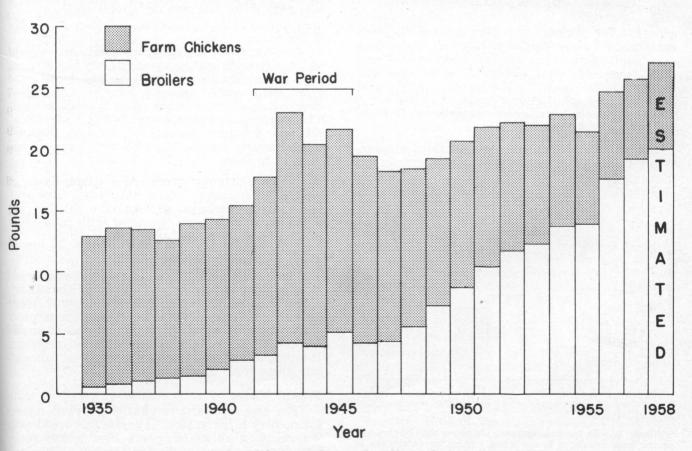
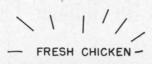
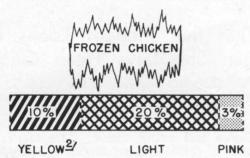


Figure 1. U. S. per capita consumption of chickens. Source: Agricultural Outlook Charts, USDA, 1957 and 1959.

<sup>\*</sup>Respectively, formerly assistant professor, Department of Poultry Science, and professor and assistant professor, Department of Agricultural Economics and Sociology.







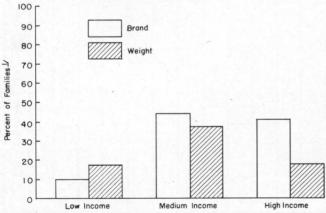
<sup>1</sup>Forty-five percent of the shoppers said they considered skin color either first or second in selecting a fresh chicken; thus these percentages total only 45 percent.

<sup>2</sup>Thirty-three percent of the shoppers buying frozen chicken selected by skin color as a first or second factor.

Figure 2. What skin colors shoppers prefer.

shopping for chicken. A yellow-colored bird was preferred by about the same number of shoppers as a light-colored one. A few shoppers favored pink-colored chickens, Figure 2. The latter apparently is the result of low quality, poorly bled broilers being sold in some areas. Consequently, these consumers have become accustomed to them and now accept them as their preference.

Most broilers previously were scalded at processing plants at temperatures hot enough to cause



<sup>1</sup>Percent considering weight or brand as first or second factors in buying.

Figure 3. As incomes increase shoppers shift buying emphasis from weight to brand when buying frozen chicken in chain stores.

the removal of the thin outer layer of skin. This outer skin layer carried the natural skin coloryellow or white. Therefore, birds scalded in this manner came out with a white skin. With lower scalding temperatures being used by processing plants, the outer skin remains to show the white or yellow skin grown by the broiler.

It is believed that some housewives prefer yellow-skinned birds because they think the yellow color indicates a high quality broiler. Some younger housewives watching their figures and being calorie conscious may associate a yellow color with too much fat. The Texas Agricultural Experiment Station is conducting further research on skin-color preference and consumers reasons for their preferences.

#### Plumpness

Almost as many shoppers, nearly half, looked for plumpness in selecting a chicken as considered skin color. They generally favored a medium amount of fat. Younger housewives looked somewhat less at plumpness than did the older ones. Younger shoppers—usually more calorie conscious—associate plumpness with too much fat.

High-income and low-income shoppers considered plumpness about equally as a first consideration in selecting a bird. However, more high-income shoppers mentioned plumpness as a second selection factor. Usually high-income shoppers considered quality more carefully with less regard for the product's total cost.

#### Weight

One-fourth of the shoppers mentioned weight as important in making a selection. Housewives with large families stressed weight more than those with small families. Younger housewives checked weight first more often than older ones. The younger shoppers generally are budget conscious. A larger number of servings, because of children in the family, also may be more important to them.

White shoppers purchased on the basis of weight more than Negro shoppers. Research underway is designed to learn the relative importance of weight as compared with total price in shoppers' selections of chicken.

#### Freshness and Cleanliness

Freshness and cleanliness were each considered by a fifth of the customers. The fact that fewer housewives were primarily concerned with these indicates their confidence in the efficient processing, careful handling and speedy merchandising practiced by Texas processors and retailers. It is important that food stores continue to maintain these high standards.

#### **Brand Name**

The trend toward emphasizing brand names for poultry is increasing. Despite this trend only 7 percent of all the shoppers first looked for a brand name when purchasing chicken. This lack of interest may reflect a need for more emphasis on brand names in store advertising. Many advertisements in newspapers simply say fryers or chickens with no attention given to the brand. Because many fryers are pre-cut and packaged at the store, the brand identity of the processing plant is seldom displayed. Brand name tags often are lost when chickens are cut up and packaged at the store. Conversely, packages of wings often have a tag on every piece. This would indicate a need for the brand name being carried on the transparent wrapper.

# What the Shopper Looks for When She Buys Frozen Chicken

Less than one shopper in three interviewed had ever purchased a frozen chicken. Of this number half expressed dissatisfaction with the chicken they purchased. More research is needed to determine the underlying reasons for such dissatisfaction.

#### **Brand Name**

One out of three shoppers for frozen chicken looks either first or second for a dependable brand name. Because most frozen chickens are sold in a closed package, brand name is more important than it is for fresh chicken.

Young housewives and those with a college education are more brand conscious than the other age or educational groups. Consumers with high and middle incomes especially mentioned brand name as a first consideration. These two income groups constitute the majority of buyers of frozen chicken. Low-income shoppers looked at cleanliness, skin color and weight about equally. Brand name was less important. Low-income shoppers apparently buy birds wrapped in film rather than those pre-packaged in boxes.

#### Weight

Twenty-two percent of the shoppers for frozen chicken considered weight first when they purchased. It was a second consideration of another 14 percent of the customers. Weight was stressed more by low and medium-income as well as by larger families. The tendency to shift buying emphasis from brand name to weight as the incomes of shoppers decreases or as family size increases is being studied further, Figure 3.

Weight can be the most important criteria for low and middle-income families because of a desire to keep the total cost of the purchase low. It is important for stores that serve these families to check the size and total price range preferred in order to maximize sales.

#### Skin Color

Color is important in selecting a frozen chicken, but it is secondary to both brand name and weight. This results from most frozen chickens being sold in closed box containers. Only 15 percent of the frozen chicken shoppers said that they first looked for color; another 18 per-

cent gave color as the second characteristic they checked. At least a third of the buyers consider color, when possible, before buying. Light color was a term often used to express preference for the skin color of frozen chicken. Negro shoppers were more concerned with color than white shoppers. They preferred a light-colored frozen bird which is in contrast to their preference for a yellow skin in fresh chickens.

#### Cleanliness

Twelve percent of the shoppers for frozen chicken mentioned cleanliness first as important in making a selection. Another 13 percent gave it second consideration. Actually a prospective purchaser usually has little opportunity to check cleanliness because the birds usually are merchandised in a closed box. Low-income shoppers stressed cleanliness more than the other income groups. This suggests that stores in low-income areas should check the quality of their merchandise more closely.

#### Plumpness and Freshness

Plumpness was the first consideration of only 10 percent of all shoppers for frozen chicken. A further 23 percent gave it second consideration. About ten times as many high-income consumers as low-income ones were concerned with plumpness. It is suggested that food stores in high-income areas, especially, should purchase birds with adequate fleshing.

Only about 6 percent of the shoppers mentioned freshness as a first consideration. This is to be expected, for freshness in frozen chickens is judged by other factors than those used for fresh chickens.

## The Size of Chickens Shoppers Want

The size of chicken looked for varies rather closely with the planned method of cooking. Small chickens generally were popular for broiling and barbecuing, medium-sized chickens for frying and large ones for stewing and baking, Figure 4.

#### Frying

Most shoppers prefer a 2 to  $2\frac{1}{2}$ -pound broiler for frying. Generally, a bird weighing about 2 pounds was popular for weekday meals and one weighing 2 to  $2\frac{1}{2}$  pounds for Sundays and special occasion meals. Almost no demand existed for a frying chicken over  $3\frac{1}{2}$  pounds.

#### Baking

Most shoppers preferred larger birds for baking than for frying or barbecuing, especially when the meal was a special occasion one where a large number of servings were desired. Slightly more than half of those interviewed who baked chickens preferred a  $3\frac{1}{2}$  to 5-pound bird for this purpose. Most of the others chose a  $2\frac{1}{2}$  to  $3\frac{1}{2}$ -pound bird, which is within the fryer weight range.

Large families were no more inclined to purchase heavier chickens for baking than were small families. Only 3 percent of the households with one or two members wanted a baking chicken of more than 5 pounds for Sunday dinner and only 7 percent of the large families wanted this size.

The higher the family income, the greater is the chance of a large-sized chicken being purchased for baking. About two out of five families with incomes under \$3,000 a year buy chickens that are only  $3\frac{1}{2}$  pounds or less for baking. Only one in four high-income families buys a chicken this small for that purpose.

A 4 to 5-pound bird usually is preferred for baking. About 7 out of 10 high-income shoppers want this size and about half of the low or middle income shoppers. Thus, food stores in high-income areas should have a large demand for 4 to 5-pound baking chickens and a small demand for lighter baking weights. In low-income areas where half the buyers wanted a 3½-pound size or less, a wider range of weights for baking is needed. Their weight preferences hold for both Sunday dinner and weekday evening meals, the two occasions when baked chicken is served most often.

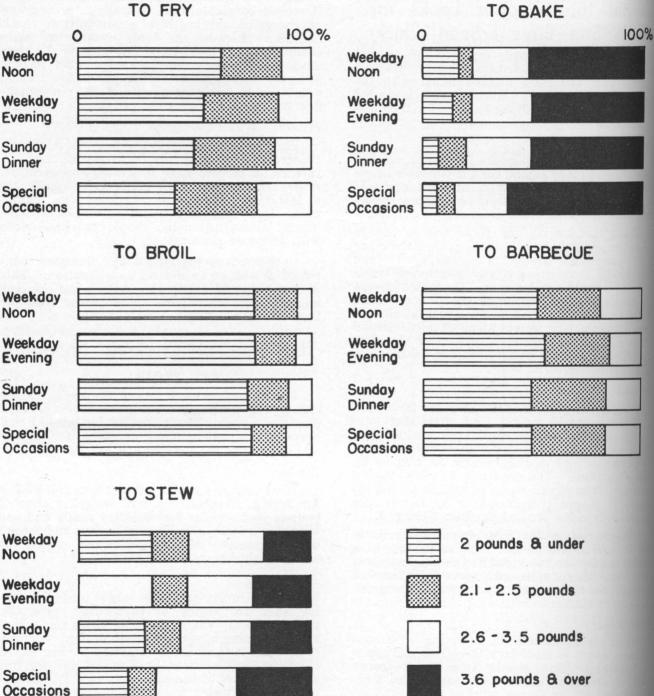


Figure 4. Percentage of shoppers preferring indicated sizes of chickens.

#### Broiling

A fourth of the housewives broil chickens—at least occasionally. Three-fourths of these want a  $1\frac{1}{2}$  to 2-pound weight. This also is the size recommended by most home economists as ideal for broiling. Even for Sunday dinner, where a larger bird may be needed, only 9 percent prefer a broiler over  $2\frac{1}{2}$  pounds. A small broiler is more tender and easily cooked than a large one. A small broiler cut in half also lends itself better to making two proper size individual servings than does a large one.

The weight preferred for broiling did not vary by the characteristics of the shopper making the purchase.

Stores would do well to explore the possibilities of a separate promotional display section for small-sized birds cut up especially for broiling and barbecuing.

#### Barbecuing

Barbecuing on outdoor charcoal grills has increased in popularity in recent years, creating a new market for chickens. For barbecuing, a chicken weighing  $1\frac{1}{2}$  to  $2\frac{1}{2}$  pounds was preferred by 8 out of 10 people. Small families favored the 2-pound size; larger families purchased the 2 or  $2\frac{1}{2}$ -pound sizes about equally.

Low-income shoppers purchased chickens weighing over  $2\frac{1}{2}$  pounds nearly twice as often as high-income shoppers.

Although chickens weighing 2 to  $2\frac{1}{2}$  pounds serve both the fryer and barbecuing consumer market, they should be cut up differently for the two purposes.

#### Stewing

The weight of chicken preferred for stewing varies widely. The preferred sizes, in order of popularity, were 2 pounds, 3 pounds and  $2\frac{1}{2}$  pounds. About 7 out of 10 housewives preferred weights within this range. The remaining 3 out of 10 preferred weights heavier than 3 but not over 5 pounds.

Shoppers in high-income area stores are more likely to buy a  $3\frac{1}{2}$  to 5-pound chicken for stewing than are those in low-income area stores.

Large families had a slight tendency to buy heavy chickens for stewing. Housewives with only grade school educations generally purchased smaller chickens than those with college educations. This is possibly because the grade school educated shopper often has a lower food budget and less knowledge of cost-net-weight values in purchasing chicken.

### How Frequently Consumers Buy Chicken

About two out of three poultry shoppers in chain food stores buy chicken once a week. Another sixth of the shoppers buy more than once a week. The remaining 19 percent purchased

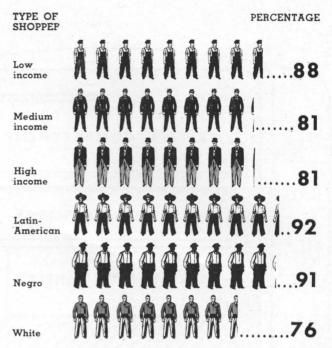


Figure 5. Most consumers shop for chicken once weekly or oftener.

chicken only one to three times each month or less.

The frequency of buying varied with age, income, race and the size of the family for whom the shopping was done.

Shoppers over 60 years of age purchase chicken more frequently than younger people. Limited refrigerated storage space in small apartments or homes where older people frequently reside often necessitates frequent small purchases. Greater consumption of chicken by elderly people because of its digestibility and nutritive value is also a factor. Many older people live on limited retirement incomes. Lowincome shoppers usually purchase chicken more frequently than those with medium or high-incomes, Figure 5.

Shoppers with grade school or high school educations buy chicken more often than college graduates. This too is largely a matter of differences in income.

Negro and Latin-American families buy chicken more frequently than other families, Figure 5. Over 90 percent of the Negro and Latin-American families purchase chicken once or more per week whereas only 76 percent of the other families buy this often. More frequent purchases by Negro and Latin-American families are partly the result of chicken being the preferred meat of these families. Retail stores serving these groups should have a comparatively high demand for chickens, relative to other meats,

<sup>&</sup>lt;sup>1</sup>Branson, R. E., George Mountney, "Consumer Attitudes and Preferences Regarding Chicken;" Texas Agricultural Experiment Station Bulletin 856, May 1958.

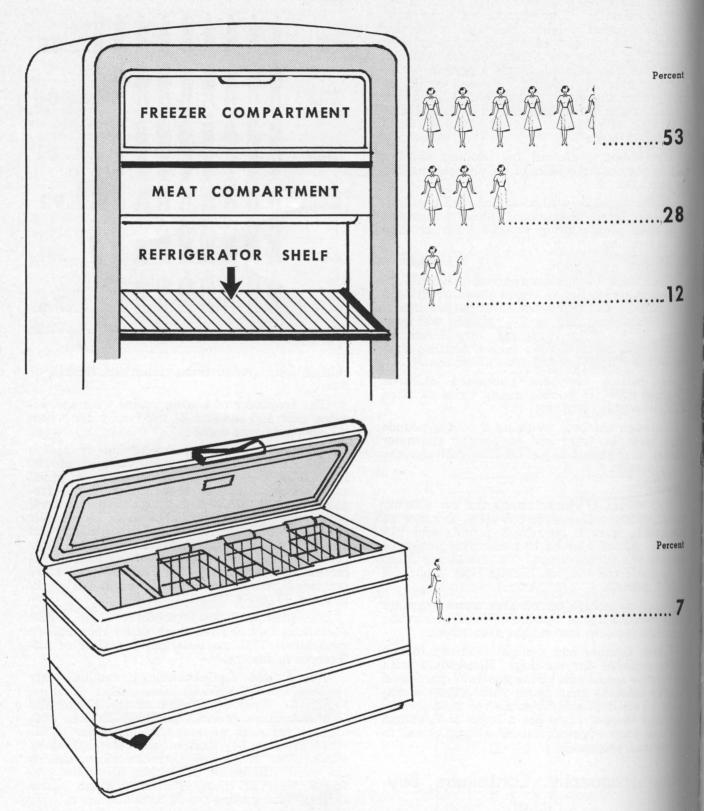


Figure 6. Where housewives store fresh chicken.

if chickens are properly merchandised. Promotion of chicken, particularly at special prices, should find a ready demand among these customers.

Homemakers whose husbands are professional men and business executives purchase chicken less often than those with husbands employed in other occupations, although they usually buy more when purchasing. These shoppers tend to have a broad formal education which makes them acquainted with a wide variety of foods. Consequently, merchandising of chickens requires more effort and promotion among high-income customers than among others.

## Where Housewives Store Chicken

More than half of the housewives store fresh chicken either in the freezer compartment of their refrigerator, or in a freezer chest, Figure 6. However, the deep freeze was used by only 7 percent of those interviewed.

Where fresh unfrozen chicken is stored is largely determined by the facilities available in the home. Less than half as many low-income as high-income families store chicken in a freezer cabinet. Even among families in high-income shopping areas, only 1 in 10 places fresh chickens in a freezer chest. The practice of buying several fryers at special sale prices and putting them in a deep freeze is not prevalent. Thus, having "deep freeze specials" on fryers apparently offers limited sales potentiality.

Fifty-three percent of the food store shoppers placed fresh chicken in the freezer compartment of the refrigerator. Another 28 percent used the meat compartment. Considering the length of time most chickens are held before cooking—3 days or less—these are the most convenient storage places.

Refrigerator shelves, which are not as desirable as meat compartments, were used for storage in 1 out of 4 low-income homes. In contrast, about 1 out of 10 high-income households stored fresh chicken on the refrigerator shelves, Figure 7.

Frozen chickens usually are stored in the freezer compartment of the refrigerator. However, 1 person in 6 stored them in the deep freeze. The meat compartment of the refrigerator was used by another 1 in 6 shoppers. Since frozen chickens held in the meat compartment will thaw, quality may be damaged if they are held very long before cooking.

## Length of Time Chicken Is Stored

Fresh chicken was stored only 1 to 3 days by 90 percent of all the shoppers interviewed. For the remaining 10 percent of the shoppers, 4 to 9 days was the usual storage period.

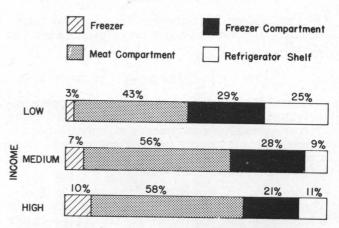


Figure 7. Where shoppers with different incomes store fresh chicken.

Frozen chicken is not stored much longer. Seventy-five percent of the frozen chickens are cooked within 1 to 3 days; less than 10 percent were kept more than 9 days. Apparently, when consumers purchase frozen chicken, it is not because they want to hold it longer than fresh ones.

The education, income and the amount of food storage at a shopper's disposal affect her buying habits and in turn the length of time she stores chicken. Only 7 percent of the low-income families usually kept fresh chicken more than 3 days before cooking. However, a fourth of the high-income shoppers kept chicken that long. Home storage of fresh and frozen chicken for as long as 1 to 2 weeks was also more prevalent among the high-income shoppers than among others, Figure 8.

It appears likely that, as the average shoppers' income and education continue to rise year by year, bought chickens will be stored in the home longer than they are at present. Consequently, more emphasis will have to be placed on prolonging shelf life of the product.

Packages of chicken parts are stored in the home about the same length of time as fresh

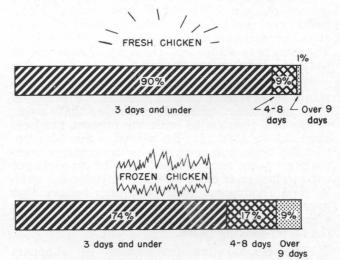


Figure 8. Length of time chain food store shoppers usually store chicken.

## Size of Storage Space

About 30 percent of the poultry shoppers interviewed in Houston food chain stores had home freezer storage compartments of only 25 pounds or less. This is usually insufficient space to store a chicken after allowing space for ice trays and a few other frozen food items.

Another 17 percent had no freezer space. Therefore, about half of the poultry customers interviewed had limited or no freezer space for chickens. If storage is attempted, space has to be made in a cramped freezer compartment or the chicken put in the meat compartment, or drawer of the refrigerator, or simply placed on a refrigerator shelf.

An additional 42 percent of the families had only 25 to 100 pounds of refrigerator freezer space, including freezer lockers. Storage is more practical for them but still must be considered as limited, particularly for any single food such as chicken, Figure 9.

These findings confirm the conclusion previously stated that special prices on chicken will increase net sales more over a time period than comparable specials on some beef or pork items. Since freezer facilities generally are not adequate for buyers to accumulate a stock for future use, any extra chickens purchased usually go into immediate use. Extra uses can be for picnics, special occasion meals or for outdoor barbecuing. Special sales can feature these promotional themes to give customers added motivations to buy.

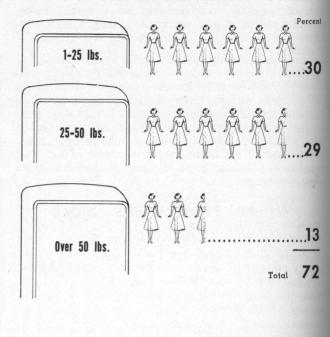
## Whole Chicken Versus Cut-up Chicken

The popular method of preparing fried or stewed chicken is to cut it into several pieces before cooking, yet half of the shoppers who purchase chicken for these uses buy a whole bird. The shoppers either cut them up themselves or have the butcher cut them up.

Research is in progress to determine why shoppers purchase in this manner. Pretests of this marketing research indicate that many people are dissatisfied with the present prepackaged cut-up chicken. Splintered bones plus unsuitable kinds and sizes of cuts are common complaints. Some shoppers feel that the prepackaged cut-up chicken is more difficult to judge for quality and freshness. Some shoppers believe that poor quality, stale or unpleasant looking pieces of cut-up chicken are apt to be concealed under the better-looking parts.

The comparative percentages of shoppers buying whole and cut-up chicken are shown in Figure 10.

#### FREEZER COMPARTMENT





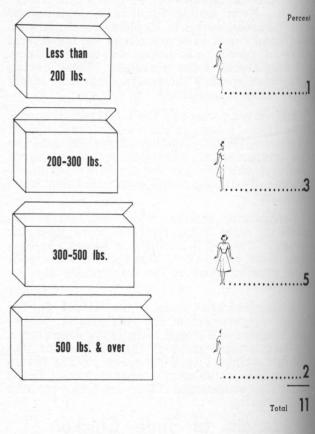


Figure 9. Size of storage space available.

Eight out of 10 housewives buying chicken for broiling or barbecuing generally buy whole chickens. Recipes recommend chicken split in halves lengthwise for pan broiling or barbecue broiling. Cut-up chicken is seldom offered in this size of cut.

Skin color is an important factor in the selection of both whole and cut-up chicken.

When shoppers select chicken for frying, the weight of cut-up chicken is considered first more often than for a whole chicken. It appears that a housewife is more adept at estimating the quantity of chicken she requires in a whole chicken on the basis of size rather than weight. Consequently, she probably studies the weight of cut-up chicken in a package and endeavors to translate the weight into terms of size and volume required for her particular need.

Brand is important to more shoppers buying cut-up chickens for frying and stewing than it is when whole chicken is being purchased for those purposes. This confirms the pretest indications of the current research which show that shoppers tend to find prepackaged cut-up chicken difficult to judge as to quality and freshness by their usual methods of selection. Consequently, they rely more on reputable brand names.

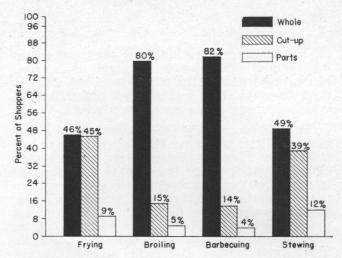


Figure 10. Proportions of shoppers preferring fresh chickens, whole or cut-up according to use.

It appears that brand names on packages of cut-up chicken together with an effort by the retail stores to overcome the bone-splintering problem and to prepare the kinds and sizes of cut-up pieces acceptable to the consumer will improve the acceptance and demand for birds in the cut-up fryers.

## **Appendix**

The survey was made among poultry-purchasing families contacted at 12 large chain food stores in Houston. The stores were well distributed geographically in the city. Therefore, all types of income areas were represented.

During the survey, interviewers were placed in each of the stores on Thursdays, Fridays and Saturdays. However, interviewers were in each store only at specified hours. The hours varied from day to day and week to week to provide a random sampling of the stores operating hours. The hours sample was designed to include during the survey all shopping periods except 12:30 to 3:00 p.m., 5:00 to 7:00 p.m. and after 8:30 p.m. These times omitted often represent low customer patronage hours. Subsequent research in another city has indicated less variation in customer count during the weekend shopping days than originally was supposed.

#### SELECTED CHARACTERISTICS OF HOUSTON FAMILIES COMPARED WITH THOSE IN THE SURVEY SAMPLE, 1956

Item	Houston <sup>1</sup> ——Perc	Sample ent———
Race or nationality		
White	74	70
Negro	21	28
Latin-American	5	2
Other	2	2
Family incomes		
Less than \$4,000	48	46
\$4,000-\$6,999	34	41
\$7,000 and over	18	$13^{3}$

<sup>&</sup>lt;sup>1</sup>Race—Bureau of Vital Statistics, City of Houston Health Department and Houston Chamber of Commerce. Income—Sales Management Survey of Buying Power, 1957.

The store interviews were continued for 6 weeks. The proportion of all poultry customers contacted in each store is not known, but appar-

ently it was at least 80 percent. Field staff members reported a high incidence of repeat contacts during the last weeks of the survey. This indicated relatively complete coverage of the poultry customers of the 12 stores. The indicated frequency with which poultry was bought by the Houston families interviewed also confirms this conclusion. Fewer than 3 percent of the families made a purchase less often than once a month. Ninety-six percent of the families buying at the 12 stores purchased poultry every 2 weeks or oftener. A total of 745 families was interviewed.

Since it is impractical to conduct a very long interview in a food store, only the name, address and telephone number of the customers and permission to interview them in their homes were obtained at the store. Home interviews were made on Mondays, Tuesdays and Wednesdays during the first 6 weeks with Thursdays, Fridays and Saturdays in the stores. After that, follow-up home interviews were made throughout the week until all the families contacted had been visited.

The housewife was interviewed except in instances of single persons or widowers living as a single household.

Field interviewers were personnel experienced in interviewing procedures and methods. All attended a briefing and training session and were required to take trial interviews before the survey began. Interviews were checked as to authenticity by a system of random selection provided to the field supervisor.

Telephone interviews were made among half the families with telephone service as a test of this technique. No significant differences were found between answers by this and the home interview method.

In conjunction with the store contact interviews, a special display of mixed chicken parts was featured in each of the 12 stores. The purpose was to determine interest in buying mixed parts packages. Packages varied as to size, but contained only the meatier parts of the chicken—breast, thighs, and drumsticks. Prices of these packages were in line with those of whole cut-up chicken considering that the package contained only the meatier parts.

<sup>&</sup>lt;sup>2</sup>Less than 1 percent.

<sup>&</sup>lt;sup>3</sup>Some difficulty was encountered in completing interviews in one of the more exclusive high-income areas. Therefore, the slight under-sampling of high-income households was expected.

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

# State-wide Research

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

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.

IN THE MAIN STATION, with headquarters at College Station, are 16 subject-

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 Conservation and use of water Grasses and legumes Grain crops
Cotton and other fiber crops
Vegetable crops
Citrus and other subtropical fruits
Fruits and nuts
Oil seed crops
Ornamental plants
Brush and weeds
Insects

Beef cattle
Dairy cattle
Sheep and goats
Swine
Chickens and turkeys
Animal diseases and parasites
Fish and game
Farm and ranch engineering
Farm and ranch business
Marketing agricultural products
Rural home economics
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.

Joday's Research Is Jomorrow's Progress