





## SUMMARY OF MAJOR FINDINGS

To learn homemaker knowledge, attitudes, and practices about food, 3,361 homemakers were interviewed in Birmingham, Montgomery, and Anniston, Alabama. Broiler-fryers were used as the test food product, but findings are pertinent to other foods and related consumer behavior. Major findings include the following:

1. Homemakers habitually purchase a broiler nearly every week. They appreciate the low prices of poultry meat and use good criteria in selection.

2. Although frying chicken is still traditional, shifts were evident toward more broiling and other cookery methods. About 45 per cent of the homemakers had used a new recipe during the month preceding the interview. Use of new recipes increased with rising income and education of the homemakers.

3. To become well informed consumers, homemakers need more information about food grades, meat grade and inspection symbols, nutritive value of poultry, and other marketing and nutritional factors.

4. Printed material, such as magazines or newspapers, was the preferred food information source of many homemakers. However, present format and coverage could be improved for greater usefulness. Many homemakers who most need consumer education, such as the young and the low income, often were not reached by these media.

# CONTENTS

	<i>Page</i>
SUMMARY OF MAJOR FINDINGS.....	3
HOW THE STUDY WAS MADE.....	6
HOW RESULTS WERE ANALYZED.....	7
WHAT MEATS WERE PURCHASED.....	9
HOW COST INFLUENCED MEAT PURCHASES.....	12
Selections for Prestige Meals.....	13
Actual Meat Purchases.....	14
WHAT HOMEMAKERS KNEW ABOUT NUTRITION AND MARKETING.....	15
Marketing Knowledge.....	17
WHO USES NEW RECIPES?.....	19
WHERE HOMEMAKERS LIKE TO GET FOOD INFORMATION.....	22
HOW MASS MEDIA SUPPLY FOOD NEWS.....	23
LITERATURE CITED.....	27
APPENDIX.....	29
Market Knowledge Scoring.....	29
Nutritional Knowledge Scoring.....	29
Poultry Recipes.....	30
Use of Specific Meats.....	31

# MEAT BUYING HABITS OF URBAN HOMEMAKERS\*

RUTH A. HAMMETT, *Instructor in Agricultural Economics\*\**

CONSUMER DEMONSTRATIONS and boycotts aimed at retail food stores in a number of cities in the fall of 1966 dramatized the frustrations of homemakers in the face of rising food prices. Much of the irritation resulted from a lack of understanding about the process by which food moves from producer to consumer. Homemakers caught between family needs and increasing costs of major food items were sure that someone was profiting at their expense. Therefore, they protested at the doors of retail food stores as the only visible culprit.

Believing that consumers have the right to be informed, a series of eight surveys were made in three Alabama cities from 1963 to 1965. Using broiler-fryers as a typical food, interviewers collected data from 3,361 respondents on homemaker attitudes and buying practices to determine areas where consumers might need information. Findings are being published in two bulletins. The first is a detailed report on the kind of homemakers who noticed and remembered food information placed in food stores, in newspapers, and on the radio (4). To provide a basis for consumer

---

\* This study was supported with funds provided by the Agricultural Research and Marketing Act of 1946 and State Agricultural Research Funds. It is a contributing project to the Southern Regional Food Marketing Research Project SM-13 in which Alabama, Kentucky, Mississippi, South Carolina, Tennessee, Texas, and Virginia are cooperating.

\*\* The author acknowledges the assistance and cooperation of personnel of the Extension Service, the 3,361 homemakers surveyed, the SM-13 Regional Food Marketing Research Technical Committee, and the interviewers who collected the data. Helpful suggestions were made by J. H. Blackstone and other staff members of the Department of Agricultural Economics and Rural Sociology.

education, this report emphasizes homemaker attitudes and practices. Both publications are based on the same population, but may be read independently as pertinent information is included in each.

Findings should be of interest to persons and agencies concerned with promoting particular food commodities, increasing consumer marketing knowledge, or improving nutritional levels of families. Although broiler-fryers were used as the test vehicle, results may be useful with respect to consumer attitudes about other protein foods. Knowledge of how per capita income and homemaker education relate to attitudes and practices can contribute to a more complete understanding of consumer motivation and receptivity to food information.

### HOW THE STUDY WAS MADE

Cities in which surveys were made and their population according to the 1960 Census are: Anniston, 33,657; Montgomery, 134,393; and Birmingham, 521,330. Each city's population was about 35 per cent nonwhite, and household size averaged 3.4 persons. The major difference in the samples was in per capita income: \$1,300 in Anniston, \$1,700 in Montgomery, and \$2,100 in Birmingham. Compared with the other cities, the Anniston samples had more families with per capita incomes under \$900.

For this report all respondents were combined into one sample, and no distinction is made as to time of schedule taking. City size was less important than method of respondent selection. In Birmingham, the store display sample was selected from names and addresses of shoppers in 16 Winn-Dixie stores. As is typical of such samples, the respondents were slightly older and better educated, and had higher per capita income than in a random sample of a population. To permit comparisons of three mass media forms of presenting food information, the 933 homemaker respondents from the broiler promotion survey by Van de Mark (5,6) were added to those in the newspaper and radio studies.

In Anniston and Montgomery, groups of three adjacent addresses were selected from the city directories. The first address in the cluster was used for the control or pre-study; the other addresses were contacted in surveys following educational events in local newspapers or over the radio station most popular with the pre-study homemakers. Schedules were obtained by per-

sonal interview within a month after completion of the particular event.

A total of 3,361 urban homemakers was interviewed: 933 in Birmingham, 1,219 in Montgomery, and 1,209 in Anniston. All were asked the basic schedule questions, with added inquiries about recall of items from the educational material. Some groups, identified by number and city, were asked about specific practices or attitudes. Descriptions of families in the combined samples are given in Tables 1 and 2.

### HOW RESULTS WERE ANALYZED

As in other SM-13 consumer research in Alabama (1,2,3,5,6) homemakers' food attitudes and practices were influenced by levels of per capita income and extent of homemaker education. Other characteristics of homemakers, such as race, annual income, family type, age of youngest family member, income source, and size of household, also were studied. Although these characteristics were interrelated with income and education, they exerted less direct influence on the food knowledge and attitudes.

For the sake of brevity, "income" in this study refers only to per capita income (annual income divided by the number of persons dependent upon it). Families with low per capita income were characterized by: (1) grade-school educated homemakers, (2) about two-thirds were nonwhite, (3) family incomes were under \$5,000, and (4) income was largely from non-work sources or the homemaker was the sole earner. In families with per capita incomes over \$3,200: (1) half the homemakers had education beyond high school; (2) over two-thirds had family incomes over \$8,000, and (3) two-fifths had working wives. Similar differences existed by educational level of the homemakers.

Family and personal characteristics of the homemakers at four levels of income (low, average, high, and liberal) are given in Table 1. Characteristics of four levels of education of the homemakers (grade school, some high school, high school graduate, and education beyond high school) are recorded in Table 2.

Since the major purpose of food is to nourish the human body, a nutritional knowledge score was developed. In this, 12 functions or sources of food were to be paired by the respondents with the four major nutrients: protein, carbohydrates, fats, and vitamins. Marketing knowledge scores were based on recognition

of the shield outline used as a background for Federal Government food grades, and the use of package-size comparison. Detailed information about scoring procedures is compiled in the Appendix.

TABLE 1. PERCENTAGE OF HOMEMAKERS HAVING SELECTED FAMILY AND PERSONAL CHARACTERISTICS, BY PER CAPITA INCOME, 3,352 HOMEMAKERS<sup>1</sup>, THREE ALABAMA CITIES, 1963-65

Family or personal characteristic	Proportion in each per capita income group				Total with each characteristic	
	Under \$900	\$900-1,799	\$1,800-3,199	\$3,200 & more	No. <sup>2</sup>	Pct.
	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>		
<b>Race</b>						
White.....	38	81	94	98	2,558	76
Negro.....	62	19	6	2	794	24
<b>Age of homemaker, years</b>						
Under 25.....	8	9	6	5	259	8
25-34.....	20	24	19	10	643	19
35-44.....	26	30	31	17	901	27
45-59.....	25	21	33	52	1,008	30
60 and over.....	21	16	11	16	532	16
<b>Education of homemaker, years</b> .....						
Under 9 (grade school).....	48	21	10	6	741	22
9-11 (some high school).....	30	25	15	8	690	21
12 (high school graduate).....	19	39	38	38	1,114	34
13 or more (beyond high school).....	3	15	37	48	778	23
<b>Source of income</b>						
Homemaker only.....	15	6	4	2	241	7
Male head of house.....	38	56	53	50	1,662	49
Homemaker and male head.....	16	22	31	39	859	26
All or part from nonwork.....	31	16	12	9	590	18
<b>Size of household, persons</b>						
2-3 (small family).....	39	44	63	91	1,863	55
4-5 (average family).....	28	43	33	9	1,037	31
6 or more (large family).....	33	13	4	0	452	14
<b>Annual family income, dollars</b>						
Under 3,000 (very low).....	70	14	0	0	742	22
3,000-4,999 (low).....	26	40	13	..... <sup>3</sup>	756	23
5,000-7,999 (average).....	4	41	38	30	974	29
8,000 and over (high).....	0	5	49	70	880	26
<b>Marketing knowledge score</b>						
0-3 (low).....	48	39	32	29	1,257	37
4-5 (average).....	37	36	32	32	1,158	35
6-8 (high).....	15	25	36	39	937	28
<b>Nutritional knowledge ranked score</b>						
0-2 (very low).....	35	22	13	11	696	21
3 (low).....	36	30	24	22	964	29
4 (average).....	22	31	39	44	1,109	33
5 (high).....	7	17	24	23	583	17
<b>Per cent of homemakers</b> .....	25	31	28	16	.....	100
<b>Number of homemakers</b> .....	851	1,039	930	532	3,352	.....

<sup>1</sup> No information on annual income for nine Birmingham homemakers.

<sup>2</sup> Totals of numbers may vary as "no information" is not included.

<sup>3</sup> Some families, but less than 1 per cent.



TABLE 2. PERCENTAGE OF HOMEMAKERS HAVING SELECTED FAMILY AND PERSONAL CHARACTERISTICS, BY EDUCATION OF HOMEMAKERS, 3,325 HOMEMAKERS<sup>1</sup>, THREE ALABAMA CITIES, 1963-65

Family or personal characteristic	Proportion in each homemaker education group				Total with each characteristic	
	Under 9 yr.	9-11 yr.	12 yr.	13 yr. or more	No. <sup>2</sup>	Pct.
	Pct.	Pct.	Pct.	Pct.		
<b>Race</b>						
White.....	54	70	85	92	2,542	76
Negro.....	46	30	15	8	783	24
<b>Age of homemaker, years</b>						
Under 25.....	2	12	10	6	259	8
25-34.....	11	20	24	21	643	19
35-44.....	19	29	29	30	896	27
45-59.....	35	27	27	32	1,000	30
60 and over.....	33	12	10	11	527	16
<b>Income source</b>						
Homemaker only.....	11	9	5	5	236	7
Male head.....	33	51	57	54	1,658	50
Homemaker and male head.....	21	22	29	29	856	26
All or part from nonwork.....	35	18	9	12	575	17
<b>Size of household, persons</b>						
2-3 (small family).....	64	50	53	55	1,847	55
4-5 (average family).....	18	31	35	36	1,026	31
6 or more (large family).....	18	19	12	9	452	14
<b>Annual income, dollars</b>						
Under 3,000 (very low).....	53	29	10	4	730	22
3,000-4,999 (low).....	29	33	20	9	742	22
5,000-7,999 (average).....	14	29	41	25	952	29
8,000 and over (high).....	4	6	18	32	885	16
<b>Per capita income, dollars</b>						
Under 900 (low).....	55	37	14	4	840	25
900-1,700 (average).....	29	37	36	20	1,026	31
1,800-3,199 (high).....	12	20	32	44	923	28
3,200 and over (liberal).....	4	6	18	32	527	16
<b>Marketing knowledge score</b>						
0-3 (low).....	53	37	36	25	1,242	37
4-5 (average).....	35	39	34	31	1,150	35
6-8 (high).....	12	24	30	44	933	28
<b>Nutritional knowledge ranked score</b>						
0-2 (very low).....	69	25	16	7	916	27
3 (low).....	25	38	27	18	887	27
4 (average).....	5	26	37	43	961	29
5 (high).....	1	11	20	32	561	17
<b>Per cent of homemakers.....</b>	22	21	34	23	.....	100
<b>Number of homemakers.....</b>	740	690	1,115	780	3,325	.....

<sup>1</sup> No information on education for 36 Birmingham homemakers.

<sup>2</sup> Totals of numbers may vary as "no information" is not included.

**WHAT MEATS WERE PURCHASED**

The surveyed homemakers were interested in serving varied meat dishes, and they could afford to purchase desired meats. However, they had bought mainly pork, beef, and poultry during

the week preceding their interviews. Only 2 per cent of the families had purchased lamb, 15 per cent (largely in Anniston) had used cold cuts, and 44 per cent served some form of fish or seafood. Poultry or beef had been purchased by an equal number of families, 82 per cent. Pork purchases were reported by 95 per cent of the respondents, largely because of the wide use of bacon or sausage for breakfast.

In Anniston and Montgomery during the 7 days before the interviews, meats from four classifications had been used by one-third of the 2,428 homemakers and from three classifications by one-fourth. Major meats purchased in each case were beef, pork, and poultry, with the fourth meat being seafood, lamb, or cold cuts, as shown below.

<i>Meat classes purchased previous week</i>	<i>No.</i>	<i>Per cent</i>
Beef, pork, poultry, other <sup>1</sup> .....	854	35
Beef, pork, poultry.....	662	27
Beef, poultry, other.....	365	15
Beef, pork, other.....	213	9
Beef, pork.....	158	7
Pork, poultry, other.....	56	2
One meat only <sup>2</sup> .....	54	2
Beef, poultry.....	44	2
One meat, other.....	22	1
	2,428	100

<sup>1</sup> Other meats: seafood or fish, cold cuts, game, lamb.

<sup>2</sup> Pork only, 32 families; poultry only, 14 families; beef only, 8 families.

Meats purchased were reported by cut when known by the homemaker. As shown below, some forms were much more often named:

<i>Most popular meat forms<sup>1</sup></i>	<i>Per cent</i>
Poultry—broiler-fryers.....	91
Beef roast—chuck.....	47
Beef steak	
Round.....	38
T-bone, sirloin.....	31
Cube, minute.....	17
Other beef—ground, hamburger.....	68
Fresh pork—chops.....	68
Cured ham—whole, half, canned.....	83
Other pork	
Bacon and sausage.....	47
Bacon only.....	46
Liver—beef, calf.....	76
Seafood and fish	
Freshwater fish.....	28
Canned tuna, salmon.....	23
Cold cuts—wieners.....	33
Two or more forms.....	26

<sup>1</sup> A detailed listing is given in the Appendix.

With "increase in education," there was a slight decrease in use of beef-pork-poultry and pork-poultry combinations. A more marked trend was the relationship of the beef-pork-poultry-other combination that rose from 15 to 30 per cent with "increase in education" of the homemaker, indicating a wider choice of meats by the more highly educated women.

About three-fourths of the respondents had purchased a broiler during the 7 days before the interview. Whole broilers accounted for about half the purchases, followed by cut-up chicken and parts. Nearly two-thirds of the women habitually bought broilers. Purchase by most of the remainder had been influenced by some form of price reduction in the store or by newspaper advertisements. The effect of inducements to buy was not related to income level.

Half the respondents usually served broilers once a week, one-fourth served poultry several times a week, and most of the remainder used this meat less frequently. Broilers were predominantly purchased because the family liked them, or because they

TABLE 3. PERCENTAGE OF HOMEMAKERS REPORTING BROILER PURCHASE, BY PER CAPITA INCOME, 3,352 FAMILIES, THREE ALABAMA CITIES, 1963-65

Broiler purchase by families	Proportion in each per capita income group				Average Pct.
	Under \$900 Pct.	\$900- 1,799 Pct.	\$1,800- 3,299 Pct.	\$3,200 & more Pct.	
When last broiler purchased					
Within last 7 days.....	79	75	74	73	75
8-13 days.....	8	10	10	9	9
14 or more days ago.....	12	14	15	17	15
Don't purchase—gift, grow own..	1	1	1	1	1
Form of last broiler purchase					
Whole chicken.....	73	54	44	42	54
Cut-up chicken.....	20	27	26	27	25
Parts.....	6	18	27	29	19
Several forms, part in freezer....	1	1	3	2	2
Frequency serve broilers					
Once a week.....	42	53	58	58	52
Twice a week.....	43	25	16	15	26
Every two weeks.....	11	16	20	20	16
Less frequently.....	4	6	6	7	6
Reason buys broilers, first mention					
Family likes it.....	36	41	41	39	39
Economy.....	42	32	23	17	30
Variety of ways to prepare.....	7	10	13	18	11
Protein, food value.....	4	8	11	14	9
Easy to prepare.....	9	6	8	9	8
Other: package, size, appearance of other meats.....	2	3	4	3	3

were an economical protein source. Most broilers were purchased in units sufficient for one or two meals.

The relationship of per capita income to purchase and use of broilers is shown in Table 3. Homemakers with low per capita incomes usually purchased a whole broiler, and served them more than once a week. Economy and family preference were the major reasons for purchase. Women with higher incomes were more likely to use broilers once a week or less frequently, and to purchase parts. They more often mentioned food value or the many ways broilers could be cooked as reasons for their purchase than did the lower income women.

Low income homemakers believed that whole broilers at 35 cents a pound was the best way to buy broilers, and had backed up the belief with actual purchases. Conversely, high income women were more likely to prefer chicken breasts at 79 cents a pound. Cut-up chicken was more often purchased by average and high per capita income families.

Size or weight was the most important criteria in broiler selection. A chunky appearance with a broad breast was the next most important consideration, and yellow skin was important to some persons. Buyers also looked for a clean bird with no pin feathers, hair, bruises, or broken bones. A heavy fat layer and a firm breast bone were also mentioned by some respondents as being desirable. None mentioned grade or inspection labels.

### HOW COST INFLUENCED MEAT PURCHASES

From a list that included round steak, hamburger, pork chops, hens, whole fryers, and broiler legs or thighs, respondents were asked to select those meats not purchased because of poor quality, high price, kitchen preparation required, dislike by family members, or never used. Consumer concern about price, quality, and convenience is indicated by percentages of respondents who checked one or more meats, as shown in the following table:

<i>Reasons given when one or more meats checked</i>	<i>Per cent</i>
Quality might be poor.....	78
Price considered high.....	76
Requires too much kitchen preparation.....	56
Some family member does not like.....	35
Never uses, unfamiliar meat.....	10

Hamburger and pork chops were often passed by because of poor quality, especially in the smallest city. Round steak and

broiler breasts were considered expensive meats. Pork chops and broiler legs or thighs topped the list of meats not liked by some family member. Hens and whole fryers were not purchased because of the home preparation required. Hens were the most frequently mentioned unfamiliar meat, followed by round steak. Too much preparation was the apparent reason for unfamiliarity with the use of hens, but expense might explain nonpurchase of round steak.

### Selections for Prestige Meals

In a hypothetical situation, respondents selected from a prepared list the meat most suitable for four meals of varying prestige: Family meal, informal meal for church friends, a special dinner for the husband's birthday, and a guest meal for a business friend. Chicken was most often selected for a typical family

TABLE 4. PERCENTAGE OF HOMEMAKERS REPORTING MEAT CHOICES FOR MEALS OF VARYING PRESTIGE, BY PER CAPITA INCOME, 3,352 HOMEMAKERS, THREE ALABAMA CITIES, 1963-65

Meat choices for meals of varying prestige	Proportion in each per capita income group				Average Pct.
	Under \$900	\$900- 1,799	\$1,800- 3,199	\$3,200 & more	
	Pct.	Pct.	Pct.	Pct.	
Family meal					
Chicken.....	36	30	26	24	30
Beef roast.....	21	22	24	26	23
Hamburger.....	18	20	17	12	17
Steak.....	6	9	16	23	13
Pork-chops, ham, roast.....	14	13	10	5	11
Other <sup>1</sup> .....	5	6	7	10	6
Husband's birthday dinner					
Steak.....	22	40	48	51	39
Chicken.....	39	26	15	14	24
Beef roast.....	10	16	19	17	15
Pork-ham, chops, roast.....	18	9	7	7	12
Hamburger, other <sup>1</sup> .....	11	9	11	11	10
Church friends are guests					
Chicken.....	53	47	41	43	46
Beef roast.....	17	22	28	30	24
Hamburger, steak.....	14	12	13	11	13
Pork-chops, ham, roast.....	13	12	10	6	11
Other <sup>1</sup> .....	3	7	8	10	6
Business acquaintance is guest					
Steak.....	24	33	41	43	35
Beef roast.....	17	25	31	29	25
Chicken.....	30	22	15	16	21
Hamburger, other <sup>1</sup> .....	15	10	8	8	11
Pork-chops, ham, roast.....	14	10	5	4	8

<sup>1</sup> Fish, seafood, lamb, miscellaneous.

meal or for church friends, followed by beef roast. Steak was the most popular meat for the husband's birthday dinner and for serving when the guest was an important business friend, presumably male.

Chicken was selected because it was an economical protein source and easy to prepare. Beef roast was chosen because cooking failure was almost impossible, and beef is equated with prestige. Steak was considered the man's favorite meat, and brought compliments for the cook from honored guests.

Level of per capita income was closely related to meat choices in which men's preferences were to be considered. Selection of beef for the husband's birthday dinner or the guest meal for a business acquaintance rose 30 percentage points with increase in per capita income from low to liberal. With a decrease in per capita income, selection of chicken for the dinners for men increased 25 points for the husband and 14 points for the business friend.

With "increase in income," roast beef or steak would be most popular at all the meals. Chicken, pork, or hamburger increased in popularity as per capita income decreased. Other meats such as fish, seafood, lamb, and casseroles were more often the choice of homemakers with per capita incomes over \$1,800, Table 4.

### **Actual Meat Purchases**

All meats used by the families were classed as low, moderate, and high-cost on the basis of price per pound. Low-cost meats included most forms of poultry, hamburger, some pork cuts, and fish that retailed under 50 cents per pound. Moderate-cost meats retailed for 50 to 75 cents per pound and included such items as chuck roasts, ham, sausage, wieners, or bologna. High-cost meats retailed for over 75 cents a pound, and were represented by steaks, roasts, boneless beef, cold cuts, and center slices of ham. To find out how many families were using poultry for other than economy reasons, analysis was made including and excluding poultry forms selling for less than 50 cents a pound. About half the families in the three-city sample had used meats at all three cost levels, and had included another low-cost meat if broilers had been purchased. One-fourth had bought high and moderate cost meats, with poultry the only low-cost purchase.

Eighty per cent of the families had used at least one high-cost

TABLE 5. PERCENTAGE OF HOMEMAKERS REPORTING COST PATTERNS OF MEATS PURCHASED THE PREVIOUS 7 DAYS (WITH RESPECT TO POULTRY AS THE ONLY LOW-COST MEAT USED), BY PER CAPITA INCOME, 3,349 HOMEMAKERS, THREE ALABAMA CITIES, 1963-65

Cost pattern of meats purchased during previous 7 days	Proportion in each per capita income group				Total or average
	Under \$900	\$900-1,799	\$1,800-3,199	\$3,200 & more	
	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>
High, moderate, low cost.....	36	53	57	47	49
High, moderate + low cost poultry <sup>1</sup> .....	14	17	22	30	21
Moderate, low cost.....	33	19	9	7	13
High, moderate only <sup>2</sup> .....	4	4	6	9	6
Moderate + low cost poultry <sup>1</sup> .....	6	3	1	3	4
High, low cost.....	2	2	3	3	3
Low only.....	3	1	---	---	2
Moderate only <sup>2</sup> .....	1	1	---	0	1
High + low cost poultry <sup>1</sup> .....	---	---	---	2	1
High only <sup>2</sup> .....	---	---	---	---	---

<sup>1</sup> In these families, poultry was the only low-cost meat purchased.

<sup>2</sup> No poultry or other low-cost meat purchased.

<sup>3</sup> Dash indicates some families, but less than 1 per cent.

meat, 93 per cent had bought a moderate-cost meat, and 67 per cent purchased at least one low-cost meat. Exclusive use of moderate and low-cost meats tended to increase as income level diminished. Purchase of high and moderate priced meats, with poultry as the only low-cost meat used, rose as income level increased. Higher income families appeared to be using broilers for variety rather than economy. Major users of the high, moderate, and low-cost meats were the middle income groups (per capita incomes between \$900 and \$3,200), Table 5.

### WHAT HOMEMAKERS KNEW ABOUT NUTRITION AND MARKETING

Homemakers' knowledge of nutritional terms and the function or source of the major nutrients was determined by using a special scoring system. Respondents were given a list of the four nutrients, protein, carbohydrates, fat, and vitamins, and a list of 12 functions or sources to be paired with the nutrients. They were also asked to rate the adequacy of a serving of broiler meat with that of beef, pork, dry beans or peas, and milk.

Chicken was identified as a protein food by 84 per cent of the white and 64 per cent of the Negro women. Slightly over half of the respondents said chicken was a good source of the B vitamins,

such as thiamin, riboflavin, and niacin. About one-third stated that a serving of broiler meat was the nutritional equivalent of a serving of beef, pork, dry beans, or milk. Somewhat more than one-third of the homemakers believed that broilers were not an adequate replacement for beef or pork, and the remainder had no idea about the exchange values. A listing of the nutritive values of these foods is in Appendix Table 1.

Knowledge of equivalent food values increased with "increase in education" of the homemakers. The better educated respondents also had a clearer understanding of the use of low-calorie broilers in weight control. They also knew that fresh and frozen broilers were nutritionally equal. Grade school educated homemakers were most likely to think that fresh broilers were superior.

The nutritional knowledge scores in Tables 1 and 2 were based on ranked points in which 3 was given for correct and 2 was accumulated for partially correct answers. A perfect score for the 12 paired instances was 36 points, or a ranked score of 5 for 30 to 36 points. A list of the foods or functions is given in the Appendix, together with the scoring and ranking procedures.

How education of the homemaker was related to score is shown in Table 6. The widest difference in knowledge between the grade school and the college or business school educated

TABLE 6. PERCENTAGE OF HOMEMAKERS CORRECTLY IDENTIFYING FUNCTION OR SOURCE OF NUTRIENTS, BY EDUCATION OF HOMEMAKERS, 3,325 HOMEMAKERS<sup>1</sup>, THREE ALABAMA CITIES, 1963-65

Correct identification of function or source of nutrients	Proportion in each homemaker education group				Average <i>Pct.</i>
	Under 9 yr.	9-11 yr.	12 yr.	13 yr. or more	
	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	
General good health-protein, vitamins .....	89	94	96	96	94
Bacon-protein, fat .....	86	95	85	93	93
Cottage cheese-protein, vitamins .....	69	78	82	87	79
Cantaloupe-carbohydrates, vitamins .....	68	79	83	88	80
Chicken-protein, vitamins .....	64	71	85	93	79
Pecans-protein, fat .....	79	82	83	88	83
Growth and repair-protein, vitamins .....	76	83	80	82	80
Tomatoes-vitamins .....	58	65	72	83	70
Potatoes-carbohydrates, vitamins .....	36	48	60	77	56
Bread-carbohydrates, vitamins .....	31	42	56	74	51
Quick energy-carbohydrates .....	34	33	45	59	41
Concentrated energy-fat .....	14	18	23	26	21
<i>Number of homemakers</i> .....	740	689	1,116	780	3,325

<sup>1</sup> No information on education of homemaker for 36 Birmingham homemakers.

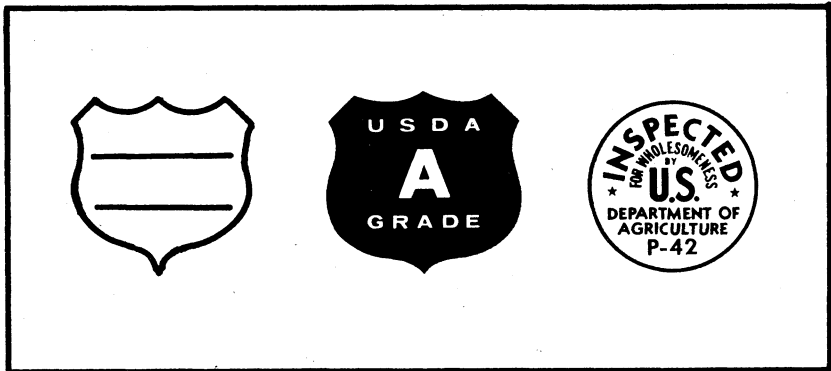


homemaker was in identification of the major nutrient in bread or potatoes. This was followed by differences in knowledge about chicken, tomatoes, quick energy, and cantaloupe. The most frequently missed items were pairing of concentrated energy with fat, and quick energy with carbohydrates. These terms should be familiar ones to the homemaker if she is calorie conscious, or if she is aware of advertisements for soft drinks. Many homemakers said they tried to supply their families with "balanced meals," but findings of this study indicate that they do not plan menus in terms of protein, carbohydrates, or concentrated energy foods.

### Marketing Knowledge

Meat forms the backbone of menu planning, and as much as one-third of the food money may be spent for meat. Most homemakers were sure they bought only the best meats, and many chose a food store on the basis of quality of meats carried. However, only one-third of the respondents could name at least one meat grade, while an equal number suggested incorrect designations, such as A-1 or Grade A. Homemakers were more familiar with the grades used on eggs and milk, as about three-fourths could mention "Grade A" for these foods.

Respondents were shown an outline of the shield used as the background for Government meat grades, and to a limited extent in the continuous inspection of fruit and vegetable products. One-third did not remember seeing the shield, an equal number though it was a brand name or seal of approval, and most of the



An outline of the shield indicating USDA meat grades (left) was shown to the homemakers for identification. An actual shield from graded poultry meat is at center. The inspection mark, which refers to wholesomeness, is shown at right.

TABLE 7. PERCENTAGE OF HOMEMAKERS HAVING KNOWLEDGE OF FOOD GRADES OR LABELS, BY PER CAPITA INCOME, 3,352 FAMILIES, THREE ALABAMA CITIES, 1963-65

Knowledge of food grades and labels	Proportion in each per capita income group				Average
	Under \$900	\$900-1,799	\$1,800-3,199	\$3,200 & more	
	Pct.	Pct.	Pct.	Pct.	
Meat grades (Prime, Choice, Good, Standard, Utility)					
One or more correct.....	10	25	44	54	33
Wrong answer <sup>1</sup> .....	41	37	31	22	32
Don't know.....	49	38	25	24	35
Meaning of shield outline					
Government inspection.....	18	35	45	44	34
Other inspection..... <sup>2</sup>	---	1	2	2	1
Meat grade.....	1	2	2	2	2
Wrong answer, don't know.....	34	33	29	31	32
Did not recall seeing symbol.....	47	29	22	21	31
<i>Number of homemakers</i> .....	851	1,039	930	532	3,352

<sup>1</sup> Homemakers were usually quite positive that only the "best" meat was purchased. Suggested grades, in order of number of mentions, were: A-1, Grade A, Excellent, Best, U.S. Certified, Premium, First Quality.

<sup>2</sup> Some families, but less than 1 per cent.

remainder said it meant government inspection of meats. As indicated in the illustrations, the shield carries the grade for meat, poultry, eggs, and a growing list of other foods. The inspection seal is round.<sup>2</sup> Grade and inspection labels are often found together on meats and poultry. Of course not all meats have these labels, and they are not always on every retail cut or package. More than half the "low income" homemakers had never noticed the grade label shield. (See the Appendix for marketing knowledge scoring procedures.)

In the total sample of 3,361 homemakers, 11 per cent named one grade, 14 per cent named two, 7 per cent named three, but only 1 per cent, or 31 homemakers, gave correct names for four or more meat grades. Greater knowledge of grade labeling and checking of package size and cost was related to "increased per capita income or educational level" of the homemaker. Better educated homemakers and those in higher income families were better informed about names of the most used grades of beef, Table 7.

<sup>2</sup> "The inspection mark refers only to the wholesomeness of the product, not to the quality of the product. The grade mark refers to the quality of the product. Before poultry may be graded it must first have been inspected for wholesomeness." USDA Poultry Inspection—A consumer's safeguard. PA—299 USDA Consumer and Marketing Service. September 1965.

Average per capita incomes and years of homemaker education were less in the Anniston sample than in the Birmingham sample, and this showed up in differences in meat grade knowledge between the cities. In Anniston, 13 per cent of the total homemakers mentioned one meat grade, and 9 per cent mentioned two grades. In the Birmingham sample, 9 per cent of the respondents named one grade, but 35 per cent could name three or more. That the selected food stores in Birmingham were advertising and selling beef by grade at the consumer level is also a possible reason for the greater knowledge of meat grades by the surveyed homemakers who were selected from a list of shoppers in the stores.

### WHO USES NEW RECIPES?

Each year promoters of food products invest many millions of dollars in campaigns centered on recipe ideas. Homemakers are virtually flooded with recipes and many of them have kitchen drawers filled to overflowing with clippings, leaflets, and booklets. To most women, recipes are a source of interest and excitement. But what kind of homemakers are likely to use a new recipe?

Homemakers in the entire study were asked if they had tried a new recipe during the past month, and if so, what it was for, where they found it, and if an ingredient had to be specially purchased. Of the total number of homemakers, 44 per cent had

TABLE 8. PERCENTAGE OF HOMEMAKERS HAVING SELECTED FAMILY AND PERSONAL CHARACTERISTICS, BY NUMBER OF NEW RECIPES TRIED, 1,416 HOMEMAKERS, THREE ALABAMA CITIES, 1963-65

Family and personal characteristics	Proportion according to number of new recipes tried		
	One	Two	Three
	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>
Per capita income, <i>dollars</i> .....			
Under 900 (low).....	77	17	6
900-1,799 (average).....	59	30	11
1,800-3,199 (high).....	45	37	18
3,200 and over (liberal).....	46	36	18
Education of homemakers, <i>years</i> .....			
Under 9 (grade school).....	80	17	3
9-11 (some high school).....	64	28	8
12 (high school graduate).....	51	34	15
13 or more (beyond high school).....	39	39	22
<i>Per cent of homemakers</i> .....	56	32	12
<i>Number of homemakers</i> .....	998	267	151

tried a new recipe. Analysis of first mentions showed that nearly half of the new recipes had been for desserts, mostly cakes. Friends and relatives were the most frequent source of the new recipe, 42 per cent, with printed materials (newspapers, magazines, cookbooks, and package labels) accounting for the remainder of the mentions. Spices and flavorings were most often the specially purchased ingredient, but fruits, vegetables, and combinations, such as mixes or soups, were also purchased.

"Increase in income or educational level" was closely associated with greater use of a new recipe, Table 8. About twice the percentage of homemakers with per capita incomes over \$1,800 had tried a new recipe as compared with those having lower incomes. Differences were greater among those who had tried several new recipes. New recipes were used largely by homemakers between 35 and 59 years of age whose family size fitted the servings in the usual recipe — 4 to 6. Cake and cookie recipes appealed more to homemakers with less than 12 years of education. Casserole and salad recipes were more popular with homemakers with education beyond high school.

In each series of radio programs, specific recipes that would be sent on request to listeners were mentioned by title and use. In Montgomery, 34 women phoned in requests for recipes, and 29 were interviewed to learn something about the characteristics of homemakers who would call in for free recipes. The following listing presents the results:

1. Half of the respondents were between 45 and 59 years of age.

2. Two-thirds were high school graduates.

3. Two-thirds had families of 2 or 3 adults.

4. Two-thirds had per capita incomes over \$1,800.

5. Most homemakers had the following habits or attitudes: They used complete shopping lists and food store advertisements in planning shopping, enjoyed entertaining guests for meals, liked to try all kinds of food suggestions and new products, and often made up their own recipes. They had regular (predictable) times for meals, and usually shopped the same day of the week.

The most appealing of the 18 recipes was "Easy Oven Chicken," which featured broiler parts baked with mushroom soup in aluminum foil. Five of the 29 women had prepared this dish. Half of the recipients had tried at least one recipe. Three had prepared "Corn Crisp Chicken," cut-up chicken dipped in evaporated milk

and coated with cornflake crumbs before baking. Several had prepared "Baked Chicken with Peaches" and cold "Chicken Loaf."

Homemakers asked for a recipe because it sounded different or interesting, they wanted a new way to fix chicken, or the suggested use interested them. Half of the women put the typed mimeographed recipe in the active file — a favorite cookbook, a looseleaf binder, a "try soon" file, or on the bulletin board. The remainder "saved" the recipes in a box or drawer. Homemakers had phoned in for a certain recipe, but the entire series of 18 was mailed to them. These homemakers were typical of recipe users in other consumer studies by the author (1).

The 3,361 homemakers in the entire study were asked about the method used to cook the last broiler as compared to their usual habit:

<i>Cookery method for broiler</i>	<i>Most recent, Pct.</i>	<i>Usual, Pct.</i>
Fried.....	52	69
Broiled, barbecued.....	21	15
Baked.....	12	7
Stewed, salad, casserole.....	15	9

Fewer homemakers had fried the last chicken than usually used this way of cooking, and a variety of other methods had been used. Per capita income level was closely related to methods the homemaker usually used, as well as the most recent one, Table 9. Compared with "low income" homemakers, "higher in-

TABLE 9. PERCENTAGE OF HOMEMAKERS REPORTING LAST AND USUAL COOKERY METHODS USED FOR BROILERS, BY PER CAPITA INCOME, 3,352 HOMEMAKERS, THREE ALABAMA CITIES, 1963-65

Last and usual cookery method for broilers	Proportion in each per capita income group				Average
	Under \$900	\$900- 1,799	\$1,800- 3,199	\$3,200 & more	
	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>
<b>Cookery method used last</b>					
Fried.....	63	57	46	38	52
Broiled.....	14	18	24	31	21
Baked.....	11	11	12	15	12
Other—stewed, salad, casserole.....	12	14	18	16	15
<b>Cookery method usually used</b>					
Fried.....	76	75	66	51	69
Broiled.....	9	12	19	27	15
Baked.....	4	6	7	13	7
Other—stewed, salad, casserole.....	11	7	8	9	9

come" level women were twice as likely to have broiled the last fryer and three times as likely to use broiling or baking as the usual method. However, percentage differences between the usual and the last method showed comparable shifts at all income levels.

### WHERE HOMEMAKERS LIKE TO GET FOOD INFORMATION

Some 367 homemakers in Montgomery were asked to match hypothetical situations about food with suitable information sources. Nearly half believed their own experiences would be sufficient. A child's menu for a week or a covered dish for a supper would be taken care of by the respondent.

Advice on a company size roast would be asked from the butcher. Cookbooks would take care of most unusual situations, such as an unfamiliar meat, a prestige dinner, or refreshments for a woman's group. Friends, the church hostess, or a professional home economist would be information sources for a church supper for 200 persons. Home economists have not been thought of as food information sources, if this survey is an indication, Table 10.

Although 70 per cent of these 367 Montgomery homemakers said they were satisfied with their food buying ability, 87 per cent suggested a favorite method of receiving food information. One-third of the suggestions were for timely food news and ideas

TABLE 10. POSSIBLE INFORMATION SOURCES THAT WOULD BE CONSULTED IN SPECIFIC FOOD SITUATIONS, 367 HOMEMAKERS, MONTGOMERY, ALABAMA, SPRING 1965

Possible information source, prepared list	Percentage choosing for specified food situation						
	Rump roast for 12	Unfamiliar meat	Child's menu for day	Prestige meal	Refreshments for women	Covered dish for supper	Church supper for 200
	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>
Own experience.....	26	8	71	55	58	66	12
Cookbook.....	21	44	10	27	27	25	9
Friends, organized groups.....	8	25	10	6	10	5	51
Professional home economist.....	5	5	3	7	2	1	21
Store employees.....	33	5	0	— <sup>1</sup>	—	0	2
Relatives.....	7	12	3	4	2	2	5
Mass media-news-paper, radio, television, magazines.....	—	1	3	—	1	1	—

<sup>1</sup> Dash indicates some families, but less than 1 per cent.

in newspapers that could be read leisurely, and possibly clipped for future reference. A considerable number liked cooking schools or demonstrations on television that would show them how to prepare and serve the dish. The third most popular source was magazines, which added to newspapers accounted for over half the suggested ways to get new food ideas.

Two-thirds of the women in the Birmingham sample suggested newspapers as the most important source of information about all phases of food purchase and preparation. Magazines were considered most helpful in meal planning and preparation of food. In the purchase of foods, radio, newsletters, television, and in-store information were all useful. Friends and magazines were most important in supplying new recipes and food hints. Details about the Birmingham survey were reported by Van de Mark (5,6).

Both in Anniston and Montgomery, homemakers were much more concerned with buying and preparation of food than with nutritive value, food storage, and economics of food production and processing. Meal planning and food buying information (specials) were most important to the Anniston homemakers. Montgomery homemakers were more interested in recipes and food preparation methods.

### HOW MASS MEDIA SUPPLY FOOD NEWS

The weekly food section of the newspaper was useful in providing homemakers with current prices of some foods in the trading area. About half of the Anniston homemakers were influenced in store choice by food store advertising, but Montgomery women were less responsive to this source. Relatively few women used advertisements in making shopping lists or planning meals.

Several issues of large daily newspapers in Georgia and Alabama were analyzed for food section content. Even the most informative devoted more than half the space to food prices. Single food advertisements, often with price reduction coupons, occupied about one-sixth of the total area. Nonfood advertising, news, or syndicated columns might occupy one-fourth of the section. Consumer lures, such as news about prizes, games, winners, or stamp coupons, took up most of the remaining space. There were virtually no articles that would help the consumer under-

stand the food marketing system and the economics of supply and demand, or other information that would enable the homemaker to better fill the job of food buyer for her family. The food section of the smaller dailies normally carried one page of recipes, usually tied to a personality whose picture was featured.

Perhaps homemakers were suggesting that food advertisers should take on the task of supplying consumer information. Some said advertisements would be more useful if they carried news about food innovations, nutritive values, how to use such new ideas as meat tenderizers, lists of plentiful or seasonal foods, and helpful hints in buying and cooking meats. There was considerable criticism of pricing policy in advertising, particularly with regard to lack of information about previous price, brand, size, or grade.

Placing food information in the food section of newspapers could be highly effective since four-fifths of the homemakers with access to newspapers read the food store advertisements and nearly as many read the food section. However, young homemakers, employed homemakers, and those with education beyond high school are likely to be nonreaders of the food section. In addition, about 20 per cent of the Anniston and 11 per cent of the Montgomery samples did not regularly read a daily newspaper of any kind.

As presently constituted, radio is depended on for news and music. Queries as to what form food information programs should take, or how long they should be, brought little response. Many Negro women listened to a radio station in Montgomery that carried some food information. Interest shown by Negro women in the experimental programs indicates that radio might be used effectively for these groups if there was regular programming and more publicity.

Store displays were most effective in informing consumers about prices. In view of their socioeconomic level, homemakers who recalled nutrition information were probably checking previous information rather than acquiring new ideas. Since they provide the only contact most homemakers have with the marketing system, retail food stores have a unique opportunity to present marketing information to consumers in a receptive atmosphere. The utmost care needs to be used to ensure that such information is free from pressure or hidden motives, and that the source is acknowledged.



Each media had a characteristic audience, but the degree of recall of the messages was related to the proportion of homemakers with upper levels of income and education who were attracted. In presenting food information, it is necessary to keep firmly in mind that the more socioeconomic restraints the homemaker has, the less likely she is to be aware of food news or be willing to use it. The more closely the information fits the homemaker's need, the more likely she will be aware of, remember, and use the material.

Few homemakers can resist "saving money" approaches if they do not interfere with family preferences or their standards of quality. In many cases, whether the family will eat a food is of more importance than nutritive value. Variation of a familiar recipe with a new twist is more appealing than exotic combinations that are difficult to visualize in terms of flavor combination or appearance.

Many homemakers were using near optimum quantities of broilers, but new and easy ways to prepare this meat might cause the less frequent users to add broilers to their weekly list. These respondents might profit from more knowledge about the equivalent food values of broilers and other meats. If homemakers ought to consider sources and functions of nutrients in planning meals for their families, nutritionists must devise educational programs that incorporate methods used by practicing homemakers in food selection, preparation, and service.

Studies are needed to determine how homemakers at various income and homemaker educational levels plan meals. This would provide a firm base from which nutritionists and the food marketing system could motivate consumers to improve food buying skills. Much remains to be done to make nutritional aspects of food as important as price, convenience, or family preference, especially if income is limited.

Lack of recognition of grade and inspection labels could result in confusion as to the role of the USDA Consumer and Marketing Service in supplying wholesome food and aiding the shopper in selection of quality foods. Food grades are widely used in the marketing system. Consumers should learn to read labels and understand their meaning if they are serious about wanting the most nutrition and quality for their food dollars.



## LITERATURE CITED

- (1) HAMMETT, RUTH A., AND J. HOMER BLACKSTONE. 1964. Alabama Urban Homemakers and What They Know About, How They Use, What They Think About Milk Products. Auburn University Agr. Exp. Sta. Bull. 352.
- (2) ----- . 1964. How Homemakers Select Foods. A Study of Influences Affecting Food Buying of Urban Homemakers. Auburn University Agr. Exp. Sta. Bull. 353.
- (3) ----- . 1965. Response by Urban Homemakers to Mailed Advertising. Auburn University Agr. Exp. Sta. Bull. 359.
- (4) HAMMETT, RUTH A. 1968. Response of Homemakers to Food Information in the Mass Media. Auburn University Agr. Exp. Sta. Bull. 377.
- (5) VAN DE MARK, MILDRED S. 1965. Homemaker Response to Poultry Promotion. Auburn University Agr. Exp. Sta. Bull. 364.
- (6) ----- . 1966. Homemakers' Response to Poultry Promotion in Retail Food Stores in Birmingham, Alabama, and Greenville, South Carolina. Southern Cooperative Series Bull. 113.



**APPENDIX**

**Market Knowledge Scoring**

<i>Item</i>	<i>Score points</i>	
	<i>Each</i>	<i>Maximum</i>
Symbol identification (shield outline)		
U.S. Government or other inspection.....	1	
Grades of meat.....	1	1
Labels of various foods.....	1	
Food where find symbol		
Fresh meat, poultry.....	1	
Canned fruits, vegetables, juices.....	1	1
Labels of foods containing meat.....	1	
Egg grades		
Four letters correct.....	2	2
One to three letters correct.....	1	
Meat grades		
Three to five grades correct.....	2	2
One or two grades correct.....	1	
Milk grade		
Grade A.....	2	2
Compares package size with price		
Often, occasionally.....	1	1
Total cumulative points.....		9

**Nutritional Knowledge Scoring**

<i>Function or source of nutrients</i>	<i>Score 3</i>	<i>Score 2</i>
General good health.....	Protein	Vitamins
Bacon.....	Fat	Protein
Cottage cheese.....	Protein	Vitamins
Cantaloupe.....	Vitamins	Carbohydrates
Chicken.....	Protein	Vitamins
Pecans.....	Fat	Protein
Growth and repair.....	Protein	Vitamins
Tomatoes.....	Vitamins	-----
Potatoes.....	Carbohydrates	Vitamins
Bread.....	Carbohydrates	Vitamins
Quick energy.....	Carbohydrates	-----
Concentrated energy.....	Fat	-----

<i>Ranked scores</i>	<i>Total score</i>
0-2.....	0-19
3.....	20-24
4.....	25-29
5.....	30-36

### Poultry Recipes

#### Baked

Baked Chicken with Peaches  
Cabbage, Apple, Chicken Casserole  
Chicken Pie  
Chick-n-Rice Bake  
Corn Crisp Chicken  
Country Captain  
Easy Oven Chicken

#### Two methods

Fried Chicken Supreme  
Picnic Chicken Delight  
Waikiki Chicken

#### Cooked chicken

Chicken Curry  
Chicken Pie  
Chicken Loaf  
Chicken Tetrazzini  
Crunchy Party Chicken

#### Stew

Brunswick Stew

#### Broiled

Lemon Broiled Chicken  
Barbecued Chicken

EQUIVALENT FOOD VALUES OF SERVINGS OF BROILER MEAT, DRY BEANS,  
BEEF, PORK, AND MILK<sup>1</sup>

Item	Food value per serving <sup>2</sup>				
	Dry beans	Lean ham- burger	Lean pork	Whole milk	Broiler meat
Item No., Handbook No. 8.....	155	368	1685	1321	685
Nutrients					
Water, <i>per cent</i> .....	69.0	60.0	57.2	87.2	71.0
Calories, <i>number</i> .....	118.0	219.0	236.0	176.0	136.0
Protein, <i>grams</i> .....	7.8	27.4	28.0	9.4	23.8
Fat, <i>grams</i> .....	.6	11.3	12.9	9.8	3.8
Calcium, <i>milligrams</i> .....	50.0	12.0	12.0	312.0	9.0
Phosphorus, <i>milligrams</i> .....	148.0	230.0	292.0	244.0	202.0
Iron, <i>milligrams</i> .....	2.7	3.5	3.6	0	1.7
Vitamin A, <i>I. units</i> .....	0	20.0	0	400.0	90.0
Thiamin, <i>milligrams</i> .....	.14	.09	.61	.08	.05
Riboflavin, <i>milligrams</i> .....	.07	.23	.28	.46	.19
Niacin, <i>milligrams</i> .....	.7	6.0	5.5	.27	8.8

<sup>1</sup> Composition of Foods, Raw, Processed, Prepared. Agriculture Handbook No. 8. Consumer and Food Economics Research Division, ARS USDA. December 1963.

<sup>2</sup> A serving is 100 grams, or 3½ ounces, of cooked beans or meat and 8 ounces of milk.

**Use of Specific Meats**

<i>Meat forms used previous 7 days</i>	<i>Per cent</i>
Poultry	
Broiler-fryers.....	91
Baking or stewing hen.....	8
Turkey.....	1
Beef roast	
Chuck, English cut, boneless.....	47
Not specified, more than one form.....	32
Rump, sirloin.....	21
Beef steak	
Round.....	38
T-bone, sirloin.....	31
Cube, minute.....	17
All other or two forms.....	14
Other beef	
Ground beef, hamburger, meat loaf.....	68
Two or more forms.....	20
Stew beef, all other.....	12
Fresh pork	
Pork chops.....	68
Two or more forms, all other.....	19
Loin, shoulder roast, spare ribs.....	13
Cured ham	
Whole, half, canned, center cut.....	83
Picnic.....	11
Two or more forms, chops.....	6
Other pork	
Bacon and sausage.....	47
Bacon only.....	46
Sausage.....	7
Liver	
Beef, calf.....	76
Pork.....	12
Chicken.....	12
Seafood	
Shrimp, lobster, saltwater fish.....	29
Freshwater fish.....	28
Canned tuna, salmon.....	23
Two or more forms.....	20
Cold cuts	
Wieners.....	33
Two or more forms.....	26
Loaf, sausage.....	16
Bologna.....	14
Canned meat.....	11

