Some indication of the food buying knowledge of homemakers in three Montana counties
by Janice Kay Laidig

A thesis submitted to the Graduate Faculty in partial fulfillment of the requirements for the degree of
MASTER OF SCIENCE Home Economics
Montana State University
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Abstract:
The purpose of this study was to find some indication of the food buying knowledge and habits of homemakers in three Montana counties to serve as a source of information for the Cooperative Extension Service, home economists, retail grocers, wholesalers, food processors, and others interested in the homemaker's buying habits. Hill, Richland, and Beaverhead Counties were selected as the study area on a basis of population, employment, and location. Three thousand six hundred fifteen (3615) selected homemakers were contacted in these counties by a mailed questionnaire, One-third, 1161, of the questionnaires were returned to be used in the study.

The results indicated that one-fourth of the homemakers were influenced by the brand name of the product when purchasing food. Food sales, family and friends, and newspaper advertising were other major influences in food buying.

Use of food was the major consideration for one-third of the homemakers when purchasing food. Other considerations of importances to the homemakers were brand name of product, grade of product, and cost.

Popular magazines and newspapers served as sources of information about grades and standards for 40 percent of the homemakers. Bulletins and information from home economics courses were other sources used, Montana homemakers were best informed about apple, meat, and egg grades. However, the homemakers were generally uninformed of food grades and. -standards. The homemaker's food buying knowledge decreased slightly with age and increased slightly with education and a higher income. The place of residence (urban or rural) did not influence to any extent the homemakers food buying knowledge. Home economics trained homemakers did not show any greater knowledge of food buying practices than those without this training.

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in

Home Economics

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ABSTRACT

The purpose of this study was to find some indication of the food buying knowledge and habits of homemakers in three Montana counties to serve as a source of information for the Cooperative Extension Service, home economists, retail grocers, wholesalers, food processors, and others interested in the homemaker's buying habits. Hill, Richland, and Beaverhead Counties were selected as the study area on a basis of population, employment, and location. Three thousand six hundred fifteen (3615) selected homemakers were contacted in these counties by a mailed questionnaire. One-third, 1161, of the questionnaires were returned to be used in the study.

The results indicated that one-fourth of the homemakers were influenced by the brand name of the product when purchasing food. Food sales, family and friends, and newspaper advertising were other major influences in food buying.

Use of food was the major consideration for one-third of the homemakers when purchasing food. Other considerations of importances to the homemakers were brand name of product, grade of product, and cost.

Popular magazines and newspapers served as sources of information about grades and standards for 40 percent of the homemakers. Bulletins and information from home economics courses were other sources used.

Montana homemakers were best informed about apple, meat, and egg grades. However, the homemakers were generally uninformed of food grades and standards. The homemaker's food buying knowledge decreased slightly with age and increased slightly with education and a higher income. The place of residence (urban or rural) did not influence to any extent the homemakers food buying knowledge. Home economics trained homemakers did not show any greater knowledge of food buying practices than those without this training.

# CHAPTER I

## INTRODUCTION

### Problem Situation

There was a time when few food items were available on the market and in many cases the money with which to buy them was limited. Today, the problems involved in obtaining goods to consume are more complicated. Food technology is putting more and more food items on the grocery shelves for the consumer to select. Faced with the necessity of decision making the consumer tends to seek the advice of others. Familiar queries of "Which brand of peas is best?" and "Which cake mix is best?", indicate that many buyers want the judgment of someone else. It is impossible to prescribe what is best suited for a particular consumer without knowing the specific purpose of the item.

The homemaker is the chief consumer-buyer of food (1). Her family, various food stores, advertisers, and marketing agencies are continually reminding the homemaker of this important part of family living. In her role as food buyer, the homemaker needs information about the commodities that she buys and an understanding of how to make decisions about what to buy.

As personal incomes continue to increase in the United States, the homemaker probably will use more money in purchasing food items and services. With a large number of homemakers working outside the home, the family income is higher and the family spending patterns are altered. Items purchased by the family are directed toward allowing the homemaker

to have time to serve in this dual role, as well as time for activities outside the home.

Many of the young consumers of today have lived in an environment of abundance. The shopping competence of these young consumers is increasingly important to them, to their families, and to their communities not only because such competence would enable them to feed their families more wisely but also because it would aid them financially.

## Food Trends

The variety of food items offered for sale in the American colonial market was comparatively limited. The family and community were self-sufficient in supplying the food which they consumed. During this cracker-barrel era most foods offered to the consumers were fairly simple products, which were produced near the point of sale with virtually no processing or packaging with little attention having been given to variety, convenience, or sanitation. Generally the only people involved were the farmer, the grocer, and the customer. At that time it was easy for the consumer to examine the product and its quality before it was wrapped by the grocer.

Today, with 5,000, 6,000, or 7,000 items in the supermarket, and with the strong possibility that this number will double within the next ten years, this simple, almost personal relationship between the farmer, the grocer, and the customer has been made vastly more complex. The modern big supermarket has about 6,000 items on its shelves. These items include

more than 85 different kinds and cuts of meat--not including cold cuts. Also on the shelves are 262 different combinations of can sizes, brands, and varieties in canned vegetables (2). During the next year it is estimated that an additional 400 items will be added to the 6,000 already on the supermarket shelves.

There is a greater variety of food items today and they are processed and packaged differently than ten years ago. These items have introduced a whole new food vocabulary to the homemaker. For example, foods may now be concentrated, frozen, dehydrated, dehydro-frozen, or irradiated. They require new kinds of storage, new kinds of packaging, and often new standards of identity.

As more and more of the things we buy come to us ready to use, standards of identity are necessary if we are to have confidence in the things we buy (3). It is doubtful that there are many consumer goods that have not been subjected to a variety of standards on their route from the production of the raw materials to the finished product. Frequently the only guides to the contents of the food packages are grades, labels, and brands, which the homemaker must evaluate if she wants to get the best value for her dollar (4). The food problem today is in making wise decisions in selection, purchase, and usage. The ability to purchase food wisely has become a skill and an art (5).

## Today's Consumer

According to a survey by "Progressive Grocer" (6), today's food buyer

is a 35-year old wife with two children. The family has an income of $5,850 a year. She drives two miles to the supermarket to do the weekly shopping on Friday afternoon. Store displays influence her to try a new product, change a brand or "stock up" on an extra supply. She spends about one-half hour per week in shopping and spends about $1,125 in supermarkets each year for food and other items.

Since we have a consumer-oriented culture, the consumer is king. But in many cases the consumer does not realize the nature or strength of his power. This is especially true of the young consumer. Young people can be taught to figure things out for themselves regarding food purchases and to be proud of their technical knowledge (7). A study has shown that 80 percent of the teen-age girls studied shopped for their family's food and spent one-fourth of the entire family's food budget (6). Hence, the purchasing behavior of the young person is important today. She should be taught the problems, limitations, and opportunities of marketing from the standpoint of the purchaser (7).

Although consumers read or listen to advertisements, they also get information about products and services from friends and relatives (8). The information they obtain from friends and relatives about a product's performance may mean more to them than the information they get from advertisements or from shopping.

A survey of Alabama homemakers (9) indicated that food advertisements in newspapers were one of the most influential promotional media. Homemakers living in small cities (under 25,000) were in general more responsive

to promotional media than homemakers in larger cities. The younger homemaker and the homemaker with nine to twelve years of education were influenced most by their families (children) to buy certain foods.

In a recent survey by United States Department of Agriculture marketing specialists (10) in Greensboro, North Carolina, it was found that most families used 40 percent of the food money for meat, poultry, fish, and eggs. Vegetables and fruit composed 23 percent of the family's food bill. Dairy products made up 17 percent, while 11 percent was spent for cereals. Miscellaneous items amounted to 9 percent.

Researchers in Michigan (11) conducted a study to determine the homemakers' knowledge in six selected areas of food buying. The areas studied were eggs, meat buying, reconstituted non-fat dry milk, grades of beef, apples, and food costs. It was found that the homemakers were the best informed about egg buying and the least about apple grading and the economic aspects of food costs. The homemakers knew top quality eggs when broken from the shell, but were confused about the terminology for egg grading. They incorrectly associated facts such as storage and color of the shell with requirements for graded eggs. They frequently thought that the size of eggs indicated quality. The homemakers generally did not know the answers concerning grades of meat. They thought that the U.S. Inspection Stamp and the U.S. Grade Stamp were the same thing. Those homemakers with higher incomes, more education, and between the ages of 31 to 60 had the highest level of food buying knowledge in most areas. One-third of the Michigan homemakers were found to be misinformed concerning the

difference between "U.S. No. 1" and "U.S. Fancy" grades of apples.

Researchers in California (12) found that convenience in food preparation was valued more highly by the homemaker with the greater amount of formal education than those with less education. Food buyers over 50 indicated a much higher value for the brand name factor than did food buyers under 50. This study gave evidence that homemakers having an elementary or high school education, valued the brand name more than food buyers having a college education.

A study of the shopping habits of young homemakers in all regions of the United States (13), indicated that they used a limited amount of convenience foods. Many of the homemakers did not have any idea of the sources used for information on food buying. Some indicated that newspapers, cookbooks, women's magazines, and food labels were used.

A study of Alabama homemakers (14) ranked as their highest source of information regarding food buying the recipes on the food containers. Urban homemakers between 30 and 50 years old were the most responsive age group to promotional displays found in the food market (14).

Today's food shopper controls the food expenditure of the family (4). She can spend or save depending on her inclination and her information. Since money spent on food is the major living expenditure for most families, the homemaker has the opportunity and the responsibility to influence the health of the family members as well as the health of the family purse.

Many families are developing new tastes, new appetites, new habits, and new horizons. Better foods, new foods, and more foods suggest needed

changes in shopping habits. In this era of supermarkets, customers are "on their own." The customer is the one who must make the value judgments of quality, brand, and price of the food she buys (15).

## Montana's Consumer

Montana's population during the past ten years has not increased at the same rate as the nation's. The state's population increased 14 percent between 1950 and 1960, while the population of the nation increased 18.5 percent (16). The urban population in Montana exceeded the rural for the first time in 1960. The 1960 urban population in Montana was 50.2 percent of the 674,767 people. About 15 (15.6) percent of the state's population lived in rural areas and about 34 percent (34.2) lived in rural non-farm areas. The mountain counties in Montana have become more populous in the past 30 years than the plains counties.

Characteristics of Montana's population have also changed in the last ten years. There has been a decrease in working population (between 18 and 64 years of age) and an increase in dependent population (under 18 years of age) (17).

The median 1960 income of Montana families was $5,403. About 20 percent (20.2) of the families had incomes under $3,000, approximately 68 percent (68.3) had incomes between $3,000 and $10,000, and nearly 11 percent (11.5) had incomes of $10,000 and over (18).

About one-third (32.6 percent) of the 224,898 women were employed. The women who were 25 years of age and over had completed a median of 12.1 years of school.

## Problem Statement

Many people are challenged with helping the consumer learn to purchase wisely from the abundance and multiplicity of the nation's food supply. In order to help the Montana homemaker it is necessary to ascertain the characteristics of her present food buying knowledge. Determining the food buying knowledge of the Montana homemaker will serve as a guideline for the Cooperative Extension Service, retail grocers, wholesalers, food processors, home economists, and others interested in the homemaker's food buying knowledge.

## Objectives

The major objective is to determine how well informed homemakers in Montana are about food standards and grades.

Specific objectives are to:

1. Determine the homemaker's knowledge of grades and standards of beef, poultry, eggs, enriched bread, milk, fruits, and vegetables.
2. Identify the sources the Montana homemaker uses to obtain information about food standards and grades.
3. Determine what media influence the homemaker when she buys food.
4. Identify the criteria the homemaker uses in purchasing food.
5. Determine if income, age, education, employment outside the home, completion of home economics courses in foods

and nutrition, and residence (urban or rural) influence the knowledge a homemaker has about food standards and grades.

## Hypotheses

The general hypothesis is that homemakers in Montana are generally uninformed, and frequently misinformed, in areas of food buying information.

Specific hypotheses are:

1. Homemakers are influenced most by their families and friends in food buying.
2. Popular magazines and newspapers are the sources most used by the homemaker to obtain information about food standards and grades.
3. Information from friends and that presented at group meetings exerts a degree of influence.
4. Homemakers consider the cost first when purchasing foods.
5. Home economics trained individuals are no more cognizant of grades and standards than are those who have not received this training.
6. Urban homemakers have a better understanding of grades and standards than do rural homemakers.
7. Knowledge of purchasing food is directly proportional to the age, education, and income level of the homemaker.

## CHAPTER II

## RESEARCH DESIGN

Montana's population is divided about equally between rural and urban places of residence. Nine cities within the state have a population over 10,000. Its topography is varied, but most areas are suitable for farming and ranching. These factors were used as guides in selecting the areas in which the food buying knowledge and characteristics of the Montana homemaker might be studied. Three (Hill, Richland, and Beaverhead) of the 56 counties were selected for the study on a basis of population, type of employment within the county, and location of county within the state (figure 1). The population within the counties is approximately half urban. Towns within the three counties range from a population of only a few to over 10,000. The counties differ in topography: Hill and Richland are mainly plains while Beaverhead has both plains and mountains. Employment varies from farming and ranching to college teaching and business.

The selection of the homemakers for this study was made by choosing every other name in the current telephone directories. This seemed to be the least biased of any available sources of names.

The people selected were mailed a questionnaire (Appendix B) which had been reviewed by college faculty in various departments and pretested with Montana homemakers who had been selected from the Cooperative Extension Service list of Home Demonstration Council members.

The 3615 unidentified questionnaires were mailed to the homemakers with a stamped return envelop enclosed. A news article was sent to

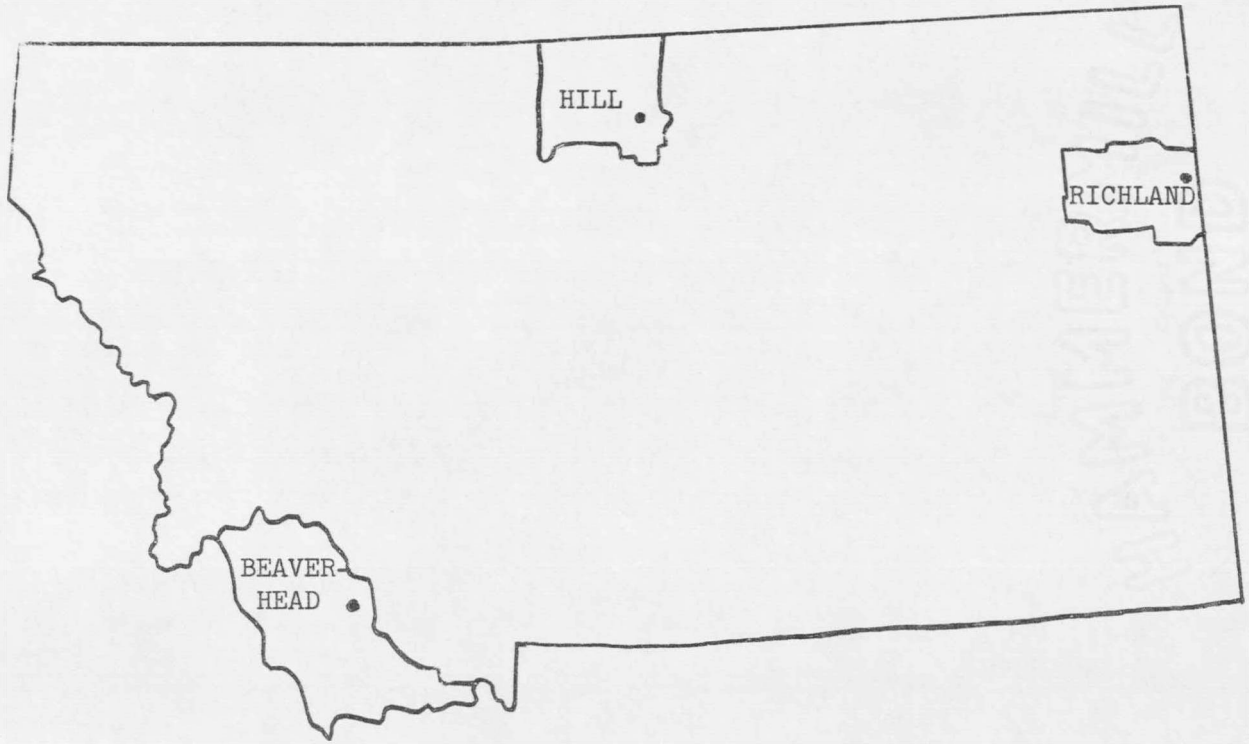


FIGURE 1. Location of counties used in the study of food buying habits of homemakers in three Montana counties, 1965.

newspapers throughout the state to alert homemakers about the study and its importance before the questionnaires were mailed. Results from the questionnaires were recorded on IBM cards for tabulating.

## Definition of Terms

The following terms are defined as they are used in this study: Grades are the acceptable limits or ranges of food quality at the time of its evaluation (4).

Standards are used as describing the nature and character of a given food product (4).

Influences are those intangible factors that produce a desire to buy certain food items when marketing for groceries.

Considerations are those factors which the homemaker is concerned with at the time of food purchasing.

The corrections of questions concerning food grades and standards (pp. 22-32) were based upon information from U.S.D.A. bulletins and regulations for the State of Montana as they applied to the various foods (19, 20, 21, 22).

## Study Areas

The three selected counties compare closely with the general characteristics of the state (table I.).

Beaverhead County, the largest county in Montana, is located in southwest Montana, with Idaho to the south and west. Western Montana College is located in Dillon, the county seat. The total population of the county according to the 1960 census was 7,194 with 24.1 percent rural,

TABLE I. General characteristics of study areas as indicated by the 1960 census.

| Characteristics | Montana | Beaverhead County | Richland County | Hill County |
|---|---|---|---|---|
| Population | 674,767 | 7,194 | 10,504 | 18,653 |
| Percent rural | 15.6 | 24.1 | 28.6 | 15.7 |
| Percent rural non-farm | 34.2 | 24.6 | 27.9 | 26.7 |
| Percent urban | 50.2 | 51.3 | 43.5 | 57.6 |
| Median family income | $5,403 | 4,998 | 4,462 | 6,210 |
| Percent women in labor force | 32.6 | 34.6 | 27.0 | 33.0 |
| Median school years completed by women | 12.1 | 12.2 | 11.7 | 12.1 |

24.6 percent rural non-farm, and 51.3 percent urban. The labor force included 34.6 percent of the women living in the county. The median income of the 1,711 families was $4,998. The women within the county had completed a median of 12.2 years of school (18).

Hill County is located in north central Montana, with Canada forming its northern border. The Rocky Boy Indian Reservation located in the county is the home of a group of Chippewa and Cree Indians. Havre, the county seat of Hill County, is the location of Northern Montana College. This county is primarily a grain and livestock area. The county population according to the 1960 census was 18,653 of which 26.7 percent were rural non-farm, 15.7 percent rural, and 57.6 percent urban. Thirty-three percent of the women were in the labor force. The median income for the 4,432

families was $6,210. The women within the county had completed a median of 12.1 years of school (18).

Richland County in eastern Montana is bordered by North Dakota on the east. Major crops were livestock and grain, with sugar beets important in the irrigated sections. Sidney served as the trade center for the area as well as being the county seat. The county population according to the 1960 census was 10,504 of which 27.9 percent were rural non-farm, 28.6 percent rural, and 43.5 percent urban. Twenty-seven percent of the women were in the labor force. The median income for the 2,584 families was $4,462. The women within the county had completed a median of 11.7 years of school (18).

## Limitations of Data

The data concerning food buying knowledge and buying characteristics of 1,161 Montana homemakers has the following limitations:

1. Only three of the 56 counties in the state were used. Because of this sample, generalizations of the findings have not been made for the state.
2. The names were selected from telephone directories, therefore families not listed in the directory were excluded from the study.
3. The respondents varied in their ability to recognize the factors which influenced their purchasing of food.

# CHAPTER III

## DATA ANALYSIS

The questionnaires provided information on the food buying knowledge and characteristics of the Montana homemaker in the study. From the 3,615 questionnaires mailed, 121 were returned unclaimed, 15 unanswered, and 1,161 or one-third were usable.

### Identification of Respondents

The homemakers who returned the questionnaires are identified in table II. These homemakers compared closely with the characteristics of Montana women (table I). Slightly more than half of the respondents, 60.4 percent, were urban residents, 16.6 percent rural residents, and 12.5 percent lived in rural non-farm areas. Some of the homemakers indicated they had both rural and urban residences. In cases such as this, the homemaker was recorded as an urban resident. Montana ranch women often live in the city during the school months so that their children will have access to school. Some families live in the city commuting to their ranch or farm daily.

More than one-third, 35.5 percent, of the homemakers were employed either full or part time outside the home. This compared closely with the 32.6 percent of all Montana women employed in 1960 (table II).

About one-third, 34.2 percent, of the homemakers had completed only high school and approximately another third, 30.2 percent, had had some college education (table II).

The homemakers were asked in the questionnaire if they had had home economics courses that included foods and nutrition. About 40 percent

TABLE II. Major characteristics of 1,161 Montana homemakers, 1965.

| Characteristics | Number of Respondents a/ | Percent of Respondents a/ |
|---|---|---|
| Place of residence | | |
| Farm | 193 | 16.6 |
| Open country non-farm | 69 | 5.9 |
| City under 2,500 | 77 | 6.6 |
| City of 2,500 - 4,999 | 203 | 17.5 |
| City of 5,000 - 10,000 | 286 | 24.6 |
| City over 10,000 | 329 | 28.3 |
| Total | 1,157 | 99.5 |
| Employment | | |
| Unemployed | 748 | 64.4 |
| Part time | 177 | 15.2 |
| Full time | 234 | 20.2 |
| Total | 1,159 | 99.8 |
| Education | | |
| Some grade school | 18 | 1.6 |
| Grade school graduate | 64 | 5.5 |
| Some high school | 144 | 12.4 |
| High school graduate | 397 | 34.2 |
| Some college | 351 | 30.2 |
| College graduate | 125 | 10.7 |
| Some graduate training | 46 | 4.0 |
| Advanced degree | 12 | 1.0 |
| Total | 1,157 | 99.6 |
| Home economics education | | |
| None | 462 | 39.8 |
| Junior high school | 175 | 15.1 |
| High school | 580 | 50.0 |
| College major | 16 | 1.4 |
| College minor | 49 | 4.2 |
| Total | 1,282 | 110.5 |
| Age | | |
| Under 20 years | 5 | 0.4 |
| 20 - 29 years | 164 | 14.1 |
| 30 - 39 years | 306 | 26.4 |
| 40 - 49 years | 306 | 26.4 |
| 50 - 59 years | 211 | 18.2 |
| 60 and over | 163 | 14.0 |
| Total | 1,155 | 99.5 |
| Family income | | |
| Less than $3,000 | 142 | 12.2 |
| $3,000 - 4,999 | 270 | 23.3 |
| $5,000 - 6,999 | 329 | 28.3 |
| $7,000 - 8,999 | 175 | 15.1 |
| Over $9,000 | 195 | 16.8 |
| Total | 1,111 | 95.7 |

a/ Totals may not equal 1,161 or 100 percent because some respondents omitted some questions, but for home economics education more than one answer could have been selected.

(39.4) of the respondents had not had any such courses, 15.1 percent had had junior high school home economics, 50 percent had completed high school home economics, and 5.6 percent had courses in foods and nutrition as a college major or minor (table III).

The age distribution of the homemakers ranged from under 20 years to over 60 years. The oldest known respondent was 91 years old and several respondents were in their 80's. The majority of the respondents were between 30 and 49 years of age (table II).

The 1964 median net income of the respondents families was between $5,000 and $6,999 (table II). Several rural respondents remarked that 1964 was not a normal income year for them, however, the median income for the respondents families was approximately the same as the Montana family income median in 1960 (table I).

## Influences in Food Buying

In attempting to ascertain the factors influencing the homemaker in buying food, the questionnaire requested the homemaker to list the influencing factors by numbering from one to five with the most influential factors as number one and the least as number five. The following list was presented to the homemaker in the questionnaire: Television, radio, newspaper advertising, magazines, advertising in the store, brand of food product, food sales, family and friends. They also were given an opportunity to list influencing factors other than these named.

The manner in which the homemakers responded to this question is given in figure 2. It will be noted that 234 of the respondents either

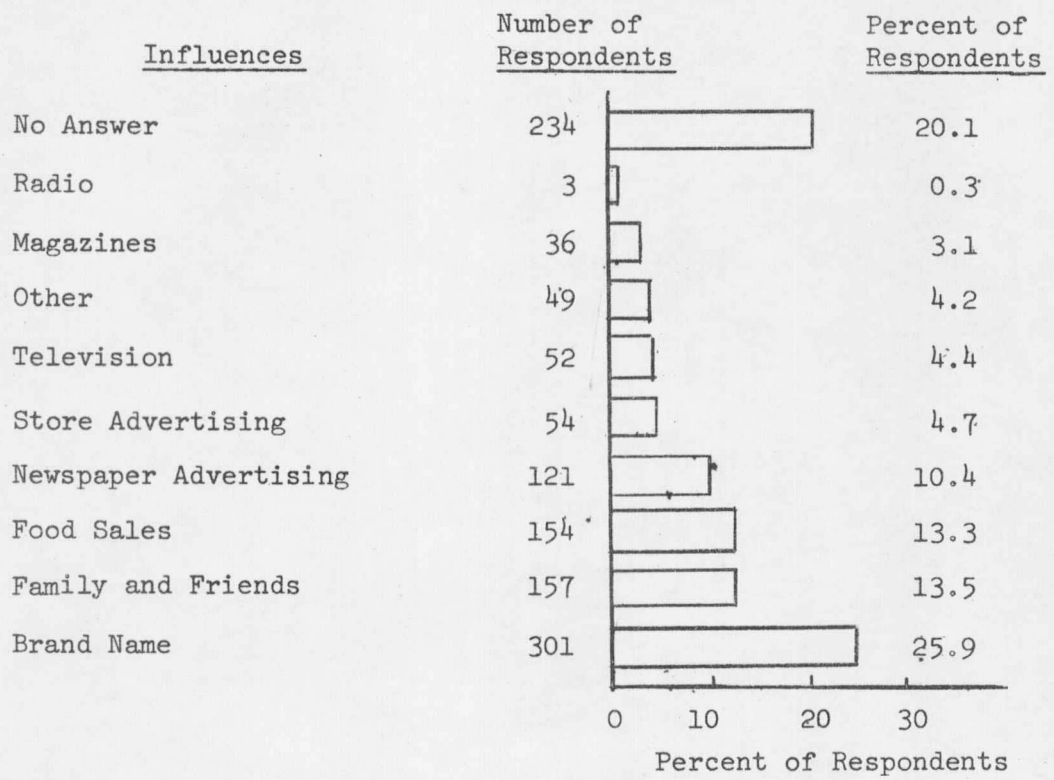


FIGURE 2. First influences in food buying as indicated by 1,161 Montana homemakers, 1965.

did not answer this question or did not follow the directions so that their responses could be tabulated. These homemakers constituted 20.1 percent of the total respondents. The most influential factor as indicated by the responding homemakers was the "brand name", with 25.9 percent selecting this as their most influential factor. The next most influential factors were family and friends (13.5 percent) and food sales (13.3 percent). Newspaper advertising was selected as the most influential factor by 10.4 percent of the respondents. Television and store advertising were selected by only 4.4 percent and 4.7 percent respectively. Magazines, as a factor, was selected by only 3.1 percent, and radio dropped to the almost insignificant level of 0.3 percent.

### Considerations in Buying Food

To determine the factors that the homemakers considered when purchasing food, the questionnaire requested that the homemakers list the considerations by numbering from one to five with the first consideration as one and the least as five. The following list of considerations was presented to the homemakers in the questionnaire: Convenience, cost, grade of the food, brand name of the food, and how the food was expected to be used. In this question also the respondents were given an opportunity to name considerations other than those listed.

The response to this question by the 1,161 homemakers is given in figure 3. Sixty of the respondents either did not answer this question or did not follow the directions of the question so that their response could be tabulated. These homemakers constituted 5.1 percent of the total

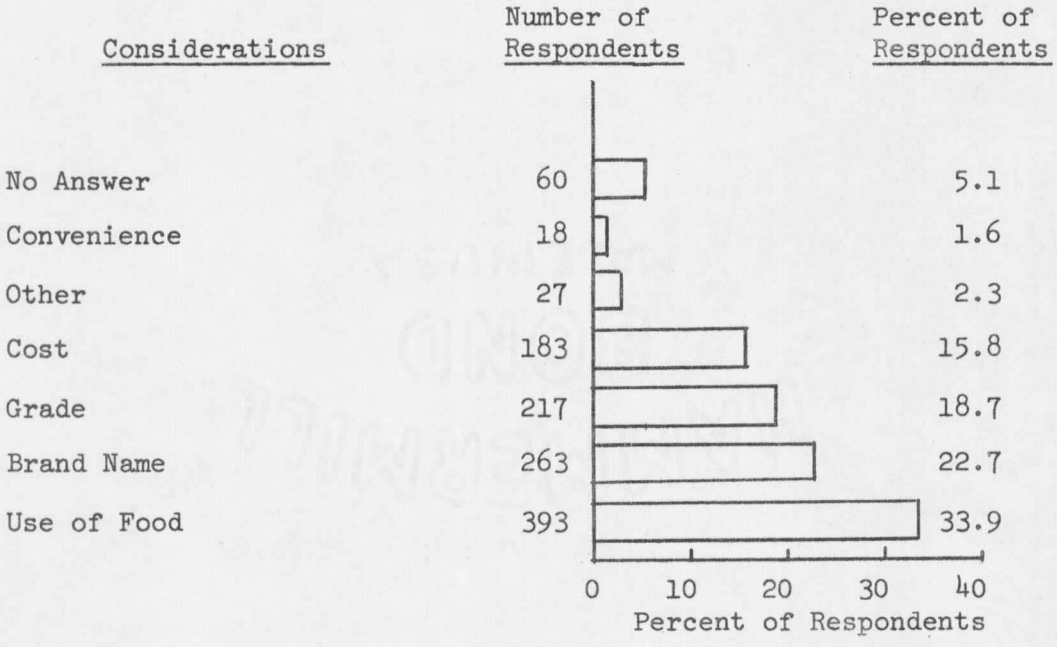


FIGURE 3. First considerations in purchasing food as indicated by 1,161 Montana homemakers, 1965.

respondents. The major consideration as indicated by the responding homemakers was the "use of the food" with 33.9 percent giving this as their first consideration. The next three considerations given by the homemakers were brand name of the product (22.7 percent), grade of the food (18.7 percent), and cost of food (15.8 percent). Convenience exerted very little influence on the homemaker with only 1.6 percent giving this as their first consideration when purchasing food. About two percent (2.3) of the responding homemakers gave other considerations when purchasing food. Some of these other considerations were family preferences, nutritional value of food, and size of food container (page 43, Appendix C).

## Sources of Information

What were the information sources used by the responding homemakers concerning food grades and standards? To determine the sources, the questionnaire requested that the homemakers list the information sources by numbering from one to five with the major source as one and the least used source as five. The following list of information sources was presented to the homemakers in the questionnaire: Magazines and newspapers, bulletins, information from home economics courses, friends, and group meetings. The homemakers also were requested to specify sources other than those given in the questionnaire.

The responses to this question by the 1,161 homemakers are given in figure 4. It will be noted that 182 of the respondents either did not answer this question or did not follow the directions in such a way that their responses could be tabulated. These homemakers constituted 15.7

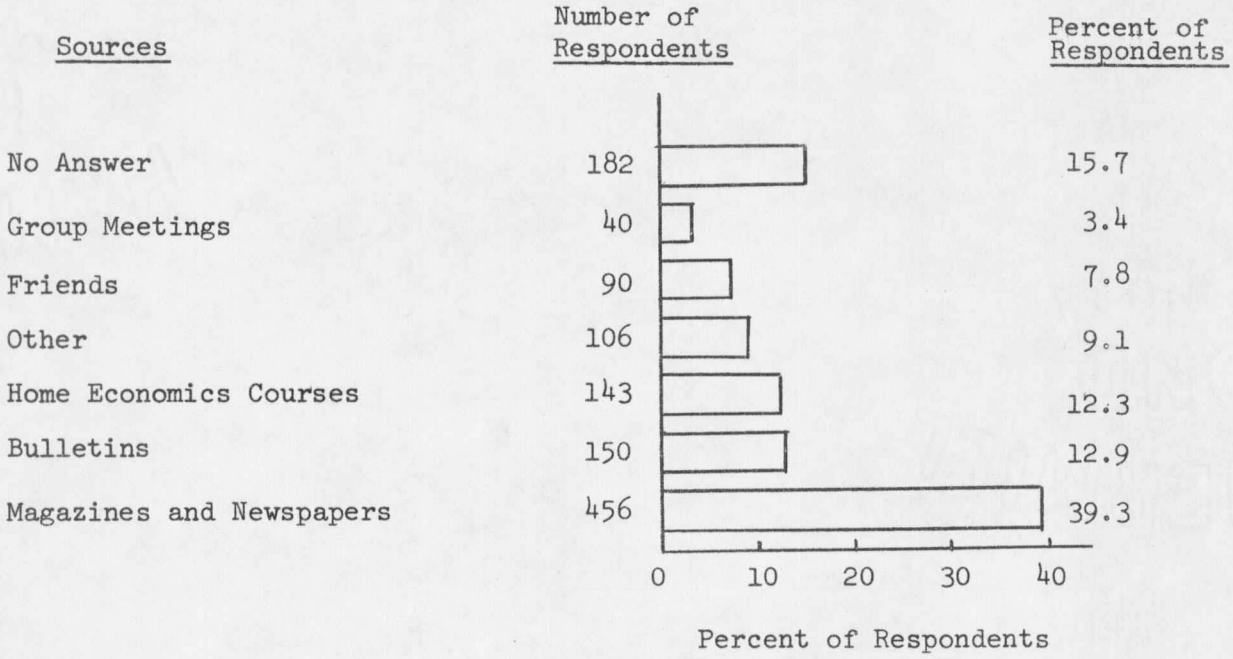


FIGURE 4. Major sources of information about grades and standards as indicated by 1,161 Montana homemakers, 1965.

percent of the total respondents. About 40 percent (39.3) of the responding homemakers gave popular magazines and newspapers as their main sources of information. This is interesting in the light of the findings of Simmons and Roehm (24) that high school home economics teachers and Extension personnel were also using popular magazines as their main source of information in teaching food grades and standards. The two next most used sources of information were bulletins (12.9 percent) and information from home economics courses (12.3 percent). About nine percent (9.1) of the responding homemakers listed other sources of information. Some of these sources were television and radio, the grocer, food labels, cookbooks, their daughters, 4-H information, the Extension Service, and "experience" (page 43, Appendix C). Friends were given as information sources by 7.8 percent of the homemakers, while 3.4 percent indicated that group meetings were their major source.

## Knowledge of Grades and Standards

Figure 5 gives the percent of correct responses of the respondents in this study to questions 2, 4, 5, and 6 in the questionnaire (page 39, Appendix B). According to figure 5, the Montana respondents were best informed about apple, egg, meat grades, and standards of identity for grading canned fruit. They knew least about potato grades, that canned fruit is graded for tenderness, that all meat inspected and passed has not been graded by the U.S. Government, the fat content of hamburger is stated by law, and that a state law does not exist regarding the enrichment of flour. This confirms the major hypothesis that Montana homemakers are

A - Meat graded U.S. Good is a higher grade than U.S. Choice.
B - All meat stamped "U.S. Inspected and Passed" has been graded by the U.S. Government.
C - "Hamburger" content is defined by law.
D - By state law all white bread sold in Montana is enriched.
E - All fryer chickens are federally inspected and passed for wholesome food.
F - Butterfat content of milk is defined by law.
G - Grade B eggs are suitable for use in baked products.
H - All large eggs are sold as Grade AA.
I - Grade A fruits and vegetables are the most nutritious.
J - Fortified milk has vitamins, minerals, or nonfat dry milk added.
K - Evaporated milk has some water removed and sugar added.
L - Canned fruit is graded for tenderness.
M - Characteristics for grading canned fruit.
N - Potato grades.
O - Apple grades.

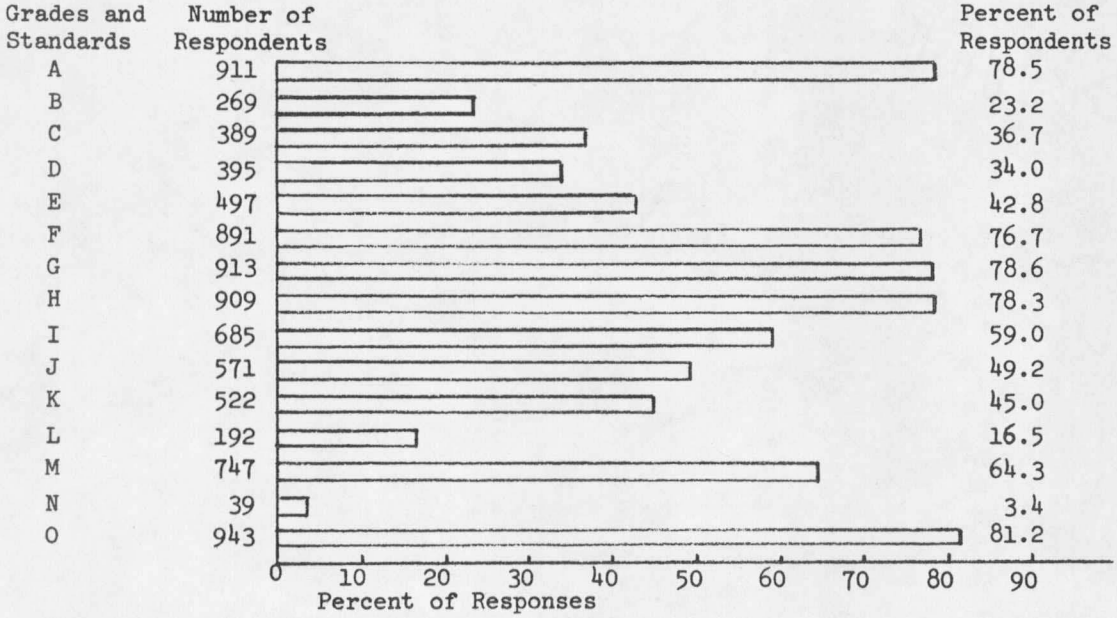


FIGURE 5. Percent of correct responses for grades and standards given by 1,161 Montana homemakers, 1965.

inadequately informed and frequently misinformed in areas of food buying.

Table III gives the percent of correct responses by the homemakers to questions 2, 4, 5, and 6 in the questionnaire (page 39, Appendix B) evaluated in terms of question number 11, the amount of home economics education received. The respondents answered either "Agree" or "Disagree" to the questions.

If the respondents with no home economics education are compared with the average correct percent of responses given by those that have received home economics training, table III shows that the respondents without home economics education were almost as well informed about nearly all food grades and standards as those having had home economics education.

In the question related to the definition of evaporated milk, there was a tendency for more respondents with home economics education to know that evaporated milk contained less water than regular milk and no sugar than those homemakers who had not had home economics.

There was a definite tendency for the college majors and minors to know that Grade A canned fruits and vegetables were not necessarily the most nutritious.

All of the 16 college home economics majors knew that meat stamped "U.S. Inspected and Passed" had not necessarily been graded.

The high school home economics educated respondents were informed least about meat grades and the college home economics graduates were informed the most about these grades. Meat grades in the past may have received more emphasis in teaching than grades of other foods.

TABLE III. Percent of correct responses for grades and standards given by 1,161 Montana homemakers according to home economics education, 1965.

| Number of Respondents | None 462 | Junior High School 175 | High School 580 | College Major 16 | College Minor 49 |
|---|---|---|---|---|---|
| Grades and Standards: | | | | | |
| A | 86.6 | 87.4 | 80.7 | 100.0 | 93.9 |
| B | 25.3 | 22.9 | 21.2 | 37.5 | 28.6 |
| C | 32.3 | 36.0 | 33.4 | 37.5 | 30.6 |
| D | 33.5 | 36.0 | 34.0 | 37.5 | 34.7 |
| E | 47.6 | 54.3 | 46.0 | 62.5 | 53.1 |
| F | 76.1 | 79.4 | 77.1 | 75.0 | 79.6 |
| G | 78.9 | 80.0 | 78.8 | 81.3 | 69.4 |
| H | 78.6 | 84.6 | 76.9 | 81.3 | 87.8 |
| I | 54.5 | 64.0 | 62.1 | 81.3 | 77.6 |
| J | 48.1 | 55.4 | 48.6 | 37.5 | 59.2 |
| K | 41.8 | 49.1 | 45.3 | 56.3 | 59.2 |
| L | 16.9 | 14.3 | 16.4 | 0.0 | 22.4 |
| M | 59.3 | 68.6 | 68.1 | 81.3 | 71.4 |
| N | 2.1 | 4.0 | 3.3 | 0.0 | 4.1 |
| O | 78.1 | 81.1 | 83.9 | 87.5 | 83.7 |

A - Meat graded U.S. Good is a higher grade than U.S. Choice.
B - All meat stamped "U.S. Inspected and Passed" has been graded by the U.S. Government.
C - "Hamburger" content is defined by law.
D - By state law all white bread sold in Montana is enriched.
E - All fryer chickens are federally inspected and passed for wholesome food.
F - Butterfat content of milk is defined by law.
G - Grade B eggs are suitable for use in baked products.
H - All large eggs are sold as Grade AA.
I - Grade A fruits and vegetables are the most nutritious.
J - Fortified milk has vitamins, minerals, or nonfat dry milk added.
K - Evaporated milk has some water removed and sugar added.
L - Canned fruit is graded for tenderness.
M - Characteristics for grading canned fruit.
N - Potato grades.
O - Apple grades.

Nearly all of the homemakers in this study did not know the wholesale grades for potatoes.

There was a definite tendency for those homemakers who had had home economics education to be more informed about the characteristics used in grading canned fruit than the other homemakers.

Table IV gives the percent of correct responses of the 1,161 Montana homemakers for questions 2, 4, 5, and 6 in the questionnaire (page 39, Appendix B) evaluated according to place of residence, question number eight.

The hypothesis for this part of the study was that urban (towns with population above 25,00) homemakers have a better understanding of food grades and standards than do rural (farm, rural non-farm, and cities under 2,500 populations) homemakers.

Table IV shows that slightly more of the rural homemakers tended to know that Grade B eggs are suitable for baking than those living in urban residences.

A slightly greater percent of all urban homemakers in this study knew that Montana did not have an enrichment law for bread than the rural homemakers.

The rural homemakers were slightly more knowledgeable regarding the standards for canned fruit than were those living in urban residences.

This hypothesis was not proven to be true from an evaluation of the data. Homemakers having rural residences were about as knowledgeable of grades and standards for the foods asked in the questionnaire as those living in urban residences.

TABLE IV. Percent of correct responses for grades and standards given by 1,161 Montana homemakers according to place of residence, 1965.

| | Farm | Non-Farm | City Under 2500 | 2500-4999 | 5000-10,000 | Over 10,000 |
|---|---|---|---|---|---|---|
| Number of Respondents | 193 | 69 | 77 | 203 | 286 | 329 |
| Grades and Standards: | | | | | | |
| A | 87.2 | 93.8 | 80.5 | 86.6 | 87.1 | 88.8 |
| B | 25.1 | 30.8 | 16.9 | 24.8 | 23.1 | 21.3 |
| C | 26.2 | 44.6 | 29.9 | 34.7 | 32.5 | 37.4 |
| D | 32.8 | 33.8 | 24.7 | 34.5 | 38.8 | 33.1 |
| E | 47.2 | 44.6 | 44.2 | 49.5 | 50.3 | 43.5 |
| F | 72.8 | 80.0 | 76.6 | 78.2 | 80.4 | 76.0 |
| G | 72.8 | 87.7 | 88.3 | 76.7 | 77.6 | 81.8 |
| H | 78.5 | 81.5 | 70.1 | 81.2 | 79.7 | 77.8 |
| I | 56.4 | 63.1 | 61.0 | 60.9 | 57.7 | 60.5 |
| J | 44.1 | 58.5 | 39.0 | 44.6 | 58.0 | 48.9 |
| K | 43.1 | 56.9 | 31.2 | 43.6 | 47.6 | 45.9 |
| L | 11.8 | 16.9 | 20.8 | 15.8 | 16.4 | 18.5 |
| M | 68.2 | 64.6 | 68.8 | 63.4 | 62.2 | 64.7 |
| N | 3.6 | 3.1 | 6.5 | 2.5 | 3.1 | 3.0 |
| O | 81.0 | 86.2 | 79.2 | 86.1 | 81.1 | 79.6 |

A - Meat graded U.S. Good is a higher grade than U.S. Choice.
B - All meat stamped "U.S. Inspected and Passed" has been graded by the U.S. Government.
C - "Hamburger" content is defined by law.
D - By state law all white bread sold in Montana is enriched.
E - All fryer chickens are federally inspected and passed for wholesome food.
F - Butterfat content of milk is defined by law.
G - Grade B eggs are suitable for use in baked products.
H - All large eggs are sold as Grade AA.
I - Grade A fruits and vegetables are the most nutritious.
J - Fortified milk has vitamins, minerals, or nonfat dry milk added.
K - Evaporated milk has some water removed and sugar added.
L - Canned fruit is graded for tenderness.
M - Characteristics for grading canned fruit.
N - Potato grades.
O - Apple grades.

The percent of correct responses given by the 1,161 Montana homemakers in this study to questions 2, 4, 5, and 6 (page 39, Appendix B) evaluated according to age, question number 12, is shown in table V.

In table V the number of respondents under 20 years of age was only five. Therefore, it seemed wise to exclude these homemakers from the discussion of the table.

In general, those homemakers in the age group of 20 to 29 years were slightly less informed about grades and standards than those homemakers 50 to 59 years of age. However, the homemakers in the 30-39 and 40-49 year age groups were slightly more knowledgeable regarding grades and standards than any other groups. Those respondents 60 years old and older had a tendency to know less than the younger homemakers about food grades and standards.

The percent of Montana homemakers in this study who gave correct responses to question 2, 4, 5, and 6 (page 39, Appendix B) is evaluated according to question ten, the education completed by the homemaker, in table VI.

There was a tendency for the homemakers with more education to answer correctly the question regarding the relation of size to grade of eggs, the state law concerning the enrichment of bread, that meat inspection does not mean grading, meat grades, characteristics for grading fruit, and apple grades. The remaining questions were generally equally well known by homemakers with all levels of education.

Table VII presents the percent of correct responses given by the 1,161 Montana homemakers to questions 2, 4, 5, and 6 of the questionnaire

TABLE V. Percent of correct responses for grades and standards given by 1,161 Montana homemakers according to age, 1965.

| Number of Respondents | Under 20 Years 5 | 20-29 164 | 30-39 306 | 40-49 306 | 50-59 211 | 60 and Over 163 |
|---|---|---|---|---|---|---|
| Grades & Stand: | | | | | | |
| A | 100.0 | 87.8 | 87.9 | 90.5 | 86.7 | 79.1 |
| B | 0.0 | 19.5 | 28.4 | 23.2 | 20.4 | 21.5 |
| C | 40.0 | 32.9 | 32.0 | 35.6 | 33.6 | 32.5 |
| D | 60.0 | 33.5 | 30.4 | 37.6 | 37.0 | 31.3 |
| E | 40.0 | 39.0 | 45.8 | 50.7 | 50.2 | 45.4 |
| F | 60.0 | 66.5 | 82.4 | 75.2 | 80.1 | 76.7 |
| G | 60.0 | 84.1 | 77.5 | 81.0 | 76.8 | 75.7 |
| H | 80.0 | 78.0 | 81.7 | 81.0 | 78.7 | 66.3 |
| I | 20.0 | 53.7 | 64.4 | 65.0 | 63.0 | 39.9 |
| J | 0.0 | 50.0 | 48.4 | 48.0 | 51.7 | 51.5 |
| K | 100.0 | 40.2 | 51.6 | 43.8 | 48.8 | 31.9 |
| L | 20.0 | 20.7 | 12.7 | 16.0 | 16.6 | 19.0 |
| M | 80.0 | 65.9 | 68.0 | 65.7 | 63.0 | 52.8 |
| N | 0.0 | 3.0 | 4.2 | 2.9 | 2.8 | 3.7 |
| O | 80.0 | 78.7 | 87.6 | 83.7 | 85.3 | 63.2 |

A - Meat graded U.S. Good is a higher grade than U.S. Choice.
B - All meat stamped "U.S. Inspected and Passed" has been graded by the U.S. Government.
C - "Hamburger" content is defined by law.
D - By state law all white bread sold in Montana is enriched.
E - All fryer chickens are federally inspected and passed for wholesome food.
F - Butterfat content of milk is defined by law.
G - Grade B eggs are suitable for use in baked products.
H - All large eggs are sold as Grade AA.
I - Grade A fruits and vegetables are the most nutritious.
J - Fortified milk has vitamins, minerals, or nonfat dry milk added.
K - Evaporated milk has some water removed and sugar added.
L - Canned fruit is graded for tenderness.
M - Characteristics for grading canned fruit.
N - Potato grades.
O - Apple grades.

TABLE VI. Percent of correct responses for grades and standards given by 1,161 Montana homemakers according to education, 1965.

| Number of Respondents<br>Grades and Standards | Some Grade School<br>18 | Grade School<br>64 | Some High School<br>144 | High School<br>397 | Some College<br>351 | College Graduate<br>125 | Graduate Training<br>46 | Advanced Degree<br>12 |
|---|---|---|---|---|---|---|---|---|
| A | 61.1 | 76.6 | 84.7 | 90.9 | 88.6 | 88.8 | 95.7 | 100.0 |
| B | 16.7 | 26.6 | 24.3 | 17.4 | 22.2 | 31.2 | 32.6 | 25.0 |
| C | 27.8 | 25.0 | 33.3 | 24.7 | 33.3 | 40.0 | 32.6 | 25.0 |
| D | 11.1 | 29.7 | 27.8 | 19.9 | 41.0 | 31.2 | 39.1 | 41.7 |
| E | 33.3 | 40.6 | 47.9 | 62.7 | 52.7 | 41.6 | 54.3 | 58.3 |
| F | 83.3 | 76.6 | 70.1 | 83.4 | 75.8 | 81.6 | 80.4 | 75.0 |
| G | 88.9 | 67.2 | 75.0 | 86.1 | 77.5 | 84.8 | 80.4 | 75.0 |
| H | 55.6 | 70.3 | 68.8 | 82.9 | 76.4 | 81.6 | 89.1 | 100.0 |
| I | 61.1 | 37.5 | 52.8 | 71.5 | 57.5 | 64.0 | 63.0 | 75.0 |
| J | 44.4 | 54.7 | 41.0 | 65.5 | 48.7 | 58.4 | 52.2 | 33.3 |
| K | 27.8 | 23.4 | 44.4 | 63.7 | 46.2 | 45.6 | 43.5 | 75.0 |
| L | 22.2 | 18.8 | 22.9 | 15.4 | 14.0 | 22.4 | 15.2 | 25.0 |
| M | 44.4 | 50.0 | 57.6 | 66.5 | 63.2 | 73.6 | 67.4 | 75.0 |
| N | 5.6 | 1.6 | 4.2 | 2.3 | 4.0 | 4.8 | 4.3 | 0.0 |
| O | 44.4 | 57.8 | 72.9 | 84.9 | 84.0 | 84.8 | 91.3 | 91.7 |

A - Meat graded U.S. Good is a higher grade than U.S. Choice.
B - All meat stamped "U.S. Inspected and Passed" has been graded by the U.S. Government.
C - "Hamburger" content is defined by law.
D - By state law all white bread sold in Montana is enriched.
E - All fryer chickens are federally inspected and passed for wholesome food.
F - Butterfat content of milk is defined by law.
G - Grade B eggs are suitable for use in baked products.
H - All large eggs are sold as Grade AA.
I - Grade A fruits and vegetables are the most nutritious.
J - Fortified milk has vitamins, minerals, or nonfat dry milk added.
K - Evaporated milk has some water removed and sugar added.
L - Canned fruit is graded for tenderness.
M - Characteristics for grading canned fruit.
N - Potato grades.
O - Apple grades.

(page 39, Appendix B) as related to the family income, question 13.

There was a slight tendency for those homemakers with higher family incomes to be less informed regarding the grading of canned fruit for tenderness and the definition of fortified milk than those with lower incomes. The homemakers with higher family incomes were slightly better informed about evaporated milk, the relationship between grade and nutritional value of fruits and vegetables, the size of the egg as related to grade, and meat and apple grades than those in the lower income brackets.

The hypothesis that knowledge of grades and standards is directly proportional to the age, education, and family income of the homemaker was not, in general, supported. However, there was a slight increase in knowledge of grades and standards of foods with education and family income, but a slight decrease in knowledge with the age of the respondent.

TABLE VII. Percent of correct responses for grades and standards given by 1,161 Montana homemakers according to family income, 1965.

| | Under $3000 | $3000-4999 | $5000-6999 | $7000 8999 | Over $9000 |
|---|---|---|---|---|---|
| Number of Respondents | 142 | 270 | 329 | 175 | 195 |
| Grades and Standards: | | | | | |
| A | 84.5 | 81.9 | 89.1 | 88.0 | 93.3 |
| B | 21.8 | 20.0 | 23.7 | 26.9 | 22.6 |
| C | 28.2 | 33.7 | 35.9 | 32.0 | 34.4 |
| D | 30.3 | 31.5 | 34.7 | 38.3 | 35.9 |
| E | 49.3 | 43.7 | 45.6 | 52.6 | 48.2 |
| F | 77.5 | 74.8 | 79.3 | 82.3 | 73.8 |
| G | 77.5 | 80.0 | 81.2 | 79.4 | 77.9 |
| H | 77.5 | 78.1 | 79.6 | 80.0 | 82.1 |
| I | 50.0 | 53.0 | 62.9 | 65.7 | 65.1 |
| J | 51.4 | 51.5 | 50.5 | 50.9 | 44.6 |
| K | 39.4 | 48.1 | 43.2 | 44.0 | 48.2 |
| L | 21.1 | 18.5 | 15.5 | 11.4 | 14.4 |
| M | 60.6 | 61.5 | 69.9 | 63.4 | 64.1 |
| N | 4.9 | 4.1 | 3.6 | 2.3 | 1.5 |
| O | 69.0 | 80.0 | 83.3 | 86.3 | 86.2 |

A - Meat graded U.S. Good is a higher grade than U.S. Choice.
B - All meat stamped "U.S. Inspected and Passed" has been graded by the U.S. Government.
C - "Hamburger" content is defined by law.
D - By state law all white bread sold in Montana is enriched.
E - All fryer chickens are federally inspected and passed for wholesome food.
F - Butterfat content of milk is defined by law.
G - Grade B eggs are suitable for use in baked products.
H - All large eggs are sold as Grade AA.
I - Grade A fruits and vegetables are the most nutritious.
J - Fortified milk has vitamins, minerals, or nonfat dry milk added.
K - Evaporated milk has some water removed and sugar added.
L - Canned fruit is graded for tenderness.
M - Characteristics for grading canned fruit.
N - Potato grades.
O - Apple grades.

# CHAPTER IV

## CONCLUSIONS

The purpose of this study was to find some indication of the food buying knowledge and habits of Montana homemakers in order to assist educators in teaching in this area. From the literature, it is noted that similar studies have been made in other states, but little information in the areas investigated by this study was available about Montana homemakers. A total of 1,161 questionnaires were used in this investigation.

The general hypothesis that homemakers are generally uninformed, and frequently misinformed, was supported by the evidence given in the questionnaires. This study revealed that homemakers were informed the most about apple, egg, and meat grades, but the number of homemakers correctly answering these questions was below 85 percent.

### Influences in Food Buying

The largest percentage of the responding homemakers were influenced most by brand name of the product when purchasing food. Other influences indicated by the homemakers in order of importance were family and friends, food sales, newspaper advertising, advertising in stores, television, magazines, and radio.

### Food Buying Considerations

Use of the food was considered first when buying food by the highest percentage, 34 percent, or the responding homemakers. Other considerations

in rank of importance are brand name of product, grade of product, cost and convenience.

## Sources of Information

Popular magazines and newspapers served as sources of information concerning grades and standards for most of the Montana homemakers studied. Bulletins and information from high school home economics courses were other sources used.

## Food Buying Knowledge

Homemakers in Montana who have had formal education in home economics are no more cognizant of grades and standards which would be helpful in making wise food purchasing decisions than were homemakers who had not had home economics courses.

Place of residence, either urban or rural, did not indicate in general a better understanding of grades and standards by the responding homemakers.

Food buying knowledge in general tended to decrease slightly with the age of the homemaker, and to increase slightly with education and higher family incomes.

## Suggestions for Use of This Research

A few inferences might be made from the results of this study. A low percentage of the homemakers indicated that group meetings was a source of information about grades and standards. Those educators who use this method of teaching might do well to evaluate their programs. Perhaps

the information given at group meetings could be more useful or information on food grades and standards might be an area which could be used for teaching in group meetings.

It seems that college and high school home economics teachers should be aware that either they are not teaching grades and standards which the consumer needs to know in making wise decisions in buying foods, or that their methods of teaching are not as effective as they might be.

Retail grocers in Montana may want to evaluate their methods of advertising from the standpoint of the results found in this investigation. The sources of information which the homemaker is now using may or may not be authentic and most probably is biased in favor of the product being advertised.

Researchers who write bulletins in the area of food buying should be aware that the homemakers indicated bulletins were not used extensively as a source of information. Perhaps the bulletins could be written in a style that the homemaker could refer to quickly, and easily understand the contents of the material. Good informative bulletins might also be made more available to the homemaker.

It is hoped that this study will stimulate interest in further investigation of the Montana homemaker's buying practices.

# APPENDICES

APPENDIX A

MONTANA STATE COLLEGE
Bozeman

Dept. of Agr. Economics
& Rural Sociology

March 1965

Dear Homemaker:

We need your help in conducting a research project about the food buying knowledge of Montana homemakers. Montana State College is sponsoring the project. The project using the enclosed questionnaire is being conducted in Richland, Hill, and Beaverhead Counties.

Since the questionnaire cannot be identified individually, it will be impossible to send you a reminder. Therefore, would you please return the completed questionnaire in the envelope immediately? No postage is necessary.

The initial on the return envelope will indicate the return of questionnaires from your county.

The questionnaire is a part of the research project which I am doing in partial fulfillment of requirements for a master of science degree in home economics.

Thank you for your help.

Sincerely yours,

Janice K. Laidig

Janice K. Laidig

JKL/ms

P.S. If you would like the results of the study, please write me.

APPENDIX B

Dear Homemaker:

The following is a list of statements dealing with a number of things related to food and food buying, and some about you, the homemaker.

First, some questions about food buying.

1. What influences you in buying food? Number 1 through 5 those items that influence you the most.

___television
___radio
___newspaper advertising
___magazines
___advertising in the store
___brand of food product
___food sales
___family and friends
___other (please specify)

2. Would you please read each of the following statements and then indicate with an X whether you AGREE, DISAGREE, or have NO OPINION about the statement. Indicate the one that best gives your feelings.

| | AGREE | DISAGREE | NO OPINION |
|---|---|---|---|
| a) Meat graded US Good is a higher grade than US Choice . . . . . | ___ | ___ | ___ |
| b) All meat stamped "US Inspected and Passed" has been graded by the US Government . . . . . | ___ | ___ | ___ |
| c) "Hamburger" content is defined by law. | ___ | ___ | ___ |
| d) By state law all white bread sold in Montana is enriched . . . . . | ___ | ___ | ___ |
| e) All fryer chickens are federally inspected and passed for wholesome food . . . . . | ___ | ___ | ___ |
| f) Butterfat content of milk is defined by law . . . . . | ___ | ___ | ___ |
| g) Grade B eggs are suitable for use in baked products . . . . . | ___ | ___ | ___ |
| h) All large eggs are sold as Grade AA. . | ___ | ___ | ___ |
| i) Grade A fruits and vegetables are the most nutritious. . . . . | ___ | ___ | ___ |

| | AGREE | DISAGREE | NO OPINION |
|---|---|---|---|
| j) Fortified milk has vitamins, minerals, or nonfat dry milk added . . . . . | ___ | ___ | ___ |
| k) Evaporated milk has some water removed and sugar added. . . . . | ___ | ___ | ___ |
| l) Canned fruit is graded for tenderness . . . . . | ___ | ___ | ___ |

3. Where do you get your information about food standards and grades? Number 1 through 5 starting with the one you use the most.

___home economics courses in school
___bulletins
___popular magazines and newspapers
___group meetings
___friends
___others (please specify)

4. Which of the following characteristics would Grade A canned fruit have? Please mark with an X those characteristics.

___uniform pieces
___pieces with blemishes
___mature fruit
___different sized pieces
___uniform color

5. Potatoes are often sold to consumers by wholesale grades. Number the grades starting with 1 for the highest and 4 for the lowest.

___U.S. Commercial
___U.S. Fancy
___U.S. No. 1
___U.S. No. 2

6. Apples are also sold by wholesale grades. Number the grades starting with 1 for the highest and 4 for the lowest.

___U.S. Fancy
___U.S. Extra Fancy
___U.S. Utility
___U.S. No. 1

7. What do you consider when purchasing foods? Number 1 through 5 starting with the one you consider first.

___brand of food
___grade of food
___cost
___convenience
___use of food
___other (please specify)

NOW, we would like to know a little about you.

8. Where do you live? Please check one.

___farm
___open country non-farm
___city under 2,500
___city of 2,500 - 4,999
___city of 5,000 - 10,000
___over 10,000

9. Are you employed outside the home?

___not employed
___part time
___full time

10. How much education have you completed? Please check one.

___some grade school
___grade school graduate
___some high school
___high school graduate
___some college
___college graduate

___some graduate training
___advanced degree

11. Have you had home economics courses that included foods and nutrition?

___none
___junior high
___high school
___college - major
___college - minor

12. In what age category are you? Please check.

___under 20
___20-29
___30-39
___40-49
___50-59
___60 and over

13. An indication of your family NET INCOME after taxes in 1964 would be helpful. Please check category which best fits your estimate.

___less than $3,000
___3,000 - 4,999
___5,000 - 6,999
___7,000 - 8,999
___over 9,000

# APPENDIX C

## Selected Comments Made On Questionnaires

The number following the comment indicates how many times the comment was made. Those comments without numbers were made only once.

What influences you in buying food?

"Personal preference" (4)
"Need" (17)
"Experience" (2)
"Grocer" (2)
"Nutritional value of food" (5)
"Quality" (5)
"Price" (7)
"Specials"
"Food Stamps"
"Attractive displays"
"Convenience"
"Consumer Reports"
"Best buy information"
"Diets that are special" (3)
"New receipts"
"T.V. usually affects me adversely -- if the ad is aimed at a 5 year old I am disgusted and do not care to try the product!!"
"A lot depends on what kind of meat I'm planning to prepare such as beef and wild meat."
"Advertising aimed at children has a powerful, but detrimental effect."
"Coupons"
"Outdoors advertising"
"Freshness"
"Mostly by label, weight and truth of advertisement."
"Meal plans"
"Cookbook"
"Television and radio -- not reliable!!"
"Trial and error" (3)

Where do you get your information about food standards and grades?

"Television and radio" (13)
"Grocer" (18)
"Information on container/can/package" (3)
"4-H information" (9)

"Home demonstration agent"
"Cookbooks" (25)
"Experience" (46)
"Food labels" (17)
"Husband" (4)
"Don't really know" (4)
"Trial and error" (10)
"Advertisements"
"Trade magazines and papers"
"Daughter" (3)
"Extension Service" (15)
"Prenatal classes"
"Agricultural book"
"Hospital nutrition pamphlets"
"The Good Lord"
"Consumer Index"
"Consumer Report"
"Hotel training school"
"Books on diet"
"From dieations, our doctor, from 4-H leaders"
"Lunch program workshops"
"Health booklets from my school children"
"I don't get such information" (2)
"Comparison of items"

What do you consider when purchasing food?

"Degree of spoilage"
"Family's tastes" (17)
"Nutritional value" (10)
"Needs" (2)
"Recommendation" (3)
"Avoid fat and sugar saturated foods."
"Diet"
"Container Size" (4)
"I never buy anything until I know when the product was first manufactured or canned, since on occasion, found worms and insects in old products."
"Number buying for and age" (2)

Meat graded US Good is a higher grade than US Choice.

"As good as"
"U.S. Choice too fat"
"Choice is fatter"
"Choice meat is a better grade meat, but has more fat in it."

All meat stamped "US Inspected and Passed" has been graded by the US Government.

"Not sure, should be" (2)
"Local meat inspector"
"Not enforced"
"Supposedly" (3)
"Should been anyway"
"I wish I knew"
"State grade"
"It should be -- some isn't depending on the insector."
"US government standards supposed to be."

"Hamburger" content is defined by law.

"Supposed to be"
"Somewhat but leeway is given"
"Up to a point"
"At least I hope so!" (2)
"Should be but I doubt it."

By state law all white bread sold in Montana is enriched.

"Should be" (2)
"Supposedly"
"I bake my own" (2)

All fryer chickens are federally inspected and passed for wholesome food.

"Perhaps they are inspected but are not handled properly. Chickens on the market now are becoming distasteful, partly due to the process in which they are raised, too much stuff added to their food, and in the preservative substance injected in them."
"When held too long this wouldn't mean anything."
"Not those bought locally and sold at small stores."
"Some are some can't be."

Grade B eggs are suitable for use in baked products.

"Ugh!"
"And eating"
"If fresh"

Grade A fruits and vegetables are the most nutritious.

"Should be"
"Not fruits"

Evaporated milk has some water removed and sugar added.

"Not all evaporated milk has sugar added."
"Water removed no sugar except for Eagle Brand" (2)
"Not sugar added" (6)

Which of the following characteristics would Grade A canned fruit have?

"Sugar content"
"Mature fruit (not over ripe)"
"Mature fruit -- best state of ripeness"
"Not graded as such here"
"None of my canned fruit is graded"

Potatoes are often sold to consumers by wholesale grades.

"Potatoes have all been poor -- I pick mine by appearance."
"Never noticed the grade -- buy by looks."
"Don't know."
"We get only U.S. #1 and U.S. #2."
"These days most of them are half rotten"
"No. 1 potatoes are often a very inferior grade."
"U.S. Commercial and Fancy not used here"

Apples are also sold by wholesale grades.

"Don't know"
"U.S. Utility not used here"
"Identify good apples by taste"
"Never noticed the grade"
"Buy by looks"

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