

Consumption of
POULTRY MEATS
IN KENTUCKY

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Consumption of Poultry Meats In Kentucky¹

By JOHN B. ROBERTS and MILDRED R. WIGHTMAN²

Poultry is a 45-million-dollar industry in Kentucky. Its potential is many times this size. The problem of industry expansion is partly one of finding ways to increase consumption and use of poultry meats. In order to analyze this marketing problem, about 1,100 randomly selected families living in Ashland, Bowling Green, Somerset and Louisville were asked questions about how much poultry they used, how they cooked it, where they bought and what they liked or did not like about the poultry they purchased.³

The families surveyed averaged 3.6 persons. The number of children, family income, education, and marketing situations were about like those of urban families for the state as a whole. Incomes ranged from less than \$300 to more than \$15,000 per family per year.⁴ The average was between \$5,000 and \$6,000 per year. The cost of food

¹ Information reported includes data secured under Southern Regional Food Marketing Project SM-13 and from selected data, Kentucky Project 252, Problems in Marketing Farm Perishables, Department of Agricultural Economics and School of Home Economics, cooperating. Special acknowledgment is made of the assistance of Dr. Abby L. Marlatt, director, School of Home Economics, in coordination and planning, and Dr. James T. Ralph, formerly of the Department of Agricultural Economics, University of Kentucky, who drew up the schedules and directed the survey.

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³ Not all families reported on all the same questions. There were 572 families in Louisville who reported their attitudes on cut-up chicken. Consumption and use data were obtained from 527 families in Ashland, Bowling Green and Somerset. The families contacted were representative of both consumption rates and the attitudes to be found in urban communities in the state.

⁴ Families were divided into the following groups on the basis of per capita income:

- (1) Under \$500 per person per year
- (2) \$500-\$999 per person per year
- (3) \$1,000-\$1,499 per person per year
- (4) \$1,500-\$1,999 per person per year
- (5) \$2,000-over per person per year

In the interest of simplicity, the purchase and use of poultry will be reported for the low (1), middle (3), and highest (5) income ranges. It is among these three groups that differences become most apparent and accordingly the data most useful in a market appraisal. Louisville families did not report consumption.

eaten at home ranged from 11 cents to more than 1 dollar per person per meal. The average cost was 30 cents per person per meal.

The amount of money the family spent for food increased as per capita income increased, though it did not rise as fast as income. Thus, the percentage of income spent for food was less among high-income families. The families in the lowest income bracket spent 43 percent of their income for food. Those with the higher incomes spent only 22 percent. Some individual families spent as little as 9 percent. The average was about 28 percent for all families.

Table 1.— Age distribution and average size of family by per capita income groups

Per capita income	Number families	Average size		5 yrs. under	6-12	13-19	20-over	NA	Total no.
		No. persons	%						
Under 500	61	4.7	19.2	21.6	11.8	46.7	0.7	287	
500-999	163	3.8	15.6	16.9	10.0	57.2	0.3	621	
1,000-1,499	129	3.7	10.2	14.3	13.9	61.4	0.2	482	
1,500-1,999	76	3.3	12.6	11.1	10.3	65.2	0.8	253	
2,000 and over	98	2.6	3.5	6.3	6.3	83.1	0.8	254	
Total	527	3.6	12.8	14.8	10.8	61.2	0.5	1,897	

Table 1 summarizes income per capita, family size and age distributions. From a marketing standpoint these factors are important, because families of adults have different food patterns from families with small children. Large families usually have less to spend and must buy food to satisfy a wider range of ages in the family. For example, at the low end of the income scale, families averaged nearly 5 persons, about half of whom were under 20. Those families with high-per-capita income were more likely to be small families of 2 or 3 persons. About 80 percent of the members were over 20. The middle-income group represented an approximate balance of age groupings and can be considered representative of an average of families surveyed.

CONSUMPTION OF POULTRY MEATS

Information was secured on amounts purchased and preparation and use of broiler-fryers,⁵ hens, roasting chickens and turkeys for 527 families in Ashland, Bowling Green and Somerset.

Amounts Consumed

The average consumption of poultry per person was 34.6 pounds a year among the families surveyed. The data showed that on the

⁵ The term broiler-fryers means young chickens of sizes suitable for broiling or frying. The terms are used interchangeably.

average the families used 23 pounds of broilers, 6 pounds of hens, and 5.6 pounds of turkey per person per year. Compared with national averages, the Kentucky families surveyed used 3.5 pounds more broilers, 0.1 pound less hens (mature chickens) and 0.3 pound less turkey than the national average. Accordingly, higher average consumption of 3.1 pounds per capita was due entirely to greater broiler consumption.

Sources of Poultry Meats

Ninety-two percent of the homemakers interviewed reported grocery stores as their source of poultry meats. Almost all reported they bought their groceries and poultry at the same store. Small neighborhood stores were relatively unimportant as a source of poultry meats.

<i>Type of Store Patronized</i>	<i>Families Using (Percent)</i>
Large chain supermarkets	58
Independent stores and local chains	30
Small neighborhood stores	12

Low-income groups patronized the neighborhood stores and bought poultry from produce dealers more often than any of the other families. Almost all of the poultry bought was ready-to-cook. Only a fraction of 1 percent was bought live for family use.

Shopping Characteristics and Patterns

Most of the families (over 90 percent) did their food buying in person. Wives alone and husbands and wives shopping together were those making the decision. About two-thirds were guided by a shopping list which was flexible. Ninety-two percent bought poultry where they bought their groceries. This means, from the standpoint of marketing poultry meats, that price, type of display, packaging, and quality considerations influenced a substantial proportion of shoppers while they were in the stores buying other foods.

In shopping for poultry, homemakers patronized the larger stores. About 75 percent bought broilers every other week or more often. Very few purchased hens that frequently, and turkeys were used only infrequently, except in the high income families.

How Poultry was Prepared

Poultry was liked by almost all families. Low-income families who spent an average of 19 cents per person per meal bought less, used simpler dishes and were more "cost conscious" than higher income families. Low-income families used fried chicken, stewed poultry

dishes and occasionally roast turkey, while higher-income homemakers used frying, broiling, barbecuing, roasting, baking, and variety preparation of broilers, hens, and turkeys. Necks, gizzards, livers, and wings were the "hard-to-use parts" for the average family. The problem of making full use of all the parts is partly one of preparation, partly that of personal taste preference and partly that of the adequacy of the food budget. There are also differences directly related to the type of poultry used.

To some degree, at least, the purchase and use of broilers do not parallel the purchase and use of turkeys. For this reason attention has been given to survey findings as they relate to turkeys, hens and chickens (other than broilers) and to broilers. Each constitutes a separate market or demand even though to some degree one class of poultry may be substituted for another.

TURKEYS

Turkey was essentially a holiday bird for the Kentucky families surveyed. Only 3 out of 527 families used turkeys as often as every other month. Two-thirds used at least one turkey during 12 months. Families with the higher incomes per person bought turkey most frequently and consumed larger amounts.

The relationship between income and turkey consumption was as follows:

Income Levels and Turkey Consumption

	Per Capita Income Range		
	Low	Middle	High
Families using turkey	46 Percent	70 Percent	81 Percent
Number of turkeys used per family each year	1.3 Birds	2.1 Birds	2.9 Birds

When these data were adjusted for the number of people in the different families and for the weight of the turkeys bought, the low-income family members averaged 2 pounds and the highest-income grouping averaged more than 15 pounds per person during the year. In each of the markets studied turkeys were available the year round, but many individual families bought only one or two a year. Ninety-nine percent of these turkeys were bought as whole birds for roasting. The industry has not yet succeeded in merchandising parts and/or getting general acceptance of new and different ways of preparing and serving turkey.

HENS AND CHICKENS OTHER THAN BROILERS

Mature hens from laying flocks and a few roasters made up this class. Three percent of the families bought chickens at least once every two weeks. Eighteen percent of the families purchased and used this kind of chicken as often as every other month. Sixty-five percent of the families used one or more hens or roasting chickens during a year's time.

Frequency of Purchase (Hens) 527 Families

Weekly or every two weeks	3 Percent
Monthly or every other month	18 Percent
At some time during year	65 Percent

The amount of hens and roasting chickens used yearly averaged 4 pounds per person for people in the relatively low-income families and 8.7 pounds per person in the high-income families. On the average, families bought 6 hens per year, an equivalent of 6 pounds per person per year.

There was no measurable difference in the proportion of families in the different income groups who used baking hens and similar type



Fig. 1.— Roasting was the most popular method of preparing hens.

Method of Preparing Hens

	Per Capita Income Ranges		
	Low %	Middle %	High %
Stewing process	41	30	23
Roasting and others	59	70	77

poultry, but there was a definite difference in how it was cooked and used.

Stewing of poultry was a much more important way of cooking among the lower-income families than for other income groups. Undoubtedly, stewing gave a more complete utilization. This method was basic when poultry was combined with dumplings, biscuits and other extenders. Roasting and baking were important for all income groups. It was noteworthy, however, that 15 percent of the high-income groups used methods other than roasting or stewing. Among the methods mentioned by the high income homemakers were numerous special dishes involving unique ways of preparing and uses.

The question can be raised as to whether high income families did not use a different type of poultry than the other groups. Generally the answer would be no. But the highest income group had different tastes or at least favored more variety in preparation.



Fig. 2.— Stewed chicken may be served with gravy and biscuits and in many other tempting dishes.

BROILER-FRYERS

Ninety-nine percent of the families had used broilers during the year previous to the survey. Three-fourths (75 percent) of the families were considered regular users and bought them weekly or at least every two weeks. Twenty-three percent used broilers monthly or at least once every other month.

How Often Broilers Were Used

	Per Capita Income Ranges		
	Low %	Middle %	High %
Weekly or every other week	70	70	81
Monthly or every other month	25	27	17
At some time during year	98	99	99

The proportion of regular users of broilers was greatest among families with the higher-per-capita incomes, but the families reporting infrequent use bought larger quantities at each purchase.

A per capita estimate shows a relatively high level of consumption for three-fourths of the families surveyed.

Amounts of Broilers Used

Families reporting amounts		Frequency of use	Amount ready-to-cook per person yearly (Pounds)
(Number)	(Percent)		
392	75	Weekly or every other week	27.5
119	23	Monthly or every other month	10.0
10	2	At some time during year	0.5
521	All types of users	23.0

For the 521 families who reported their purchases, the average yearly consumption was 22.9 pounds per person compared with an estimated national average of 19.5 pounds. These estimates indicate that consumption of broiler-fryers in Kentucky was about 18 percent higher than the national average.

Methods of Broiler Preparation

Fried chicken was the main use made of broilers. Next in importance was roasting, then broiling and then stewing. Ninety-six percent reported frying. Occasionally, families favored special dishes, mostly interspaced with frying.

The level of per capita income did not determine how broilers were cooked, but homemakers with the higher incomes reported a greater



Fig. 3.— Frying was the method favored by 96 percent of Kentucky families for preparing broiler-fryers.

variety of preparation methods. Broiling, barbecuing and special dishes, as well as frying, were mentioned.

BARBECUING

Barbecued chicken has grown in popularity, is widely used on festive occasions and has grown in importance with outdoor cooking. The method represents a potential for home use, and for this reason specific questions were asked about this method of cooking.

Significantly, only 2 percent of the families barbecued chicken frequently. Fourteen percent of the low-income group and 35 percent of the high-income families barbecued chicken occasionally. Eighty-four

Frequency of Barbecuing Chicken

	Per Capita Income Ranges		
	Low %	Middle %	High %
Frequently (once or twice a month)	2	2	2
Occasionally (a few times a year)	14	23	35
Never (at no time in year)	84	75	63



Fig. 4.— Barbecued chicken is increasing in popularity, especially for outdoor meals.

percent of the low-income group never barbecued chicken at any time. Differences are noted in the table on page 10.

When asked whether they used a special barbecue sauce, 122 families answered the question. The use of special sauces was most frequent among the high-income group.

Attitudes Expressed about Special Sauces

Per capita income (range)	Do you use a special sauce when barbecuing (yes)	Would you be in- terested in using one? (yes)
	Percent	
Low group	13	20
Middle group	20	20
High group	35	48

People with higher incomes appeared more interested in new or different sauces, but the majority of families had never had a barbecue sauce recommended to them. The use of special sauces was not widespread among the Kentucky families surveyed but could be increased through wider distribution of recipes and information.

AVAILABILITY OF POULTRY AND ATTITUDES OF CONSUMERS

Out of 527 homemakers interviewed, only eight reported that the poultry meats they would like to buy were not available. Most homemakers had little criticism of quality, cutting and handling.

Attitudes

In most Kentucky communities, poultry can be bought in different forms and on a self-service basis. In many stores the volume of "cut-up broilers" is important. Information as to preference for broilers showed that about three-fourths of the homemakers surveyed preferred to have them cut up at the store. Among the reasons given were that (1) it saved time, (2) it was more convenient, (3) they didn't know how to cut them up, (4) the knives at home were not satisfactory, and (5) the job was distasteful. The most favorable attitude toward cut-up poultry was found among the younger-age groups and among the higher-income families. These same groups looked favorably on buying the special pieces they liked.

Among those who preferred whole chicken were Negroes and low-income families, and a considerable number of older housewives. There were some indications that members of the latter group were dissatisfied with the method of cutting and/or liked to cut their own. Older women seemed to take pride in the fact that they could cut their own, while the younger group either did not have experience or preferred having it done.

Chicken Parts

The parts of the chicken that were hardest to use in order of difficulty were necks, gizzards, liver and wings. When asked whether they would want to buy poultry without these parts, less than one-third (30 percent) said yes. Most of these were in high-per-capita-income families. Apparently the attitude of lower-income groups was that they got more for their money by taking the hard-to-use parts.

Quality

It is significant that high-per-capita-income homemakers were reluctant to buy B grade poultry. On the other hand, only a few objected to the quality of poultry available. A tabulation of the objections listed, in order of their frequency, showed the following points by the 20 percent of homemakers who mentioned some of the more specific factors:



Fig. 5.— Whole and cut-up broiler-fryers are almost equally popular with Kentucky homemakers.

Objections to Quality

Objection	Percent making objection
Pin feathers	10.2
Poor fleshing	4.0
Poor color	1.7
Bruised	1.7
Not clean	1.7
Not tender	1.5

The data do not show whether objections from various groups were justified. Few were of such a nature as to cause unfavorable consumer reaction. Neither do they justify complacency with present products and handling methods.

SOURCES OF INFORMATION ON POULTRY MEATS

Less than one-fourth of all homemakers could recall cases where they noticed poultry meats were being promoted or advertised. Among the 25 percent who had definite recollections, the newspaper was the most often named—44 percent reported seeing poultry mentioned there. About one-fourth recalled some articles or items from magazines. Television and radio ranked next in order with less than 10 percent response. About one-third of the 118 homemakers who had noticed any advertising had been influenced to buy as a result.

Awareness and Price Appeal

	Per Capita Income Low %	Middle %	Range High %
Recalled an article or item	10	26	34
Price mentioned in the recall	67	63	42

Price was the most important of various factors mentioned for all homemakers—56 percent gave this answer. Thirty-two percent mentioned recipes. No one mentioned food value or nutrition as a primary appeal or motivating factor. This does not mean that respondents were not aware of such values. No special probing was done, and no attempt was made to get elaborate response on questions about sources of information. Rather, the objective was to enumerate various responses as they were volunteered without undertaking quantitative evaluation of separate media.

SUMMARY AND CONCLUSIONS

Shopping and use patterns indicate a demand for both tray pack and whole broilers every day of the week. Demand for broiler parts is limited mostly to high-income groups on a selective basis. Potentially less desirable parts can be sold on a price basis, but even low-income families like to buy whole broilers and consider them the "best buys."

Homemakers buy mature chickens like hens, and roasting chickens and turkeys infrequently, but they like to have them available consistently. This creates a problem for small-volume stores and makes handling of these classes of fresh poultry more difficult for the large-volume stores. But to restrict any class of poultry would reduce tonnage and sales.

The poultry display counter in the grocery store, the grocery ads in newspapers and food articles in magazines are significant in influencing the homemaker's purchase and/or use of poultry. When making actual purchases the reaction and attitude of the homemaker toward the way poultry was displayed and processed were favorable. However, enough defects were noted to emphasize the need for continued diligence in keeping the quality and appearance of poultry as good as possible.

Aside from this, there was strong evidence of price consciousness and appeal. Undoubtedly, comparisons between poultry and competing items is a consideration, especially for all families who feel the need to economize on the food budget. Different cooking methods, variety recipes and different uses appealed to the homemaker whose

food budget was not limited. The high-per-capita-income group noticed and used more ideas than did the other groups. This same group appeared more willing to experiment and try new things, as illustrated by the acceptance of barbecue sauce, and their acceptance and use of different methods of cooking and serving.

The popularity of poultry in Kentucky is shown by the fact that the average consumption per person per year was 23 pounds of broilers, 6 pounds of hens, and 5.6 pounds of turkey. This amounts to 34.6 pounds or about 10 percent more poultry than the national average. Compared with national averages the families surveyed used 3.5 pounds more broilers. Fried chicken outranked all other forms of chicken in popularity.

Information on poultry meat requirements based on the consumption rate of the surveyed families, as compared with production estimates, is significant. A rough estimate for 1959 indicated that Kentucky produced approximately 20 pounds of ready-to-cook poultry per person living in the state. This means the state is deficient in poultry meat production.

This study leaves unanswered the question of how much of this potential market could be supplied competitively by Kentucky poultry producers.

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