

# FOOD PRACTICES OF HOMEMAKERS IN A SURBURBAN AREA OF GREENSBORO, NORTH CAROLINA 

## by

Phy11is Harris

A Thesis Submitted to
the Faculty of the Graduate School at
The Woman's College of the University of North Carolina
in Partial Fulfillment
of the Requirements for the Degree Master of Science

## Greensboro <br> May, 1963

Approved by


This thesis has been approved by the following committen of the faculty of the Graduate School at the University of North Carolina, Greensboro, North Carolina. Committee Members


Oral Examination


## ACKNOWLEDGMENT

Sincere appreciation is expressed to Mrs. Mary Dickey for her guidance and supervision throughout the period of time devoted to this study; to Dr. Hildegarde Johnson, Dr. Vance T. Litt1ejohn, and Mrs. Made1eine B. Street for their interest, advice, and direction during the study and composition of the report of the study. Appreciation is a1so extended to Miss Grace Collins of Bob Jones University for her technical assistance.

An expression of gratitude is a1so due to Miss Dorothy McNairy, principal of the General Greene Schoo1, and the sixty-seven homemakers who so willing1y cooperated in making this study possib1e.

## TABLE OF CONTENTS

CHAPTER PAGE
I. THE PROBLEM AND PROCEDURE ..... 1
The Problem ..... 2
Definition of Terms Used ..... 2
Food Practices ..... 2
Chain Stores ..... 3
Locally-owned Stores ..... 3
Foods Budget ..... 3
Record of Spending for Groceries ..... 3
Basic Seven ..... 3
Prepared Mixes ..... 3
Convenience Foods ..... 3
Food Management ..... 3
Procedure ..... 3
II. REVIEW OF THE LITERATURE ..... 8
Knowledge of Nutrition ..... 8
Nutrition Practices ..... 10
Marketing Practices ..... 12
Mea1 Planning Practices ..... 15
Use of Convenience Foods ..... 18
III. FINDINGS ..... 23
Descriptions of the Sample ..... 23
Ages of Homemakers and Children ..... 23
Size of Family ..... 24
Income Leve1 of Family ..... 24
Educationa1 Leve1s ..... 28
Occupations ..... 30
Sources of Information Regarding Nutrition
and Food Practices ..... 30
Grocery Shopping Information ..... 32
Food Preparation Information ..... 34
Nutrition Information ..... 34
Grocery Shopping Practices ..... 36
Who Does the Shopping ..... 36
Where Shopping is Done ..... 38
How Often Shopping is Done ..... 38
Pattern of Grocery Shopping ..... 40
Budgets and Records ..... 42
Amount Spent for Groceries ..... 44
Foods Budget and Adjustment ..... 48
Nutrition ..... 50
Nutritional Know1edge ..... 50
Nutritional Practices ..... 51
Nutritional Knowledge Compared with Nutri-
tional Practices ..... 54
Knowledge of "Basic Seven" ..... 56
Adequacy of Meals for the Family ..... 57
Meal Management ..... 58

## CHAPTER

PAGE

$$
\text { Families That Eat Together as a Group . . . . } 58
$$

He1p Received With Management of Meals in
the Home ..... 60
Time of Meal P1anning ..... 60
Bases of Meal P1anning ..... 60
Problems of Deciding What to Serve ..... 65
Information and He1p Needed ..... 65
Mea1 Preparation Time ..... 66
Use of Convenience Foods ..... 68
Frequency of Serving Baked Products ..... 71
Frequency of Serving Baked Products Prepared
From the Prepared Mixes ..... 71
Frequency of Serving Convenience Foods Besides Prepared Mixes ..... 74
Reasons for Using Convenience Foods ..... 77
IV. SUMMARY AND CONCLUSIONS ..... 78
Sources of Information ..... 78
Grocery Shopping Practices ..... 79
Know1edge of Nutrition ..... 80
Meal Management Practices ..... 80
Use of Convenience Foods ..... 82
V. IMPLICATIONS FOR THE TEACHING OF FOODS AND
NUTRITION ..... 84
BIBLIOGRAPHY ..... 89
CHAPTER PAGE
APPENDIX A. Interview Schedu1e ..... 94
APPENDIX B. Letter of Introduction to Homemakers ..... 98
APPENDIX C. Cards for Recording Interview Information ..... 100
APPENDIX D. Scoring Guide for Nutrition Know1edge
and Practices ..... 105

## LIST OF TABLES

## TABLE

PAGE
I. Disposition of the Samp1e ..... 7
II. Age of Homemakers ..... 24
III. Size of Family ..... 25
IV. Income Distribution of the Families ..... 26
V. Educational Leve1 of Husband and Homemaker ..... 29
VI. Occupations of Husbands and Homemakers ..... 31
VII. Sources of Information on Grocery Shopping, Food Preparation, and Nutrition ..... 33
VIII. The Family Member Doing the Grocery Shopping ..... 37
IX. Frequency of Grocery Shopping ..... 39
X. Preparation for Grocery Shopping ..... 41
XI. Number of Homemakers Practicing Budgeting ..... 43
XII. Amount Spent Week1y for Groceries ..... 45
XIII. Cost of Groceries per Person per Week ..... 47
XIV. Families Spending Various Amounts for Groceries by Income Level ..... 49
XV. Distribution of Scores on Nutritional
Know1edge ..... 52
XVI. Distribution of Scores Estimating Adequacy
of Mea1s Served ..... 53
XVII. Comparison of Knowledge of Nutrition Scores
with Adequacy of Mea1s Served ..... 55
XVIII. Know1edge of Basic Seven ..... 57

XIX. Number of Families That Eat Together as a
Group ..... 59
XX. He1p Received With Management of Mea1s in the Home ..... 61
XXI. When the Homemaker Decides What to Serve ..... 62
XXII. Homemaker's Bases for Menu Planning ..... 64
XXIII. Time Spent on Breakfast Preparation ..... 67
XXIV. Time Spent on Lunch Preparation ..... 69
XXV. Time Spent on Dinner Preparation ..... 70
XXVI. Frequency of Serving Baked Products ..... 72
XXVII. Frequency of Using Prepared Mixes for Baked
Products ..... 73
XXVIII. Frequency of Use of Convenience Foods Other
Than Prepared Mixes ..... 75

## CHAPTER I

## THE PROBLEM AND PROCEDURE

The advancement of technology, the shift of social and economic forces, the population expansion, and the change in age group distribution affect today's home life. These changes along with family mobility, increased urban living, earlier marriage and parenthood, and the multiplicity of new goods and services available require new approaches to education for homemaking. Wood, Hi11, and Amidon in a bulletin on the employed homemaker and management state that "Education adapted to the changing times and geared to significant needs of the homemakers of today can play a vital role in he1ping family members to meet new problems and to live enriched lives under the ever-changing conditions. "1

Most educators today believe in basing the curriculum on current practices and recognized needs of the students whom they teach. If this is to be done in the field of foods and nutrition, then it is necessary to know current food practices of homemakers. These practices are undoubtedly influenced by increased variety of products in the grocery
$1^{1}$ Mi1dred Wood, A1berta Hi11, and Edna Amidon, Management Problems of Homemakers Employed Outside the Home: $\overline{V o c a t} \overline{i o n a 1 ~ D i v i s i o n, ~ H o m e ~ E c o n o m i c s ~ E d u c a t i o n, ~ B u l i e t i n ~} 289$ (Washington: Government Printing Office, 1961), page ix.
stores, dual roles of homemakers, and mass media. Since food practices are not the same in all parts of the country, it is necessary to study an area of North Carolina. Studies similar to this have been made in other states, but a review of the literature reveals no such study to have been made in North Carolina. This study was made of a middle-income group from which come most college students. The study included emp1oyed and non-employed homemakers. By 1earning what today's homemakers practice, a more functional educational program can be adapted.

## I. THE PROBLEM

The purpose of this study was to obtain a description of the food practices of homemakers in a suburban area of Greensboro, North Carolina. It was designed to obtain information with regard to the homemaker's knowledge of nutrition; the relationship of this knowledge to the feeding of her family; and the problems and practices of the homemaker in regard to planning, buying, and preparing food for her family.

## II. DEFINITIONS OF TERMS USED

Food practices. The procedures the homemakers use in purchasing, preparing, and serving foods for her family are inc1uded.

Chain stores. These are stores that are a part of a cooperative buying unit inc1uding voluntary chain stores.

Independent stores. These are stores owned and operated as a sing1e unit.

Foods budget. This is labeled as such if there is a predetermined amount spent week1y or month1y for grocery items.

Record of spending for groceries. This may be any set method of recording what was spent for groceries whether it be an itemized record or a check stub.

Basic Seven. This refers to the common check list of groups of foods needed daily, as recommended by the United States Department of Agriculture.

Prepared mixes. Included in this group are packaged mixtures that require only the addition of 1 iquid and/or eggs to complete the product.

Convenience foods. This inc1udes all foods in which some preparation has been done ahead of the actual mealtime preparation.

Food management. The securing, care, preservation, storage, preparation, and serving of the family's foods are inc1uded in this term.
III. PROCEDURE

To study food practices of homemakers, a stratified random samp1e was drawn of the General Greene School District of Greensboro, North Carolina. The stratification was done by class divisions of the schoo1, thus giving variation in the ages of the children in the homes. The random sample was used so that everyone would have the possibility of being chosen and so that those chosen would represent a picture of the who1e group. Because this samp1e seemed to be a rather mobile group, this may represent a picture of a population 1arger than the General Green School District alone.

The list of students, with their parents' initia1s, their addresses, and their telephone numbers, was provided by the schoo1. This was a 1ist given by the school to all Parent Teacher Association members in the fall semester and brought up to date by the interviewer with the permission of the school principal. The 1ist of the population contained 549 families. The names of 4 families from each c1ass were drawn by the use of a table of random numbers, and 5 were drawn from those classes having 30 or more class members. This resulted in a total of 76 homemakers to be interviewed. Those eligible for the study must have had husbands and children home 5 days per week and have served at least one meal per day in the home.

An interview schedule [Appendix A] was designed and pretested with 4 staff members of the School of Home Economics at the Woman's College and 2 homemakers known by the interviewer. The pretesting was done to familiarize the interviewer with the procedure and to test the schedule for clarity and suitability of purpose. The final interview schedu1e required $20-25$ minutes to be completed.

In collecting the data in the survey, the interviewer used the following procedure:

1. Introduced se1f, exp1ained overa11 purpose of visit, asked for time to conduct the interview.
2. Offered to call at a later time if that time was inconvenient for the homemaker.
3. Presented letter of introduction [Appendix B] from the school of Home Economics at the Woman's Co11ege.
4. Asked about family characteristics to determine eligibility for the study. The interviews were completed unless one parent was no longer a member of the family.
5. Co11ected interview data, exp1aining more thoroughly the purpose of the study with the interview section on convenience foods.
6. Thanked the homemaker for her cooperation and time.

After the interviews were completed, the data of those homemakers whose husbands he1d trave1ing occupations were
observed for consistent meal pattern differences. Since their husbands' occupations seemed to have no effect upon their food practices, all interviews were included. Two homemakers declined interviews; both refusals were preceded by 2 visits and a phone call in attempt to make an appointment. Repeated attempts were made at all homes until the homemakers were located.

The 1 ist of homemakers was precoded and the interviewer was guided by the house address; she never requested nor referred to the name unless a house was empty or the occupants had no children. The names of those who had moved were used to consult a new telephone directory for their new address. If they were still in or near the district they were then interviewed.

Seventy-six homemakers were sampled from a population of 549 (Tab1e I). Sixty-seven interviews ( 88 per cent of the samp1e) were completed. The remaining 9 were exc1uded for various reasons shown in the table. Of the 67 interviews completed, 15 were of employed homemakers.

TABLE I
DISPOSITION OF THE SAMPLE

| Disposition | Number of <br> Homemakers | Per Cent |
| :--- | :---: | :---: |
| Total interviews completed | 67 | 88.2 |
| Employed homemakers | 15 | 19.7 |
| Nonemp1oyed homemakers | 52 | 68.4 |
| Dec1ined interviews | 2 | 2.6 |
| Unqualified interviews | 1 | 1.3 |
| Fami1ies moved out of area | 6 | 7.9 |
| Total Samp1e | 76 | 100 |

## CHAPTER II

## REVIEW OF THE LITERATURE

Various studies of food practices of homemakers inc1ude the homemaker's know1edge as compared with her practices in the areas of marketing, preparing and serving meals, and nutrition. Studies have been made on marketing, on meal p1anning, on use of convenience foods; some have included many phases of food management.

## I. KNOWLEDGE OF NUTRITION

In Young's ${ }^{1}$ study of homemakers in Rochester and Syracuse, New York, approximate1y one quarter of the homemakers appeared to have a fair understanding of nutrition as related to the feeding of their families. In contrast, more than half of the homemakers in a study in Appomattox County, Virginia, by Cameron ${ }^{2}$ had 1ittle or no information on nutrition. Seven per cent of those Virginia homemakers had a good working knowledge of nutrition, 24 per cent knew

[^0]something about it, and 69 per cent knew $1 i t t 1 e$ about how to feed their families we11. There were 19 per cent who knew the amount of milk required per person and served the correct amount.

Muse in a Vermont rural study ${ }^{3}$ found that many of the homemakers owned or were familiar with the colorful "pie" or "whee1" chart picturing the foods of the 7 foods groups that plainly gave the number of servings per day of each group suggested for an adequate diet. The study did not conclude, however, that any woman was actually using the idea of the Basic Seven in planning meals for her family. Most of the housewives considered all vegetables to be of equal nutritive value and seldom used the more valuable sources of Vitamin A.

Tucker and Lovee in a study of nutritional data from 75 homemakers in a rural community of a Louisiana bayou area found in $1953^{4}$ that there were only 4 who knew a day ${ }^{\prime} s$ food needs. Their poor nutritional practices were attributed in part to lack of money, lack of education, scarcity of foods, lack of desire to improve, unsatisfactory attitudes toward

3Marianne Muse, Food Management in Some Vermont Farm Homes, (Burlington, Vermont: Agriculture Experimental Station, University of Vermont and State Agriculture College, Bu11etin 601, June, 1957).
${ }^{4}$ C1ara Tucker and Ray Lovee, "Hurd1es to Good Food Practices," Journa1 of Home Economics, XLV (November, 1953), 654-657.
foods, and unsatisfactory family and community living
patterns. Lack of a desire to improve and the unsatisfactory family and community living patterns were common to all fami1ies. Some seemed to think that adequate food meant serving the family foods that satisfied the appetite and tastes of its members.

## II. NUTRITION PRACTICES

Young ${ }^{5}$ states in her study that the homemaker's actual performance in feeding her family was considerably better than her theoretical know1edge. The food groups of which the homemakers' knowledge was weakest were a1so those most poor1y used: citrus fruits, tomatoes, and cabbage; green, leafy and yellow vegetables; and milk, cheese, and ice cream. The younger homemakers appeared to do a more adequate job in feeding their families than did the older homemakers. Perhaps the difference is due to the superior level of educational attainment of the younger homemakers. The adequacy of food used and nutritional knowledge appeared to be related.

Cameron ${ }^{6}$ in a study in Appomattox, Virginia, found that of those who said it was important to serve salad greens
$5^{5}$ C. M. Young, K. Berresford, and B. G. Wa1dner, "What the Homemaker Knows About Nutrition: Relation of Knowledge to Practice," Journal of the American Dietetic Association, XXXII (Apri1, $\overline{1956), ~} 3 \overline{26}$.
${ }^{6}$ Cameron, op. cit., page 13.
once a day, on1y one-third served them that often. Twentynine per cent of those who said citrus fruits shou1d be served once a day served them that often. Seventy per cent of those who said it was important to serve meat once a day served it that often or more often.

Techno1ogical developments may cause the food activities of the homemakers of tomorrow to consist 1argely of opening cans and packages, adding water to concentrated foods, operating a freezer-refrigerator, and subjecting food to a limited heat or microwave treatment. Those developments wi11 in no way decrease the importance of understanding the relationship between nutrition and hea1th. People will sti11 need to know what to select for adequate nutrition. In fact, there appears to be, if anything, an increased need for sound nutrition education and education concerning food and its role in health, in order to interpret available information relating to the foods. ${ }^{7}$

The iiterature on nutrition points to a need for more effective nutrition education. That the homemaker's practice of serving daily balanced meals is weak and that the future seems to demand an even greater knowledge of nutrition present challenges to nutrition education.
${ }^{7}$ Catherine J. Personius, "The Current Situation and Trends Pertinent to the Future Development of Food and Nutrition," Journal of Home Economics, LI (September, 1959), 577-588.

It was of interest to note in the report of a survey in Columbia, Ohio, by Methany et al. ${ }^{8}$ that studies in Canada ${ }^{9}$, Mississippi ${ }^{10}$, and California ${ }^{11}$ indicate that the dietary patterns of families in which the mother is gainfully employed do not differ from those of the unemployed homemaker.

## III. MARKETING PRACTICES

C1ark et a1. report in the study, Food Consumption of Urban Families ${ }^{12}$ in 1954, that an average of 26 dollars per week was spent for groceries. This was one-third of the family income for the week. Both qua1ity and quantity accounted for higher food bil1s. A1though large families spend more for food than smaller families, the cost per
$8^{8}$. Y. Methany, F. E. Hunt, M. B. Patton, and H. Heye, "The Diets of Preschool Children:' Nutritional Sufficiency Findings and Family Marketing Practices," Journal of Home Economics, LIV (Apri1, 1962), 297-303.
${ }^{9}$ M. T. Doy1e, M. C. Cahoon, E. W. McHenry, Canada Journa1 of Pub1ic Health, XLIV (1953), 259-262.
${ }^{10}$ Dorothy Dickens, Food Use $\frac{\text { and }}{\text { Eainful }}$ Employment of the Wife, (Mississippi Agriculture Experiment Station, Bul1etin 558,1958 ).
$11_{\text {A. F. Morgan, Nutritional }}$ Status U. S. A., (Ca1ifornia Experiment Station, Bulletin 769, 1959).

12 F. C1ark, J. Murray, G. S. Weiss, and E. Grossman, Food Consumption of Urban Families in the United States, (United States Department $\frac{\text { of Agriculture }}{\text { of }}$ nformation, Bulletin No. 132, October, 1954).
person is not the same. Undoubtedly there are economies in the purchasing and preparation of meals for large families, so that some of the difference in expense between the sma11 and the 1 arge households does represent savings.

Van Syck1e in her study of 226 homemakers in Everette, Washington ${ }^{13}$, found that only 7 per cent of the homemakers said that they kept a regular record of what was spent on individual foods. Forty-six per cent indicated that they tried to keep within a certain amount of expense for food supplies. About one-fourth of the homemakers in Cameron's study ${ }^{14}$ in Virginia said that they limited their food purchases to a definite amount of money each week or each month. In Young ${ }^{\text {'s }}$ study ${ }^{15}$, two-thirds of the homemakers had a specified amount they allowed themselves to spend for food each week. The major portion of their food shopping was done by the homemaker and usually only once a week.

Going to the store to buy food is most frequent1y a once-a-week activity for homemakers in the West Virginia urban and rural areas studied by Porter et a1.

A1though wives usually do most of the food shopping, husbands participate in this activity--alone or in
${ }^{13}$ Calla Van Syck1e, "Food Management Practices in an Industrial City," Journa1 of Home Economics, XLVII (February, 1955), 119-120.
${ }^{14}$ Cameron, 1oc. cit.
${ }^{15}$ Young, op. cit., page 326 .
conjunction with their wives--to a greater extent in rural areas. The percentage of urban households with wives doing most of the shopping is usually lowest for the highest income category. The opposite prevails in rural areas. Urban wives and husbands are more likely to shop together in homes where homemakers have one or more years of schooling beyond high schoo1. ${ }^{16}$

In Gazaway and Marsh's study of homes in Anchorage and Fairbanks, A1aska ${ }^{17}$, half of the homemakers interviewed said that they made one trip a week for grocery shopping. Of the remainder, 17 made $2-5$ trips, while 4 made 5 or more.

Two homemakers reported making 7 trips to the store.
Approximately 8 out of 10 homemakers said they shopped for
food specials regularly.
Stubbs in a study of the state of Texas reported that
Homemakers have the major responsibility to purchase food for their families, but almost one-third reported their husbands cooperate in this homemaking responsibility. Thirty-seven per cent of the homemakers traded regularly at a locally-owned grocery; 47 per cent said they shopped at a district or national chain. 18

Seventy-two per cent shopped once week1y for their major grocery supp1ies. The homemakers bought fill-in purchases

16 W. F. Porter, W. W. Armentrout, M. K. Conval, R. Dimit, G. Lyon, C. E. Swank, and G. Ueland, Food Buying: Knowledge - Concerns - Practices, (Morgantown, West Virginia: West Virginia University Agriculture Experiment Station, Bu11etin 456, May, 1961), page vii.
$17_{G}$. P. Gazaway, and C. F. Marsh, Some Characteristics of Anchorage and Fairbanks Househo1ds, (A1aska Agricultural Experiment Station, Circular 23, June, 1960).
$18_{\text {A1ice }}$ C. Stubbs, Family Food Marketing Practices, (Co11ege Town, Texas: Texas Agricultural Experiment Station, March, 1961), pages 2-4.
two or more times a week. Seventy-one per cent made a 1ist before going to the grocery store. A small number said they checked the pantry before going to the store and then bought from memory. ${ }^{19}$

When the Vermont farm homemakers as reported by Muse ${ }^{20}$ did their buying, they made most of their decisions in the stores, except that all but a few kept a running 1ist of needed staples. The homemaker generally gave a 1 ist of some sort to the other persons of the househo1d who bought foods. The family head did food buying far more frequently than he did any other food activity in the home.

Many of the homemakers of the various studies told of attempts to keep within a family foods budget. The homemakers were usua11y the grocery shoppers, except that many of the husbands of the rural areas cooperated in the shopping. Some type of grocery 1ist, whether complete or partial, was used for most of the shopping.

## IV. MEAL PLANNING PRACTICES

The writing out of meal plans by the homemakers was the exception rather than the rule in Van Syckie's study of Everette, Washington. About 80 per cent of them never wrote
${ }^{19}$ Ibid.
${ }^{20}$ Muse, 1 oc. cit.
out meal plans. The other 20 per cent did so on1y occasionally, sometimes for dinner, but main1y for special occasions, such as company meals or week-end and vacation trips. ${ }^{21}$

Van Syckie a1so reported that breakfasts were either not planned at all or the menu had become a fairly fixed one for the most part. Over 50 per cent of the homemakers said that breakfast was planned by what the other members of the family chose. About one-third replied that breakfast was a routine menu. ${ }^{22}$

The main meal of the day in about 3 out of 4 of the homes was planned around meat or a meat substitute or, in the case of a few, around meat and potatoes. A special diet or a balanced diet was the basis of planning a menu by about 1 in 10 homemakers. For 1 unch or supper, over half said they had whatever was on hand or ate left-overs. One-third repiied that they followed a general pattern such as soup and sandwiches. ${ }^{23}$

One-fourth of the respondents to Van Syck1e's study in Everette, Washington, said they had no main problems deciding what to serve. Food dislikes of families or finicky eaters to plan for were the most frequent difficulties mentioned. ${ }^{24}$
${ }^{21}$ Van Syckie, 1oc. cit. ${ }^{22}$ Ibid. ${ }^{23}$ Ibid. ${ }^{24}$ Ibid.

Young et a1. in a study of Rochester and Syracuse, New York, found that "most homemakers did not p1an mea1s much in advance. The younger, better educated homemakers with better incomes did more advanced meal-planning., 25

Young et a1. a1so found that "ninety-two per cent of the homemakers felt their families were getting all the foods they needed. The most common explanation given for failure to do so was food dislikes of individual family members." ${ }^{26}$

In a national study of home demonstration members ${ }^{27}$ the problems of general family eating habits were mentioned 1ess often as the educational leve1 increased. The urban and rural nonfarm women planned meals further ahead than farm women. Those trained in home economics did more advanced meal p1anning, as did those aged forty or less. As the family income increased, so did the proportion of homemakers planning meals ahead.

[^1]The homemakers who knew more about nutrition tended to plan a day or so ahead in the study by Cameron. ${ }^{28}$ Farm homemakers tended to plan a day or so ahead more often than did nonfarm homemakers.

Muse found there was less planning for breakfast in the Vermont farm homes--as e1sewhere--than for the other meals. This was because breakfast was generally a routine meal. The less time spent planning the meal, the poorer the nutritional balance tended to be. Often the supper was simply the leftovers from dinner. In the better balanced meals the night meal was planned in the morning with the idea of using some left-over foods with some other foods for variety. ${ }^{29}$

Usually those homemakers who did the more advanced p1anning seemed to practice serving the more nutritious meals; this relationship was less marked among the younger homemakers who exhibited more knowledge of nutrition. The main problems deciding what to serve for meals were centered around the likes and dislikes of certain foods by the family members; however, the homemakers usually be1ieved their meals were adequate for the family.

## V. USE OF CONVENIENCE FOODS

Methany et a1. 1isted the convenience foods: frozen soups, meat pies, dinners, dessert pies, and mixtures; canned

${ }^{28}$ Cameron, 1 oc. cit.

${ }^{29}$ Muse, 1 oc. cit.
soups and mixtures; cake, muffin, biscuit, and pudding and pie mixes; ready-to-eat cerea1; and instant coffee. The homemakers' frequency of use and reasons for use were obtained:

The saving of time and energy through the use of each of the itemized convenience foods was the reason most frequently given by the homemaker for using them. The belief was expressed that the convenience food was less expensive than the comparable product prepared from the original ingredients by as many as 20 per cent of the users of some products; none of the users of other products he1d this view, however. Approximately onefifth of those using instant coffee reported that it was less expensive than brewed coffee in their family situation. This was especially true in families where on1y one member drank coffee.

For from 5 per cent of users for certain products to 26 per cent for others, a better quality product was the inducement for convenience food. As a whole, few families found convenience foods to be less expensive or of higher quality than conventional items; however, homemakers expressed the belief that the time and energy saved compensated for the higher cost. 30

In the study of the frequency of use of those products, it was found that instant coffee and ready-to-eat cereals were the most frequently used of the convenience foods. Canned soups, pudding and pie mixes, and the cake, muffin, and biscuit mixes followed the coffee and cereals closely as compared to the canned mixtures or any of the frozen items. ${ }^{31}$

30 Methany, 1 oc. cit. $31_{\text {Ibid }}$.

A pilot study in Washington, D. C. ${ }^{32 \text {, and a report in }}$ Agricultural Research ${ }^{33}$ indicate that convenience foods do not account for a great percentage of the food dollar. One study considered the amount to be on1y 4 per cent. The pilot study by the Department of Agriculture Marketing Service attributed the gross increase in food spending to the rise in food prices, increase in population, higher farm production, movement of people off farms, and reduced output of food for farm use (food which does not enter the marketing system). In comparing serviced foods with nonserviced foods this study stated: "A consumer who bought one hundred do11ars worth of unserviced foods in three Washington, D. C., chain supermarkets during December, 1957, would have had to pay only sixty-one cents--1ess than one per cent-more for the equivalent quantity in serviced foods."

Hefner compared the cost of the conventional versus premix cakes and found that time and labor costs were lower for the mix cakes, but the ingredient costs were higher. From the standpoint of control of cost and other management factors for the institution, the mix was considered superior
${ }^{32}$ Convenience Foods and Their Cost to Consumers: A Pilot Study in Washington, ㄷ. C., December, 1957 , (Washington, $\overline{D . C .}: \frac{\text { Unit }}{} \frac{1}{\text { ed }}$ States Deparモment of Agricuiture Marketing Service, Bu11etin 257, August, 1958).

33"City Fo1ks and Convenience Foods," Agricultural Research, V (March, 1957), 8-9.
to the conventional cake. The study compared the white, yellow, chocolate, and angel food cakes. ${ }^{34}$

In Stitt's study of the frequency of use of prepared mixes by 2,169 homemakers in A1abama ${ }^{35}$ the frequency of serving the product whether by use of mixes or the original ingredients was obtained. Stitt's study conc1udes:

Biscuits were served at least once a week by 61 per cent of the rural and urban families. This is similar to the finding in the study sponşored by the United States Department of Agriculture ${ }^{36}$ in which it reported that 67 per cent of the families in Birmingham served biscuits at some time during the week of the survey. In the Birmingham study waffie or pancake mix was reported as being the most frequently used of all mixes with cake mix next in preference. Of prepared mixes in A1abama, cake mix was the most frequently used, with other mixes in the following order of usage: puddings, pancakes, yeast rolls, pastry, icings, cookies, muffins, and biscuits.

The larger families served biscuits, cookies, pancakes, puddings, and icings more often than did smaller households, but there was 1ittle difference in the frequency of their use of mixes for these foods.

The younger homemakers and those who were employed made more frequent use of mixes than the older or the
${ }^{34}$ Larue Hefner, "Quality and Cost of Conventional Versus Premix Cakes,"'Journa1 of the American Dietetic Association, XXXIII (March, 1957), 233-237.

35 Kath 1 een Stitt, "Frequency of Use of Prepared Mixes," Journal of the American Dietetic Association, XXXIII (June, 1957), 596-598.
${ }^{36}$ C. L. Bovit and F. C1ark, Household Practices in the Use of Foods . . Three Cities, 1953, (United States $\overline{\text { Depa }} \frac{\mathrm{rtm}}{\mathrm{rtt}} \frac{\mathrm{nt}}{\mathrm{of} \text { Agricuiture, Agriculture Information Bulletin }}$ 146, Apri1, 1956).
full-time homemaker. However, there were only onethird as many employed homemakers as ful1-time homemakers so that employment may not have been a significant factor. The trend shown in this study was to more frequent use of mixes by homemakers who had a co11ege education. ${ }^{37}$

A1though it was reported by several studies that convenience foods do not constitute a great percentage of the food do11ar, genera11y the homemakers use them because they save time in preparation. A minority of the homemakers in the studies reported using the convenience foods because they fe1t that they were cheaper.

## CHAPTER III

## FINDINGS OF THE STUDY

The employed homemakers differed 1ittle in their food practices from the non-employed homemakers. In the findings of the present study the emphasis is on a general description of the homemakers of the total population interviewed. In some instances comparisons are made between employed and non-employed homemakers, between older and younger homemakers, and between homemakers with more years of schooiing and those with fewer years of schooling.

## I. DESCRIPTION OF THE SAMPLE

Ages of homemakers and children. In the interview the homemaker was asked to indicate her age group ciassification from an interview card [Appendix $\underline{C}$ ]. These age groups were in spans of five years (Table II). The largest number of homemakers was in the group which ranged from 30-34 years. There were a few in the 25-29 year age group and one in the 45-49 year age group. The employed homemakers were more evenly distributed throughout the four groups between 25-44 years.

Because an elementary school record was used to choose the sample, most of the children were from 6-12 years of age. Of the 188 children of the homemakers in the survey, 120 were
of the elementary school leve1. A s1ight1y larger number of the other children in these families were pre-schoolers than were beyond the elementary school level.

TABLE II
AGE OF HOMEMAKERS

| Age Group | Nonemp1oyed <br> Homemakers | Emp1oyed <br> Homemakers | Tota1 <br> Homemakers |
| :---: | :---: | :---: | :---: |
| $25-29$ | 3 | 4 | 7 |
| $30-34$ | 21 | 4 | 25 |
| $35-39$ | 18 | 4 | 22 |
| $40-44$ | 9 | 3 | 12 |
| $45-49$ | 1 |  | 1 |

Size of family. The families varied in size from 3-8 members (Tab1e III). The greatest percentage of the families ( 48 per cent) had 2 children. About half that many families had 3 children.

Income leve1 of family. Tab1e IV, page 26, shows that one family had an income of less than 4,000 dollars for the year of 1961. The homemaker volunteered the explanation that this was because her husband had been unemployed for six months due to a business failure and hindrances in reinvestment plans. Two homemakers had no idea what their

TABLE III
SIZE OF FAMILY

| Number in <br> Family | Frequency | Percentage |
| :---: | :---: | :---: |
| 3 | 3 | 4 |
| 4 | 32 | 48 |
| 5 | 15 | 22 |
| 6 | 12 | 18 |
| 7 | 3 | 4 |
| 8 | 2 | 2 |

TABLE IV
INCOME DISTRIBUTION OF THE FAMILIES

| Income Range | Nonemployed <br> Homemakers <br> No. |  | Emp1oyed <br> Homemakers <br> No. |  | Tota1 <br> Homemakers <br> No. |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| $\$ 3000-3999$ | 1 | 2 |  | 1 | 1 |  |
| $\$ 4000-4999$ | 4 | 8 |  | 4 | 6 |  |
| $\$ 5000-5999$ | 4 | 8 |  | 4 | 6 |  |
| $\$ 6000-6999$ | 9 | 17 | 3 | 20 | 12 | 18 |
| $\$ 7000-7999$ | 8 | 15 | 5 | 33 | 13 | 19 |
| $\$ 8000-8999$ | 7 | 13 | 2 | 13 | 9 | 13 |
| $\$ 9000-$ Over | 17 | 33 | 5 | 33 | 22 | 33 |
| No Answer | 2 | 4 |  |  | 2 | 3 |

family income had been; these, from appearances of the home and family, were neither extremely high nor $10 w$ incomes.

Tab1e IV shows that the employment of homemakers tended to raise the total family incomes. Considering the costs of being employed (loss of income tax deductions, maid expenses, and the like), the total family incomes of these families tend to appear higher than they actually are.

No accurate median income could be set for the homemakers in the present study since no exact income figures were given by the homemakers. The approximate median income for this district was $\$ 7,150$ or above. This amount is considerably higher than in Young's study ${ }^{1}$ in the cities of Rochester and Syracuse where in 1953 their median income was $\$ 4000-4499$. The median income in the present study is a1so higher than reported in Dickens' study of the state of Mississippi ${ }^{2}$ (data collected in 1958-1960) where the average incomes were $\$ 2071$ to $\$ 5972$, depending on whether the family lived in an urban or a rural location and on whether they were Negro or white. The lower incomes were among Negro and rural populations.

The median income in the present study was lower than Gazaway's study of Anchorage and Fairbanks, A1aska, where

[^2]in 1958-1959 40 per cent of the families in Anchorage and 60 per cent in Fairbanks received $\$ 9000$ or more and a third of the families in Anchorage received incomes of $\$ 7000-9000 .{ }^{3}$ This report may be biased, for the report of the study states that both studies were made when business activity and employment were at a peak.

Educationa1 1eve1s. The majority of the homemakers were high school graduates and over half had attended co11ege, as shown in Table V. Eleven of the 67 were college graduates and 2 of these had had graduate study. Nurse's training and business school were inc1uded in the category "some co11ege."

About the same number of the husbands of the homemakers were high school graduates. A larger number had completed co11ege, and several had done graduate study. (Table V)

Over 50 per cent of these homemakers and their husbands had had education beyond high school. Gazaway's study of Anchorage and Fairbanks ${ }^{4}$ reported that 38 per cent and 35 per cent, respectively, had had education beyond high schoo1. The present study, however, dea1s with a school district area of a city rather than, as in Alaska, with the whole city.

```
\(3_{\text {Gazaway }}\), op. cit., p. 6.
\({ }^{4}\) Gazaway, op. cit., p. 6.
```

TABLE V
EDUCATIONAL LEVEL OF HUSBAND AND HOMEMAKER

| Educational Leve1 | Homemaker <br> No. <br> \% |  | Hus band <br> No. \% |  | $\begin{aligned} & \text { Tota1 } \\ & \text { No. } \% \\ & \hline \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eight grades or 1ess | 3 | 4 | 5 | 7 | 8 | 6 |
| Grades nine through eleven | 2 | 3 | 1 | 1 | 3 | 2 |
| High school graduate | 25 | 37 | 27 | 40 | 52 | 39 |
| Some college | 26 | 39 | 8 | 12 | 34 | 25 |
| Co11ege graduate only | 9 | 13 | 21 | 31 | 30 | 22 |
| Graduate work after college | 2 | 3 | 5 | 7 | 7 | 5 |

Occupations. The occupations of the husbands and employed homemakers are shown in Table VI. The charting of these occupations was patterned after that in Young's study. ${ }^{5}$ The larger number of the household heads were white collar workers. There were many salesmen, especially traveliing salesmen, in this area of Greensboro. Skilled workers were a1most as 1arge a group as white co11ar workers; managers and proprietors constituted the third 1argest group. Most of the employed homemakers held white collar jobs, the professional group being next in size. None of the employed homemakers he1d skill jobs.

## II. SOURCES OF INFORMATION

## REGARDING NUTRITION AND FOOD PRACTICES

The homemakers were asked to check the sources of their information on grocery shopping, food preparation, and nutrition. Some homemakers placed a check in every space provided while others indicated that they learned it all from actual experiences. A11 those who checked radio as a source of information also checked television. Radio was not as frequent a source of information in any area as was television.

Since the district studied is a city district, there were few adult classes or home demonstration clubs. Each was
$5^{5}$ Young, op. cit., p. 217.

## TABLE VI

## OCCUPATIONS OF HUSBANDS AND EMPLOYED HOMEMAKERS

| Occupations* | Husbands <br> No. | $(67)$ <br> $\%$ | Homemakers (15) <br> No. |  |
| :--- | :---: | :---: | :---: | ---: |
| Unskilled workers | 5 | 8 | 2 | 13 |
| Semi-skilled workers | 7 | 10 | 1 | 7 |
| Skil1ed workers | 18 | 27 | 7 | 47 |
| White co11ar workers | 24 | 36 | 4 | 27 |
| Professiona1 | 5 | 8 | 1 | 7 |
| Manager, proprietor | 8 | 10 |  |  |

*Unskilled - truck driver, painter, sewing machine operator. Semi-skilled - textile workers, mechanics. Skilled - engraver, technician, chemist, electrician. White collar - clerical, supervisor, trave1ing salesman, inspector, buyer, secretary. Professional - nurse, teacher.
given as a source by a few homemakers. Neither was 1isted as a source of information by the employed homemakers.

A few homemakers replied that experience had been their only teacher. Others added sources of information as co-workers (sharing recipes for quick1y-prepared foods), nurse's training, the family doctor, and books and pamph1ets. One homemaker asked for dependable sources of information on nutrition.

Grocery-shopping information. Table VII shows the most frequent sources of grocery shopping information. Fifty-two per cent of the homemakers listed re1atives and acquaintances and newspapers as sources of information. Magazines and cookbooks were the second most frequent sources. Television and high school classes were the third most frequent sources. Several homemakers remarked that they shopped the newspaper advertisements regular1y. On1y a few of the homemakers 1isted co11ege classes as a source of grocery shopping information.

In the present study 30 per cent reported high school as a source of information, 4 per cent home demonstration clubs, and 9 per cent college. Referring to high school, college, and home demonstration as "formal training" there were 34 per cent who had had formal training in grocery shopping through one or more of these sources. In the study of Family Food Marketing Practices in Texas in 1958, Stubbs

## TABLE VII

SOURCES OF INFORMATION ON GROCERY SHOPPING, FOOD PREPARATION, AND NUTRITION

| Source | Grocery Shopping No. $\qquad$ |  | $\begin{gathered} \hline \hline \text { Food } \\ \text { Preparation } \\ \text { No. } \quad \% \end{gathered}$ |  | Nutrition <br> No. $\qquad$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| High Schoo1 | 20 | 30 | 41 | 61 | 42 | 63 |
| College | 6 | 9 | 5 | 8 | 13 | 19 |
| Home demonstration | 3 | 4 | 9 | 13 | 6 | 9 |
| Relative and acquaintances | 35 | 52 | 38 | 57 | 28 | 42 |
| Radio | 13 | 19 | 12 | 18 | 14 | 21 |
| Te1evision | 20 | 30 | 30 | 45 | 28 | 42 |
| Adu1t classes |  |  | 1 | 2 |  |  |
| Newspapers | 35 | 52 | 24 | 36 | 20 | 30 |
| Magazines | 25 | 37 | 40 | 60 | 38 | 57 |
| Cookbooks | 27 | 40 | 50 | 75 | 46 | 69 |
| Other sources--27* |  |  |  |  |  |  |

*Experience (17), co-workers (1), nurse's training (5), family doctor (2), books and pamph1ets (2).
reported "on1y 16 per cent had had any formal training in food buying. Ten per cent had had this training in high school, 2 per cent in home demonstration c1ub work and 2 per cent in college." ${ }^{6}$

Food preparation information. Cookbooks were most frequently a source of information on food preparation. Classes in high school were second; magazines were ranked slightly above relatives and acquaintances as a third source. High school c1asses were the most frequent educational sources of information. Most of the homemakers remarked as they checked "magazines" and "cookbooks" that there are a lot of recipes in them.

Nutrition information. As shown in Table VII, cookbooks outranked high school classes as a source of information for nutrition. Magazines were third in frequency. of the 26 homemakers who had attended college (Table V , page 29), 13 reported college as a source of information on nutrition. The present study differs slightly from one by Methany et al. on the diets of preschool children ${ }^{7}$ in which the mothers rated their sources of nutrition information as first, second, and third in importance. Past experience and
${ }^{6}$ Stubbs, op. cit., p. 8.
$7_{\text {Methany }}$, 1 oc. cit.
education were first in importance to 35 of the 94 mothers; printed materials were first in importance of the sources to 29 of the mothers. The two were rated as second in importance in the same order. Relatives were separated from friends and neighbors as a source of information in Methany ${ }^{\prime}$ s study. Were they combined as in the present study they would rank as the third major source of information. Of least importance to the mothers of the preschool children were radio and television.

In Greensboro, homemakers in the General Greene Schoo1 District had more training in nutrition than did the homemakers in Stubbs ${ }^{\text {' }}$ study in Texas. ${ }^{8}$ In the present study over 50 per cent had received nutrition information in high schoo1. On1y 25 per cent of the Texas homemakers received nutrition education. "Fifteen per cent secured this training in high school, 3 per cent in home demonstration work, and 3 per cent in college." The homemakers interested in nutrition classes in Texas preferred to have these classes on television.

Considering the frequency of cookbooks, magazines, and printed materials as sources of information, one might conclude that it is necessary for them to maintain accurate and possibly add more thorough information on nutrition.

$$
{ }^{8} \text { Stubbs, op. cit. }, \text { p. } 8 .
$$

## III. GROCERY SHOPPING PRACTICES

In order to obtain a description of food-shopping practices several questions were asked. Usually answers were readily given. Occasionally the homemakers were hesitant in replying, for they seemed to feel that their method was inferior compared with what a home economist would practice or teach. A few said that they hated cooking and grocery shopping. Their resulting methods were extremely organized or extremely disorganized. One such homemaker p1anned week1y detailed menus and made her grocery 1ist according1y. Another, completing a heavy meal, 1eft the evening dinner table to go shopping with no list or memorandum of any type.

Who does the shopping. As is presented in Table VIII, most homemakers ( 90 per cent) said that they did the grocery shopping. Three of the nonemployed homemakers had their husbands do it. One employed homemaker and 3 nonemployed homemakers had their husbands help them regularly with their grocery shopping. Later in the interview several members of the families were credited with helping with the grocery shopping (Tab1e XX, page 62).

The present study is similar to Porter's study in West Virginia, in which urbanism was related to the grocery shopping. Eighty-nine per cent of the shoppers in the urban
areas were the homemakers, whereas 82 per cent of the shoppers in the rural areas were the homemakers. The husbandwife team pattern seemed to be more frequent there. ${ }^{9}$
table ViIi
THE FAMILY MEMBER DOING THE GROCERY SHOPPING


Stubs reported in her study of Texas homemakers ${ }^{10}$ that 91 per cent of the homemakers did the family food shopping. In 4 per cent of the families the husbands did the grocery shopping and in 5 per cent of the families the shopper was some other person or some combination of family members. These results are similar to the findings of the present study.

In the present study the practice of homemakers doing the shopping is greater than in Young's study in Rochester and Syracuse ${ }^{11}$, where approximately 66 per cent of the homemakers did the shopping. Seventeen per cent of those

$$
\begin{aligned}
& { }^{9} \text { Porter, op. cit., p. } 9 . \\
& { }^{10} \text { Stubs, op. cit., p. } 3 . \\
& { }^{11} \text { Young, op. cit., p. } 430 .
\end{aligned}
$$

homemakers were accompanied by their husbands. In 9 per cent of the homes the husbands did the shopping alone.

Where shopping is done. On1y 2 homemakers said they usually or a1ways did their shopping at an independent grocery store. One of these 2 homemakers secured her groceries from her husband's fruit and vegetable store; the other worked near a locally-owned store and found it more convenient. The latter sometimes shopped at a supermarket. Sixty-five of the 67 homemakers usually or always shopped at a chain store or supermarket. None of the 65 who usually shopped at supermarkets shopped at independent grocery stores with any degree of frequency.

In the present study 97 per cent of the homemakers usually shopped at a district or national chain store; this is considerably higher than is reported in Stubbs' study of the state of Texas ${ }^{12}$, where on1y 47 per cent shopped in chain stores. The difference is perhaps due to the urbanization of the Greensboro group. On1y one-third of the Texas rural families shopped at any type of chain store.

How often shopping is done. As shown in Table IX, shopping once a week for groceries with fill-in items purchased once or twice a week was the most frequent pattern of
${ }^{12}$ Stubbs, op. cit., p. 4.

TABLE IX

## FREQUENCY OF GROCERY SHOPPING

| Time | Frequency | Percentages |
| :--- | :---: | :---: |
| Major shopping: |  |  |
| Once a week | 53 | 79 |
| 2 -3 times a week | 6 | 9 |
| 2 times a month | 5 | 7 |
| 1 time a month | 2 | 3 |
| No routine | 1 | 1 |
| Minor shopping: |  |  |
| Daily | 2 | 3 |
| 2 times a week | 36 | 54 |
| 3 times a week | 6 | 9 |
| 1 time a week | 15 | 22 |
| Never | 8 | 12 |

grocery shopping. Shopping once a week was done by 79 per cent of the homemakers. Fifty-four per cent of the homemakers bought fil1-in purchases twice a week and 22 per cent did so on1y once a week. Other patterns of frequency may be observed in the table.

A1most 80 per cent of the homemakers in the present study shopped once a week for major groceries, whereas 72 per cent in the Texas survey ${ }^{13}$ shopped once weekly for their major grocery supp1ies. Most of the Texas homemakers bought fil1-in purchases two or more times a week as compared with on1y one or two times a week in the present study. Porter et al. related the frequency of fill-in purchases to the living locality when in the report on the West Virginia survey they reported that "the more urban the area, the greater the average number of trips to the food store in any given week."14

Pattern of grocery shopping. When the homemaker was asked how she decided what to buy at the grocery store, more than one rep1y was usually made. On1y the first rep1y was recorded and used in presenting the data in Table X. A complete grocery 1 ist was used most often by nonemployed homemakers. Proportionate1y, more emp1oyed homemakers rep1ied

$$
\begin{aligned}
& 13 \text { Stubbs, } \frac{1 \mathrm{oc} \cdot \frac{\text { cit. }}{}}{14_{\text {Porter }} \text { op. cit., p. } 11 .}
\end{aligned}
$$

## TABLE X

## PREPARATION FOR GROCERY SHOPPING

| Method* | Emp1oyed Homemakers | Nonemployed Homemakers | $\begin{gathered} \text { Total } \\ \text { Homemakers } \end{gathered}$ | $\begin{aligned} & \hline \text { Per } \\ & \text { Cent } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Read Advertisements |  | 5 | 5 | 7 |
| Make partial 1ist, choose minor items | 3 | 4 | 7 | 10 |
| None | 9 | 14 | 23 | 34 |
| Check cupboard (and memory) | 2 |  | 2 | 3 |
| Make complete 1ist | 1 | 27 | 28 | 42 |
| Keep running 1ist |  | 2 | 2 | 3 |

*First answer given. In addition to other methods, advertising was mentioned four times by those employed and seven times by those not employed. It was the most frequent second answer.
that no 1ist was used. No 1ist used was the second most frequent description of method with the nonemp1oyed homemakers, too. Checking the newspaper advertisements for specials was frequently a second step in their plan of shopping, as was checking the cupboard to see what was needed.

In the present study about 33 per cent of the homemakers shopped without a list. Sixty-six per cent used the other methods which included the use of a list. Between two-thirds and 75 per cent of the homemakers in Stubbs' report of Texas ${ }^{15}$ shopped with a 1 ist. That 1 eft the other homemakers with various patterns including "no 1ist." The two reports are similar--only slight1y more unplanned purchasing is indicated in the present study than in the Texas study.

Budgets and records. When asked if the week1y food expenditure was p 1 anned in a budget, 21 homemakers rep1ied in the affirmative and 46 in the negative. Their weekly food cost was more usually a week1y occurrence than a plan. The percentage who had an established food budget was greater for the nonemployed than for the employed.

The bases for planning a set amount for foods in the budgets were varied. The replies ranged from one do11ar per person per day to the allotting of amounts for the food

$$
15 \text { Stubbs, op. cit. }, \text { p. } 6
$$

groups. More frequently the reply was that the budget was a by-product of experience. The rep1y was a1so made several times that a limited amount had been set and had been expanded as the family expanded. One homemaker remarked that their budget increased five dollars a week with each child added to the family.

TABLE XI
NUMBER OF HOMEMAKERS PRACTICING BUDGETING

| Rep1y | Emp1oyed <br> Homemakers | Nonemp1oyed <br> Homemakers | Tota1 <br> Homemakers | Percentage |
| :---: | :---: | :---: | :---: | :---: |
| Yes | 3 | 18 | 21 | 31 |
| No | 12 | 34 | 46 | 69 |

Van Syck1e pointed out from her study in Everette, Washington ${ }^{16}$, that 9 out of 20 homemakers budgeted for food supp1ies and on the whole found that the budgets worked. She pointed out that this should be encouraging to home economists. That budgeting should be maintained in the curriculum is further supported by the fact that in the present study almost one-third of the homemakers budgeted.

Twenty-five per cent of the homemakers in the present study kept a record of grocery spendings. Seven per cent of
${ }^{16}$ Van Syck1e, op. cit., p. 120.
the homemakers in Everette, Washington ${ }^{17}$, kept a record of what they spent for groceries. The records in the present study inc1uded check stubs and o1d grocery tickets.

Amount spent for groceries. The homemaker gave from an interview card [Appendix C 7 the letter that represented the amount spent for groceries in a week; this inc1uded the milk and egg bill but excluded the non-grocery items. The letter groups were in spans of five dollars. As shown in Tab1e XII, 17 indicated each group of $\$ 21-25$ and $\$ 31-35$. Thirteen indicated $\$ 26-30$ per week. Those who did not know how much was spent for groceries or who spent $\$ 40$ and over per week had larger families where there were $5-8$ members in the families. The ones who spent only $\$ 11-15$ per week had 4 or 5 members in the family.

In a report in Family Economics Review published by the United States Department of Agriculture ${ }^{18}$, the trends in the consumer price index for food during the past ten years (1951-1961) were given. Food purchased in the grocery store cost the homemaker about 2 per cent more in December, 1961, than in December, 1951. Restaurant meals were a

[^3]TABLE XII
AMOUNT SPENT WEEKLY FOR GROCERIES

| Amount | Total <br> Homemakers | Percentage <br> Homemakers |
| :--- | :---: | :---: |
| $\$ 11-15$ | 2 | 3 |
| $\$ 16-20$ | 7 | 10 |
| $\$ 21-25$ | 17 | 25 |
| $\$ 26-30$ | 13 | 19 |
| $\$ 31-35$ | 17 | 25 |
| $\$ 36-40$ | 7 | 10 |
| $\$ 40$ and over | 3 | 4 |
| Do not know | 1 | 1 |

23 per cent greater cost in December of 1961 than in January of 1953 when they were first reported in the Consumer Price Index. The 5 subgroups of foods purchased in the grocery store showed a wide diversity of price trend. During the ten-year period the prices of cereals and bakery products rose 22 per cent; retail costs of meats, poultry, and fish were reduced by 7 per cent; dairy products became 8 per cent higher; fruits and vegetables rose 7 per cent higher; and other foods used in the home (beverages, fats, sweets, eggs) cost 6 per cent less. It should be noted that the present study was made in the summer of 1962 and there may be since that time another s1ight increase or decrease in the consumer price index for food.

Table XIII shows the cost of groceries per person per week. Using the largest number of the group span to represent the grocery cost, this number was divided by the number in the family to obtain the cost of groceries per person per week. It was found that the most frequent amount spent for groceries per person per week was six dollars. An expense of five dollars was next in frequency and seven dollars third. Because 3 families had spent an undetermined amount over forty do11ars and one did not know how much was spent for groceries, there was no way of determining their cost per person per week. Excluding the four families the average spent per person per week was $\$ 6.24$. In Van Syck1e's study

TABLE XIII

## COST OF GROCERIES PER PERSON PER WEEK

| Amount per person per week | Total number of homemakers replying |
| :---: | :---: |
| \$3 | 1 |
| \$4 | 4 |
| \$5 | 11 |
| \$6 | 27 |
| \$7 | 10 |
| \$8 | 5 |
| \$9 | 3 |
| \$10 | 2 |
| Do not know | 4 |

in Everette, Washington, in $1953^{19}$, the range was from $\$ 2.24$ to $\$ 12.46$ per person per week. Young et a1. in a study in Rochester and Syracuse ${ }^{20}$ in 1953 found that the mean and median food expenditure per person per week was rough1y seven do11ars, slight1y higher than in the present study.

The amount spent for groceries by income leve1 is shown in Tab1e XIV. One of those with the highest income was in the same range of grocery spending as the one with the lower incomes. However, the amount of money spent for food by any particular family is not determined entirely by income leve1. Several factors, such as the number and ages of family members and family values and goals will operate to influence the food expenditure.

Foods budget and adjustment. The question, "If you had to cut your foods cost, in what general area would you cut?" brought rep1ies varying from "I could not cut" to ready answers. More of the reduced grocery expenditures would be in meats, desserts, and snacks. Other answers given in order of frequency were: cookies, soft drinks, frozen foods (by using canned foods instead), and milk. Starchy food groups were mentioned in various ways. One

$$
\begin{aligned}
& { }^{19} \text { Van Syck1e, op. cit., p. } 120 . \\
& { }^{20} \text { Young, op. cit. }, \text { p. } 430 .
\end{aligned}
$$

TABLE XIV

## FAMILIES SPENDING VARIOUS AMOUNTS FOR GROCERIES

BY INCOME LEVEL

| $\overline{\text { Amount }}$ Spent | \$3000- 3999 | $\$ 4000-8$ 4999 | \$5000- 5999 | \$6000- 6999 | \$7000- | $\begin{gathered} \$ 8000-\$ \\ 8999 \\ \hline \end{gathered}$ | \$9000- | Tota1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$11-15 |  | 1 |  |  | 1 |  |  | 2 |
| \$16-20 |  |  | 2 | 3 | 1 |  |  | 6 |
| \$21-25 | 1 |  | 1 | 3 | 6 | 3 | 3 | 17 |
| \$26-30 |  | 1 |  | 2 | 4 | 1 | 5 | 13 |
| \$31-35 |  | 2 | 1 | 3 | 1 | 4 | 6 | 17 |
| \$36-40 |  |  |  | 1 |  | 1 | 5 | 7 |
| \$40-0ver |  |  |  |  |  |  | 3 | 3 |
| Total | 1 | 4 | 4 | 12 | 13 | 9 | 22 | 65* |

*One did not know how much was spent for groceries. Another did not know how much income the family received.
remarked that her reductions wou1d be on a litt1e of everything.

## IV. NUTRITION

Cameron in her study of rural homemakers in Virginia ${ }^{21}$ questioned the homemakers on their knowledge of nutrition with a series of questions related to nutritional needs. Later in the interview she questioned their frequency of serving the important groups of foods and compared the two. As in Cameron's study the homemakers in the present study were asked four questions to determine their nutritional knowledge [Appendix A7. Later in the interview they were asked how often they served the food groups in the Basic Seven. Near the end of the interview they were asked if they were familiar with the term "Basic Seven."

Nutritional knowledge. The information obtained from the questions on nutritional know1edge was scored, using an arbitrary weighting system for questions asked [Appendix D7. Twelve points were assigned to the completely answered question "What foods should be included in the family meals each day?" and two points each to their correct answers for citrus substitutes (for oranges, tomatoes, and grapefruit), protein substitutes (for meats), and milk substitutes (for

[^4]milk when family members do not care to drink it). The maximum number of points was 18.

Three homemakers had a score of 17-18 on nutritiona1 knowledge (Tab1e XV): 2 of these were home economists. Forty-nine homemakers scored between 11 and 16 points. The greatest number made 11-12 points either because of incompleteness of the foods needed for a day or because of inability to give proper food substitutes for citrus fruits, meat dishes, or milk for drinking. Those who scored quite low were usually rather indifferent or seemed to feel "put on the spot" in that they had insufficient time to think. It was the opinion of the writer that the scores as a who1e would be considered high, as might be expected of a group with relatively high educational attainments.

Nutritional practices. The homemakers were given an interview card [Appendix C 7 on which to indicate how often each week the food groups 1 isted were served in the home. These groups were the Basic Seven groups broken down still further; the highest possib1e score was 12 [Appendix D7. Tab1e XVI, page 53, indicates that 32 of the 67 had a score of $9-10$ points and 20 had a score of $11-12$ points. Often the homemakers would think in terms of "daily" without thinking how often a day that particular group was served. For examp1e, they often rep1ied that bread was served daily

TABLE XV
DISTRIBUTION OF SCORES ON NUTRITIONAL KNOWLEDGE

| Scores | Total <br> Homemakers | Employed <br> Homemakers | Nonemployed <br> Homemakers |
| :---: | :---: | :---: | :---: |
| $17-18$ | 3 |  | 3 |
| $15-16$ | 13 | 4 | 11 |
| $13-14$ | 15 | 5 | 11 |
| $11-12$ | 21 | 3 | 16 |
| $9-10$ | 8 | 1 | 5 |
| $7-8$ | 5 |  | 4 |
| $1-6$ | 2 |  | 2 |

TABLE XVI

## DISTRIBUTION OF SCORES

ESTIMATING ADEQUACY OF MEALS SERVED

| Scores | Total <br> Homemakers | Per cent <br> of tota1 | Nonemployed <br> Homemakers | Empioyed <br> Homemakers |
| :---: | :---: | :---: | :---: | :---: |
| $11-12$ | 20 | 30 | 15 | 5 |
| $9-10$ | 32 | 48 | 26 | 6 |
| $7-8$ | 12 | 18 | 10 | 2 |
| $5-6$ | 2 | 3 | 1 | 1 |
| $0-4$ | 1 | 1 |  | 1 |

or 7 times a week but would not consider that toast for breakfast, bread in the form of sandwiches, and a hot bread at night made a much higher total. A1though they said they served tomatoes (at their peak season of the year) once or twice a day and that orange juice was common for breakfast, they failed to indicate this in totaling their servings for the week. It was of interest to note that the employed homemakers had higher scores for frequency of serving those foods needed daily a1though they usually had on1y 2 meals a day served in the home.

The weakest point in the nutritional group practices was the bread group--obtaining the three servings of bread per day. The milk group was 1 ow because of the 1 ow number of adult servings. Usua11y the children received the needed amount, but adu1ts received on1y one glass or on1y the small amount used in their hot beverage. The children often ate cereals, but cereal was rarely eaten by adults.

Nutritional know1edge compared with nutritional practices. With 12 points assigned to "what should be served daily" and 12 points to "how often a week these were served," Table XVII shows that 4 homemakers knew what should be served and practiced serving them. There was a total of 20 who practiced serving all of what was needed. Thirty-two failed in 2 or 3 food groups of serving what was thought

## TABLE XVII

COMPARISON OF KNOWLEDGE OF NUTRITION SCORES
WITH ADEQUACY OF MEALS SERVED

| Adequacy <br> of Mea1s <br> (Points) | $0-4$ | $5-6$ | $7-8$ | $9-10$ | $11-12$ | Tota1 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $0-4$ | 1 | 1 |  |  | 1 | 1 |
| $5-6$ | 3 |  |  | 1 | 1 | 12 |
| $7-8$ | 1 | 2 | 11 | 16 | 2 | 32 |
| $9-10$ | 1 | 5 | 3 | 7 | 4 | 20 |
| $11-12$ | 6 | 8 | 19 | 27 | 7 | 67 |
| Tota1 |  |  |  |  |  |  |

needed for the family. Seven who knew 9 or 10 of the foods that should be served indicated that they served all 12 of them. Seven knew what should be served daily--20 served what should be served daily. Twenty-seven failed in knowledge of on1y 2 or 3 of these needed daily servings--32 1acked serving on1y 2 or 3 of those needed daily servings. It seems that some of the homemakers served more adequate meals than they indicated knowledge of serving.

Knowledge of "Basic Seven." When questioned about the term "Basic Seven," several replied that they were not familiar with it. Rewording it with descriptive phrases such as "pie shaped" or "whee1" they would recall some knowledge of it. Twenty-seven gave answers indicating that they knew what "Basic Seven" meant and 26 were fami1iar with it (Table XVIII). Fourteen were not familiar with the "Basic Seven." Similarly there were 14 who mentioned half or 1ess of the foods needed for a nutritionally adequate diet (Table XVII, page 55).

Four-fifths of the homemakers in the present study knew or were familiar with the seven basic food groups. This is higher than reported in many of the other studies. Young in her study of the two cities in New York ${ }^{22}$ in 1953

22 Young, op. cit., p. 219.
reported that one-third to one-half of the sample gave no evidence of nutritional know1edge. A study by Cameron ${ }^{23}$ of Appomattox County, Virginia, in 1951 and a study by the Bureau of Agricultural Economics ${ }^{24}$ of an urban community of Virginia in 1948 reported the homemaker's knowledge of nutrition. Over 67 per cent of the rural and 50 per cent of the urban Virginia homemakers were classified as having 1ittle or no know1edge of nutrition.

## TABLE XVIII

KNOWLEDGE OF BASIC SEVEN

| Replies | Tota1 Replies | Percentage | Replies |
| :--- | :---: | ---: | :--- |
| Yes | 27 | 40 |  |
| No | 14 | 21 |  |
| Some knowledge | 26 | 39 |  |

Adequacy of mea1s for the family. The homemakers were asked whether they felt that their meals were adequate for the family. They usually based their affirmative rep1y on one of the two results: (1) the meals satisfied the family; or (2) the meals were adequately prepared, although some
${ }^{23}$ Cameron, op. cit., p. 13.
${ }^{24}$ Bureau of Agricultural Economics, Homemaker's Acceptance of Nutrition Information in an Urban Community, (United States Department of Agriculture, Mimeograph Report, February 1948).
members of the family rejected some foods because of personal dis1ikes. Seventy-six per cent said their meals were adequate for the family. Three fe1t that the foods did not meet the needs of the family; twice this referred on1y to the children. Thirteen said their meals were usually adequate for the family; once this referred to children only.

The number of homemakers in the present study ( 76 per cent) who believed that their meals were adequate for the family is less than is reported in Young's study in Rochester and Syracuse, New York ${ }^{25}$ but higher than is reported in Cameron's study in Virginia. ${ }^{26}$ Young's study reported that 92 per cent of the homemakers believed their families were getting all the foods they needed. In Cameron's study 61 per cent of adults and 63 per cent of children were reported as having adequate family mea1s.

## V. MEAL MANAGEMENT

An attempt was made in the present study to 1earn family eating patterns, meal planning patterns, mea1-time preparation procedure, meal preparation time, and the frequency of use of certain convenience foods.
${ }^{25}$ Young, op. cit., p. 434.
${ }^{26}$ Cameron, 1 oc. cit.

Families that eat together as a group. On the assumption that Saturday, Sunday, and the week days have different meal patterns, the homemakers were asked to check which of the three meals on these days were eaten together as a group or family. Table XIX indicates that the evening meal was the meal most frequently eaten together as a family. Breakfast on Monday through Friday was the meal least frequently eaten together. More often, especially in the summertime, this meal was eaten in shifts. Because Sunday morning breakfast was usually served later in the morning, it was more likely to include everyone. A11 persons at home ate together all of the time in about one-third of the homes.

Family members were away from or skipped meals most frequent1y at noon on Monday through Friday. Many of those absences from meals were because of jobs which made it inconvenient to return home at that time. Absences during the school year were not considered, since the study was made in the summer.

TABLE XIX
NUMBER OF FAMILIES THAT EAT TOGETHER AS A GROUP

| Mea1 | Monday-Friday |  | Saturday |  | Sunday* |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
|  | No. | $\%$ | No. | $\%$ | No. | $\%$ |
| Breakfast | 29 | 43 | 38 | 57 | 43 | 64 |
| Lunch | 35 | 52 | 38 | 57 | 49 | 73 |
| Dinner | 60 | 90 | 63 | 94 | 61 | 91 |

*For Sunday on1y, 1unch means the evening meal and dinner the noon mea1.

He1p received with management of mea1s in the home. The activities associated with preparing, serving, and clearing after a meal were listed, and the homemakers were asked to check whether he1p was received with them. In on1y a few areas did the employed homemaker receive more he1p proportionately than did the nonemployed homemaker (Tab1e XX). Proportionately, the employed homemaker received more he1p with dishwashing, putting groceries away, and the preparation of food by the daughter or by the maid than did the unemployed homemaker. As a who1e, more he1p was received with the dishwashing and setting the table by all homemakers. Putting the groceries away was the third highest in he1p received. Eight homemakers owned and used dishwashers. Six homemakers simply rep1ied that no he1p was received in any area of meal management.

Time of meal planning. Purchasing food in advance and having it on hand seemed to be the greatest aid to planning mea1s, since the majority of the homemakers plan at the beginning of the day (Table XXI, page 62). The second largest number p1an as they prepare the meal. One homemaker had a weekly pattern which she followed with slight variation from one week to another.

Bases of meal planning. A1most 45 per cent of the families served whatever the family wanted for breakfast.

TABLE XX
HELP RECEIVED WITH MANAGEMENT OF MEALS IN THE HOME

| Item | $\begin{aligned} & \text { Husband } \\ & \text { Non. Em. } \end{aligned}$ |  | $\begin{aligned} & \text { Son } \\ & \text { Non. Em. } \end{aligned}$ |  | $\begin{aligned} & \hline \text { Daughter } \\ & \text { Non. Em. } \end{aligned}$ |  | $\begin{aligned} & \hline \hline \text { Re1ative } \\ & \text { Non. Em. } \end{aligned}$ |  | $\begin{gathered} \text { Maid } \\ \text { Non. Em. } \end{gathered}$ |  | Tota1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grocery shopping | 19 | 4 | 4 | 1 | 4 | 3 |  | 1 |  |  | 36 |
| Putting groceries away | 15 | 4 | 15 | 7 | 19 | 12 | 1 |  | 1 |  | 75 |
| Setting the table | 7 | 4 | 16 | 7 | 31 | 12 | 1 |  | 1 |  | 79 |
| Preparation of food | 8 | 1 | 5 | 1 | 13 | 6 | 1 | 1 | 2 | 2 | 40 |
| Serving food up | 7 | 3 | 3 | 1 | 7 | 5 | 1 |  | 1 |  | 28 |
| Storing 1eft-over food | 5 | 2 | 3 | 1 | 7 | 3 | 1 |  | 2 |  | 24 |
| Dishwashing | 16 | 4 | 13 | 6 | 24 | 10 |  | 1 | 4 | 4 | 82 |
| Putting dishes away | 7 | 4 | 7 | 2 | 19 | 7 | 1 | 1 | 5 | 1 | 54 |

TABLE XXI
WHEN THE HOMEMAKER DECIDES WHAT TO SERVE

| Time of planning | Tota1 rep1ies | Percentage rep1ies |
| :--- | :---: | :---: |
| Decide as preparing | 17 | 25 |
| At beginning of day | 26 | 39 |
| Few days ahead | 11 | 16 |
| Week or more ahead | 12 | 18 |
| Week1y pattern | 1 | 1 |

The greater part of the other families had a set pattern for breakfast (Tab1e XXII).

Lunch was "whatever the family wanted" for the greater percentage of the families. "A daily set pattern" was second, as with breakfasts, but close1y followed by "whatever is on hand."

Dinner was planned by "what was good for the family." Many referred to this as being their "balanced meal for the day." Greater emphasis seemed to be placed on this meal, for more of the family members would be present. P1anning from "what is on hand"--or those foods a1ready purchased-was second in frequency of planning methods. Special diets, efforts to include variety in the diet, and time factors influenced many homemakers in what they planned for this mea1.

The findings of the present study are similar to those of Van Syck1e in Everette, Washington ${ }^{27}$, where breakfasts were not p1anned but were generally a set pattern or whatever the family wanted. Three out of 4 homemakers in Van Syckle's study planned mea1s around a meat or a meat substitute. P1anning the evening meal around a meat was a1so mentioned with much frequency in the present sample.

[^5]TABLE XXII
HOMEMAKERS' BASES FOR MENU PLANNING

| Bases for P1anning | Breakfast <br> No. $\qquad$ | Tota1 RepliesLunchNo. $\quad \%$ |  | $\begin{aligned} & \text { Dinner } \\ & \text { No. } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Left-overs |  | 4 | 6 |  |  |
| Daily set pattern | $27 \quad 40$ | 16 | 24 |  |  |
| What is on hand | 24 | 10 | 15 | 15 | 22 |
| What can afford |  |  |  | 1 | 1 |
| What is good for them | $3 \quad 4$ | 1 | 1 | 26 | 39 |
| What they want | $30 \quad 45$ | 23 | 34 | 10 | 15 |
| Other (variety, diet, time...) | $4 \quad 6$ | 5 | 7 | 13 | 19 |

Young's study in Rochester and Syracuse ${ }^{28}$ reported the homemakers' answers in their own words, but the answers fe11 into eight categories with "what's good for them" as the most frequent answer to how they decided what to serve. The second most frequent answer was "1ikes and dislikes" of family members. Young's study did not include a breakdown into the three meals a day as did Van Syck1e's or the present study.

Prob1ems of deciding what to serve. How to get variety in menus was the problem confronting homemakers most frequent1y. Several homemakers expressed prob1ems of p1anning meals that both pleased the family and provided for adequate nutrition. Food likes and dislikes of the family members hindered both the effort to provide an adequate diet and the effort to give variety to the menus. Other problems suggested were concerned with expense, the amount of time available, the weather, the need for variety in the serving of specific foods groups, and the need for new ideas in general. One homemaker replied that she had no problems. Several could give no specific answer at that moment.

Information and he1p needed. An open-end question was asked to find in what area or areas of food management the
${ }^{28}$ Young, op. cit., p. 429.
homemaker fe1t she needed he1p or information. The rep1ies were numerous; no one answer was given with much frequency. Six homemakers stated a need for more information on budgeting. Other suggested problem areas included preparing foods to preserve their nutritive value, getting variety into the menu, canning and freezing foods for winter use, planning with special diets, learning where to obtain information, learning cuts of meat and how to serve foods attractively, and improving family eating habits. Several homemakers suggested that they knew where to obtain the needed information but did not make the necessary effort.

Forty ( 60 per cent) gave a reply to the question on their need for information and he1p. Of the homemakers in the Rochester and Syracuse studies by Young ${ }^{29}$, on1y 33 per cent or about ha1f as many as in the present study, expressed their need for information about planning, and about buying and preparing foods.

Meal preparation time. Breakfast preparation time was on1y the time required to prepare the first breakfast in homes where the families ate in shifts. Since employed homemakers did not always prepare meals, there is not always the total of fifteen replies. As can be seen in Tab1e XXIII, the

$$
\text { 29Young, op. cit., p. } 431 .
$$

TABLE XXIII
TIME FOR BREAKFAST PREPARATION

| Time <br> Minutes | Total <br> No. | Rep1ies <br> $\%$ | Nonemployed <br> Homemakers | Employed <br> Homemakers |
| :---: | :---: | :---: | :---: | :---: |
| $5-10$ | 2 | 3 | 2 |  |
| $11-15$ | 14 | 21 | 9 | 5 |
| $16-20$ | 20 | 30 | 13 | 7 |
| $21-25$ | 7 | 10 | 6 | 1 |
| $26-30$ | 21 | 31 | 19 | 2 |
| $31-45$ | 3 | 4 | 3 |  |

preparation time for breakfast ranged from 5-45 minutes. Twenty-six to 30 minutes was the time used by 21 homemakers and $16-20$ minutes was the time used by 20 others. This wou1d place the average breakfast preparation time between 16 and 30 minutes. The employed homemakers used less time proportionately than did the nonemployed homemakers: the same was true for lunch when it was prepared in the home.

Three time spans were of equal frequency in the preparation time of lunch (Table XXIV, page 69). These were $11-15,16-20$, and $26-30$ minutes. Three homemakers spent more than 45 minutes in the preparation of 1 unch; for them, however, lunch was the main meal of the day.

Dinner was the most time-consuming meal, requiring from about 30 minutes to more than an hour and a half. Approximately an hour was the most frequent time span (40-70 minutes) as shown in Table XXV, page 70.

## VI. USE OF CONVENIENCE FOODS

Several studies have included a report of the frequency of the use of convenience foods by the homemaker and the reasons given for using them. In the present study the section on convenience foods was designed to include frozen dinners, desserts, vegetables, and other items that aid in faster meal-time preparation; canned soups, biscuits, and mixtures of vegetables or meat and vegetables; and other

## TABLE XXIV

TIME FOR LUNCH PREPARATION

| Time <br> Minutes | Tota1 Rep1ies <br> No. | Nonemployed <br> Homemakers | Employed <br> Homemakers |  |
| :---: | :---: | :---: | :---: | :---: |
| $5-10$ | 6 | 9 | 6 |  |
| $11-15$ | 16 | 24 | 12 | 4 |
| $16-20$ | 16 | 24 | 15 | 1 |
| $21-25$ | 2 | 3 | 1 | 1 |
| $26-30$ | 16 | 24 | 14 | 2 |
| $31-45$ | 3 | 4 | 2 | 1 |
| Over 45 | 3 | 4 | 2 | 1 |

*Figured on basis of sixty-seven homemakers. Not a11 employed homemakers prepared 1unch.

## TABLE XXV

## TIME FOR DINNER PREPARATION

| Time <br> Minutes | Tota1 Replies <br> No. | Nonemployed <br> Homemakers | Emp1oyed <br> Homemakers |  |
| :---: | :---: | :---: | :---: | :---: |
| -30 | 4 | 6 | 4 |  |
| $31-40$ | 2 | 3 | 1 | 1 |
| $41-50$ | 7 | 10 | 4 | 3 |
| $51-60$ | 29 | 43 | 20 | 9 |
| $61-75$ | 11 | 16 | 9 | 2 |
| $76-90$ | 9 | 13 | 9 |  |
| Over 90 | 5 | 7 | 5 |  |

quickly prepared items, such as prepared cereals, instant coffee, minute rice, and instant potatoes.

Frequency of serving baked products. Table XXVI summarizes the frequency of serving baked products whether made from the original ingredients at home or from a prepared mix. The products prepared from the mix listed in descending order of frequency were pancakes, cakes, biscuits, icings, cookies, puddings, pastry, yeast ro11s, and muffins. Twenty per cent of the homemakers replied that they served cookies daily. Only about 12 per cent served biscuits daily. Pancakes and cakes were reported by 37 per cent of the homemakers as served one to two times a week. Biscuits were served one to two times a week by about 33 per cent of the homemakers. Muffins was lowest on the list of baked products reported served by the homemakers: 40 per cent of the homemakers served them sometimes; 20 per cent, never.

Frequency of serving baked products prepared from the prepared mixes. The total number of homemakers (Table XXVII, page 73 ) using a prepared mix (whether always, usually, or sometimes) indicates that pancake mix was the most often used and icing mix the least used. Ranging between these two extremes, from higher frequency of replies to lower frequency of replies, were puddings, cakes, yeast roils, muffins, biscuits, pastry, and cookies. Pancakes were

TABLE XXVI
FREQUENCY OF SERVING BAKED PRODUCTS

| Item | $\begin{gathered} \hline \hline \text { Tota1 } \\ \text { Rep1ies } \end{gathered}$ | Dai1y |  | $\begin{aligned} & \text { 1-2 per } \\ & \text { week } \end{aligned}$ |  | $\begin{aligned} & \text { 3-4 per } \\ & \text { week } \end{aligned}$ |  | Sometimes |  | Never |  | $\begin{aligned} & \hline \text { Tota1 } \\ & \text { Serving* } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | No. | \% | No. | \% | No. | \% | No. | \% | No. | \% | No. | \%. |
| Biscuits | 65 | 8 | 12 | 22 | 33 | 14 | 21 | 18 | 27 | 3 | 5 | 62 | 93 |
| Yeast Ro11s | 55 | 4 | 6 | 18 | 27 | 7 | 10 | 18 | 27 | 9 | 13 | 46 | 69 |
| Muffins | 49 |  |  | 7 | 10 | 1 | 2 | 27 | 40 | 14 | 21 | 35 | 52 |
| Cakes | 65 |  |  | 25 | 37 | 4 | 6 | 35 | 52 | 1 | 2 | 64 | 96 |
| Cookies | 61 | 14 | 21 | 11 | 16 | 13 | 19 | 21 | 31 | 2 | 3 | 59 | 88 |
| Pancakes | 67 |  |  | 25 | 37 | 4 | 6 | 38 | 57 |  |  | 67 | 100 |
| Puddings | 63 |  |  | 19 | 28 | 5 | 8 | 34 | 51 | 5 | 8 | 58 | 87 |
| Pastry | 60 | 1 | 2 | 16 | 24 | 3 | 4 | 36 | 54 | 4 | 6 | 54 | 80 |
| Icings | 63 |  |  | 16 | 24 | 4 | 6 | 40 | 60 | 3 | 5 | 60 | 90 |

*Includes all but the "never" rep1y.

TABLE XXVII
FREQUENCY OF USING PREPARED MIXES FOR BAKED PRODUCTS

| Item | $\begin{gathered} \hline \text { Total } \\ \text { Replies } \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \hline \text { Always } \\ & \text { No. } \quad \% \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \hline \text { Usua11y } \\ & \text { No. } \quad \% \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \hline \hline \text { Sometimes } \\ & \text { No. } \quad \% \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \hline \text { Never } \\ & \text { No. } \quad \% \end{aligned}$ |  | $\begin{aligned} & \text { Tota1* } \\ & \text { Using Mix } \\ & \hline \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Biscuits | 61 | 11 | 16 | 5 | 8 | 16 | 24 | 29 | 43 | 32 | 47 |
| Yeast Ro11s | 52 | 15 | 22 | 8 | 12 | 11 | 16 | 18 | 27 | 34 | 51 |
| Muffins | 63 | 20 | 30 | 2 | 2 | 13 | 19 | 29 | 43 | 34 | 51 |
| Cakes | 62 | 11 | 16 | 10 | 15 | 28 | 42 | 13 | 19 | 49 | 73 |
| Cookies | 59 | 5 | 8 | 6 | 9 | 15 | 22 | 33 | 49 | 26 | 38 |
| Pancakes | 66 | 32 | 48 | 9 | 13 | 12 | 18 | 13 | 19 | 53 | 79 |
| Puddings | 59 | 20 | 30 | 13 | 19 | 17 | 25 | 9 | 13 | 50 | 75 |
| Pastry | 58 | 5 | 8 | 10 | 15 | 17 | 25 | 26 | 39 | 32 | 47 |
| Icings | 57 | 7 | 10 | 2 | 2 | 14 | 21 | 34 | 51 | 23 | 34 |

*Includes a11 but the "never" rep1y.
reported by about 48 per cent of the homemakers as always prepared from the mix. A1most 30 per cent reported that they always used the prepared mixes for muffins and puddings. A1most 40 per cent of the homemakers rep1ied that they used cake mixes only sometimes and about 44 per cent indicated that they never used the biscuit or the muffin mix. S1ightly over 50 per cent never used the prepared icings.

The interview schedule form for obtaining the frequency of use of convenience foods [Appendix $C 7$ was quite lengthy and was used near the end of the interview. For these reasons the writer fee1s that possibly the homemakers did not wish to take any more time with the interview and simply answered in part rather than completely. The total number of replies is given in the left of the tables but the percentages are figured on the basis of 67 possible rep1ies.

Frequency of serving convenience foods besides prepared mixes. Over two-thirds of the homemakers (Table XXVIII) reported serving prepared cereals, canned soups, frozen green vegetables, canned biscuits, and meat pies with some degree of frequency. Many of these were served daily or at least once or twice a week; frozen meat pies and canned biscuits, however, were more frequently indicated as items served on1y sometimes. On1y 6, or less than one-tenth, of

TABLE XXVIII
FREQUENCY OF USE OF CONVENIENCE FOODS OTHER THAN PREPARED MIXES

| Item $\quad$ R | $\begin{aligned} & \hline \hline \text { Tota1 } \\ & \text { Rep1ies } \end{aligned}$ | Daily |  | $\begin{gathered} \hline \hline \text { 1-2 per } \\ \text { week } \end{gathered}$ |  | $\begin{gathered} \text { 3-4 per } \\ \text { week } \end{gathered}$ |  | Sometimes |  | Never |  | Tota1Serving*No. $\%$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frozen Soups | 60 |  |  | 1 | 2 | 1 | 2 | 15 | 22 | 43 | 64 | 17 | 26 |
| F. Meat Pies | 64 |  |  | 3 | 4 | 1 | 2 | 41 | 61 | 19 | 28 | 45 | 67 |
| F. Dinners | 62 |  |  |  |  |  |  | 17 | 25 | 45 | 67 | 17 | 26 |
| F. Dessert Pies | 64 |  |  | 7 | 10 |  |  | 45 | 67 | 12 | 18 | 52 | 76 |
| F. Mixtures** | 66 |  |  | 1 | 2 |  |  | 5 | 8 | 48 | 72 | 6 | 9 |
| F. Vegetables |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Green | 64 | 4 | 6 | 26 | 39 | 11 | 16 | 16 | 24 | 7 | 10 | 57 | 85 |
| Ye110w | 56 | 1 | 2 | 17 | 25 | 3 | 4 | 19 | 28 | 16 | 24 | 40 | 60 |
| Potatoes | 51 | 1 | 2 | 5 | 8 | 4 | 6 | 16 | 24 | 25 | 37 | 26 | 39 |
| Canned Soups | 62 | 1 | 2 | 24 | 36 | 15 | 22 | 17 | 26 | 5 | 8 | 57 | 85 |
| C. Mixtures*** | 62 |  |  | 10 | 15 | 5 | 8 | 27 | 40 | 20 | 30 | 42 | 62 |
| Canned Biscuits | 62 | 3 | 5 | 9 | 13 | 5 | 8 | 30 | 45 | 15 | 22 | 47 | 70 |
| Prepared Cereals | S 67 | 23 | 34 | 8 | 12 | 23 | 34 | 12 | 18 | 1 | 2 | 66 | 98 |
| Instant Coffee | 64 | 18 | 27 | 2 | 2 | 7 | 10 | 16 | 24 | 21 | 31 | 43 | 64 |
| Minute Rice | 62 |  |  | 11 | 16 | 3 | 4 | 28 | 42 | 20 | 30 | 42 | 62 |
| Instant Potatoes | s 62 |  |  | 3 | 4 |  |  | 16 | 24 | 43 | 64 | 19 | 28 |

*Inc1udes all but the "never" reply.
**Chop suey, macaroni, spaghetti.
***Stew, chiii, spaghetti.
the homemakers indicated that they never served frozen mixtures. Frozen mixtures included such items as chop suey and macaroni and spaghetti.

Instant coffee, minute rice, canned mixtures (stew, chili, spaghetti), and frozen yellow vegetables were served by slightly less than two-thirds of the homemakers: most often they were served on1y sometimes.

Several homemakers remarked that the quality of frozen vegetables was not as good as that of canned. The frozen vegetables were grouped as green, yellow, and potatoes. They were used with more frequency in the order in which they were 1 isted-- 85 per cent of the homemakers used frozen green vegetables, 60 per cent used frozen yellow vegetables, and 39 per cent used frozen potatoes. Often the homemakers had to be reminded of the forms of frozen potatoes before they recognized that they used them.

The homemakers often fe1t that if the product had been used even twice then it should be checked as being used sometimes. Frequently they mentioned their having tried the product and not having been pleased with it; in that case, they were encouraged to indicate the item as never being used.

It seems that the percentages under "never" were lower in the present study than reported by Methany et al. who used "occasiona11y" instead of "sometimes" in their
interview form. ${ }^{30}$ Eighty-nine per cent in that study never used frozen mixtures, 82 per cent never used frozen soups, and 81 per cent never used frozen dinners, as compared with the present study which shows a lower number not using these items: 72 per cent (frozen mixtures), 64 per cent (frozen soups), and 67 per cent (frozen dinners). Instant potatoes were added to the present study: 24 per cent of the homemakers used them on1y sometimes.

Reasons for using convenience foods. The homemakers were questioned as to why they used convenience foods in general or why they did not use them. That they save time in meal preparation was the reason most often indicated for using convenience foods; that the family preferred the homeprepared product was the reason most often indicated for not using convenience foods.

[^6]
## CHAPTER IV

## SUMMARY AND CONCLUSIONS

A stratified random sample of homemakers of the Genera1 Greene Schoo1 District of Greensboro, North Carolina, was studied to learn of their food practices. Of the 76 homemakers in the samp1e, 67 were interviewed; there were 2 who dec1ined interviews, one who did not qualify for the study, and 6 who had moved out of the area.

The purpose of the study was to obtain a description of today's homemakers' practices in feeding their families. It was designed to obtain information with regard to the homemaker's knowledge of nutrition; the relationship of this knowledge to the feeding of her family; and the problems and practices of the homemaker in regard to planning, purchasing, and preparing food for her family.

The most frequent sources of information on grocery shopping, and equal in their frequency, were (1) relatives and acquaintances, and (2) newspapers. Magazines and cookbooks were a1most equal as being the next most frequent source of information. When high school classes, college c1asses, and home demonstrations are referred to as "formal training," only slightly more than one-third of the homemakers had received formal training on food buying.

Cookbooks were the most frequent source of information of food preparation. C1asses in high school were the second most frequent source, and relatives and acquaintances third. High school and co11ege classes had been a source of information for about two-thirds of the homemakers.

Cookbooks outnumbered high school classes as a source of information for nutrition. Magazines were third in frequency of offering nutrition information to the homemakers.

Considering the frequency of cookbooks, magazines, and printed materials as sources of information in all three areas, one might conclude that it is important that they offer accurate and thorough information on nutrition and on grocery-shopping.

Ninety per cent of the homemakers did their own grocery shopping. About 4 per cent of the homemakers had their husbands do the shopping and in 6 per cent of the situations the husband and wife did it together. The grocery shopping by 97 per cent of the homemakers was usually done in a chain store. On1y 13 per cent of the homemakers sometimes shopped in a locally-owned store.

The nonemployed homemakers used a complete grocery list for a guide in their grocery shopping with greater frequency than did the employed homemakers. Of the total number of homemakers in the study, 42 per cent made a complete grocery 1 ist before grocery shopping and 34 per cent
made no 1ist. Ten per cent of the homemakers made a short 1ist and then chose at random the rest of the grocery items.

Thirty-one per cent of the homemakers employed the use of a foods budget. For most of the homemakers the amount spent for food had been established through week1y experience. The most frequent amount of money spent for groceries per person per week was six do11ars. Five dollars per person per week was the second most frequent amount spent for groceries. Because the homemakers appeared to be overly conservative in their estimation of weekly spending (indicated in spans of five dollars), the upper limit of each five-do11ar span was used to estimate an average. This average was $\$ 6.24$ per person per week.

Forty per cent of the homemakers knew the Basic Seven daily guide to adequate meals. Thirty-nine per cent had some knowledge of it. This amount of familiarity with the Basic Seven is relatively high, as might be expected of this population with its higher educational level.

Four of the 67 homemakers knew the foods that should be served daily and practiced serving them, a1though 3 with the same knowledge served only some of them. A total of 20 practiced serving what was needed daily. The homemakers seemed to serve more nutritionally adequate meals than their nutritional knowledge indicated they knew to do.

Dinner was the meal most frequently eaten with all of the family together. Meals were eaten away from home or
skipped most often at lunch time usually because a job made it inconvenient to return home at that time. All persons who were at home ate together all of the time in about onethird of the homes. The homemakers received more help with dishwashing, setting the table, and putting the groceries away than any of the other activities related to preparing, serving, and c1earing after a meal.

About 39 per cent of the homemakers planned their meals at the beginning of the day. Purchasing foods in advance and having them on hand was their greatest aid in planning meals. Twenty-five per cent of the homemakers worked out their menu as they prepared the meal.

About 45 per cent of the homemakers did not plan their breakfasts. Breakfast for them was whatever the family wanted. About 40 per cent of the homemakers had a daily set pattern for breakfast. For lunch about one-third of the homemakers served what the family requested. About onefourth had established a daily pattern to follow. Dinner was planned by what was judged good for the family by 39 per cent of the homemakers. Many of the homemakers referred to this as their "balanced meal for the day." Twenty-three per cent of the homemakers planned by what was on hand. Such factors as time, special diets, and efforts to get variety in the meals influenced the menus of about 20 per cent of the homemakers.

Several problems concerning what to serve for meals were reported by the homemakers: how to get variety in the mea1, how to p1an meals to fit the 1ikes and dislikes of the family members, how to keep within the foods budget but serve good meals, and how to get new ideas for serving the same o1d foods.

The average time required to prepare breakfast was between 16 and 30 minutes. For lunch the average time spent in preparation was between 16 and 25 minutes. About 25 per cent of the homemakers required the time in each of three time-spans of $11-15$ minutes, $16-20$ minutes, and $26-30$ minutes. The preparation time for dinner averaged between 40 and 75 minutes; the average requirement was an hour.

Pancake mix was the commercial mix used most frequently by the homemakers. About 48 per cent of the homemakers reported that they always prepared pancakes from the commercial mix. A1most 30 per cent of the homemakers reported using the mixes for their muffins and puddings. About 40 per cent used cake mixes on1y sometimes, and s1ight1y over 50 per cent never used the prepared icings.

Over two-thirds of the homemakers reported serving prepared cerea1s, canned soups, frozen green vegetables, canned biscuits, and meat pies with some degree of frequency. Many of these were served daily or at least once or twice a week; frozen meat pies and canned biscuits, however, were
more frequently indicated as items served only sometimes. Instant coffee, minute rice, canned mixtures, and yellow vegetables were served by slightly less than two-thirds of the homemakers; in most cases they were served only sometimes. Instant potatoes were never served by 64 per cent of the homemakers; 24 per cent used them only sometimes. The reason most frequently given for using convenience foods was that they saved time in meal preparation. That the family preferred the home-prepared product was the reason most often stated for not using convenience foods.

## CHAPTER V

## IMPLICATIONS FOR THE TEACHING OF FOODS AND NUTRITION

There are implications in the present study for the teaching of foods and nutrition in many fields. The food demonstration worker may see imp1ications for specific needs in her field, as will the Home Economics Agent, the journalist, the research worker, and the teacher.

The homemaker's problem of deciding what to serve for meals was frequently influenced by the 1ikes and dis1ikes of various members. There appeared to be a conflict between planning meals that pleased the family and meals that a1so provided adequate nutrition. Since food habits are established early in life, this implies a need for teaching good food selection at an early age. Nutrition education shou1d be continuous because nutritional needs and food habits change with age. In home economics classes, the students need to be introduced to new foods and encouraged to broaden their food likes. Nutritive needs are more readily met when the diet consists of a variety of foods.

Four of the 67 homemakers served those foods which they said should be served daily. The food plans developed as a guide to daily nutritionally adequate meals, such as the Basic Seven or the Basic Four groups, should be stressed in both knowledge and practice. That the three meals for
the day must be considered as a unit must be emphasized when instructing groups in meal planning, whether the groups do advanced planning or make impromptu decisions about menus. C1ass assignments should provide for the practical app1ication of these to daily meals. It is the homemaker's responsibility to plan and prepare meals to insure good nutrition for the entire family. This responsibility becomes even greater as more and more people eat the noon meal away from home.

Many of the homemakers seemed to feel at a loss when asked for substitutions for citrus fruits, for substitutions for complete protein dishes, and for various ways of including milk in the diet other than drinking it. This demonstrated a need for the know1edge of more a1ternatives that may be used for the specific foods. For example, it is important to know that deep green, leafy, and yellow vegetables must be included in the diet and some foods which might be substituted for those most commonly used. Using meat substitutes, or combinations of plant and animal protein, may be a means of reducing grocery expenditures. This information might be presented to the people by various means, whether they be of a formal educational type or simply a pamphlet from the milk company or an article published in the local newspaper.

Homemakers' shopping practices vary from the pattern of using a complete grocery 1ist to that of using no 1 ist.

With the multiplicity of goods and services available, on1y the informed consumer can get the maximum value for her food dollar. Today's homemakers have various brands, different grades, and assorted sized packages of the same products from which they must choose. Buying practices will affect food costs. We11-p1anned marketing may bring about reduced food costs as well as would the critical evaluation of the products available on the market. For these reasons food economics needs to be offered to students in their food educational curriculum or in pub1icized materia1s.

Homemakers varied wide1y in the time required for the preparation of a meal, perhaps because of poor management which may be improved with education and practice. The factor may also be one of not knowing the time needed for the preparation of foods. The homemaker needs to be aware that under some conditions the nutritive value of foods may be destroyed. She needs to know how to prepare foods so as to preserve nutritive values.

To some homemakers diet problems entered into meal planning. This demonstrates the need for instruction in planning low calorie diets that are nutritionally adequate and for understanding the relationship between adequate nutrition and physical and psychological fitness.

Many of the homemakers indicated that they would buy less of the usually less-nutritious snacks if their grocery
budgets were reduced. It is important that homemakers know and choose nutritious snack foods. Because fruits, raw vegetables, cereals, or milk products contribute more nutritive value and often less calories, they should become the usual snacks in the home.

Friends and acquaintances, magazines, cookbooks, radio and television, and newspapers were very frequently a source of information to the homemakers. This indicated a need for the homemaker to be prepared to evaluate the information that is received. She needs to know where and how to find accurate information and how to evaluate pub1icized information. Because relatives and acquaintances were often a source of information to the homemakers, these persons, informed in nutrition, need to know how they may be of he1p in sharing information with others.

The wide variety of convenience foods on the market is important to homemakers as indicated by their frequent use by homemakers in this study. The cost, quality, and degree of convenience of these products should be considered by the homemaker in making decisions to use them. The decision of the informed homemaker should also inc1ude considerations of other possibilities available to her. For examp1e, the homemaker may choose between the home prepared product or the products of the homemade mix or the commercial mix.

The most frequent reason for not using convenience foods was that the family preferred the home prepared products. Creativity with convenience foods is needed. Homemakers may take a convenience food and prepare and serve it in a manner acceptable to the family by applying principles and procedures taught to them in foods classrooms or demonstrations.

Current situations and trends point to the need for an even greater knowledge of foods and nutrition. The understanding of the basic principles would be but a beginning in interpreting new information. Known information is a stepping stone to the future. This stepping stone needs to be firm1y implanted by the understanding of the princip1es and procedures of foods and nutrition of today's homemakers.

BIBLIOGRAPHY

## BI BLIOGRAPHY

## A. PUBLICATIONS OF THE GOVERNMENT, LEARNED SOCIETIES, AND OTHER ORGANIZATIONS

Bovit, C. L. and F. C1ark. Household Practices in the Use of Foods : - Three Cities, 1953. United States Department of Agriculture, Agriculture Information Bulletin 146, Apri1, 1956.

Bureau of Agricu1tural Economics. Homemaker's Acceptance of Nutrition Information in an Urban Community. United States Department of Agriculture, Mimeograph Report, February, 1948.

Cameron, Janet L. Study of Nutrition Information and Food Production and Conservation Practices of Rura1 Homemakers in Appomat tox County, Virginia, July, $\overline{19} 5 \overline{1}$. B1 $\overline{\text { ackburg, }}$ Virginia: Virginia Polytechnic Institute, Mimeograph Report, April, 1952.

Clark, F., J. Murray, G. S. Weiss, and E. Grossman. Food Consumption of Urban Families in the United States. United States Department of Agriculture Information Bulletin Number 132, October, 1954.

Cofer, Eloise and Bertha Friend. "Trends in the Consumer Price Index for Food During the Past Decade," Family Economics Review. Washington, D. C.: United States Department of Agriculture; June, 1962.

Convenience Foods and Their Cost to Consumers: A Pilot $\frac{\text { Study }}{\text { States }} \frac{\text { Washington, }}{\text { D. }}$ C., December, 1957 . United States Department of Agriculture Marketing Service, Bu11etin 267, Washington, D. C., August, 1958.

Dickens, Dorothy. Food Use and Gainful Employment of the Wife. Mississippi Agriculture Experiment Station, $\overline{B u 11} e t i n 558,1958$.

Feeding the Family: Some Problems Reported in a National Study of Home Demonstration Members. United States Department of Agriculture, Federa1 Extension Service, Extension Service Circular 526, Nationwide Study of 1957.
Gazaway, G. P. and C. F. Marsh. Some Characteristics of Anchorage and Fairbanks Households. A1aska Agricultural Experiment Station, Circular 23, June, 1960.

Morgan, A. F. Nutritional Status U. S. A. California Experiment Station, Bu11etin $7 \overline{6} 9,{ }^{-1} 19 \overline{5} 9$.

Muse, Marianne. Food Management in Some Vermont Farm Homes. Bur1ington, Vermont: Agricuiture Experimental Station, University of Vermont and State Agriculture Co1lege, Bu11etin 601, June, 1957.

Porter, W. F., W. W. Armentrout, M. K. Conva1, R. Dimit, G. Lyon, C. E. Swank, and G. Ueland, Food Buying: Know1edge - Concerns - Practices. Morgantown, West Virginia: West Virginia University Agriculture Experiment Station Bulletin 456, May, 1961.

Stubbs, A1ice C. Family Food Marketing Practices. College Town, Texas: Texas Agricultural Experiment Station, March, 1961.

Wood, Mildred, A1berta Hi11, and Edna Amidon. Management Problems of Homemakers Employed Outside the Home. Vocational Division, Home Economics Education, Bu1letin 289. Washington: Government Printing Office, 1961.

## B. PERIODICALS

"City Folks and Convenience Foods." Agricultural Research, V (March, 1957), 8-9.

Doy1e, M. T., M. C. Cahoon, E. W. McHenry. Canada Journa1 of Pub1ic Hea1th, XLIV (1953), 259-262.

Hefner, Larue. "Quality and Cost of Conventional Versus Premix Cakes," Journal of the American Dietetic Association, XXXIII (March, 1957), $2 \overline{33-237 .}$

Methany, N. Y., F. E. Hunt, M. B. Patton, and H. Heye. "The Diets of Preschool Children: Nutritional Sufficiency Findings and Family Marketing Practices," Journal of Home Economics, LIV (Apri1, 1962), 297-303.
Personius, Catherine J. "The Current Situation and Trends Pertinent to the Future Development of Food and Nutrition," Journal of Home Economics, LI (September, 1959), 577-588.

Stitt, Kathleen. "Frequency of Use of Prepared Mixes," Journal of the American Dietetic Association, XXX (June, 1957), 596-598.

Tucker, C1ara and Ray Lovee. "Hurdies to Good Food Practices," Journa1 of Home Economics, XLV (November, 1953), 654-657.

Van Syck1e, Ca11a. "Food Management Practices in an Industria1 City," Journal of Home Economics, XLVII (February, 1955), 119-120.

Young, C. M., B. G. Wa1dner, and K. Berresford. "What the Homemaker Knows About Nutrition: Level of Nutritional Knowledge," Journal of the American Dietetic Association, XXXII (March, 1956), $218-222$.
, K. Berresford, and B. G. Waldner. "What the Homemaker Knows About Nutrition: Relation of Knowledge to Practice," Journa1 of the American Dietetic Association, XXXII (Aprī, 1956), 323-326.
, B. G. Wa1dner, and K. Berresford. "What the Homemaker Knows About Nutrition: Her Food Problems, Shopping Habits, and Sources of Information," Journal of the American Dietetic Association, XXXII (May, 1956), 429-434.

## APPENDIX A. INTERVIEW SCHEDULE

Genera1 Information About the Family -

1. How many family members are there? (CARD 2)
2. How o1d are your children? Boys? Gir1s?
3. How many family members are usually present for each of the mea1s? (CARD 3)
4. P1ace a check beside each of the mea1s that you usually sit and eat together as a family.
5. What type of work does your husband do?

If you work outside the home, what type of work do you do? How long have you been employed?
6. Under section II which is the educational level of your husband? You? (CARD 1)
7. In section III give the 1etter of your age group.
8. You have received (A) grocery shopping, (B) food preparation, and (C) nutrition information from which of the following sources? (CARD 4)

## Leve1 of Nutritiona1 Know1edge -

9. What foods should be included in the family meals each day? (CARD 5)
10. What might be substituted for grapefruits, tomatoes, and oranges and give the same food value?
11. Suggest two foods that might be substituted for 1ean meat, fish, or poultry.
12. If your family did not care to drink milk, how or from what foods might they obtain the same food value as is in mi1k?

## Shopping Practices and Budgeting -

13. Who usually does the family grocery shopping?
a. Husband; b. homemaker; c. husband and homemaker;
d. homemaker and children; e. other.
14. How often is the grocery shopping done?
(Major) f. once a week; g. 2 or 3 times a week; h. twice a month; i. once a month.
(Minor) j. daily; k. 2 times a week; 1.3 times a week; m. once a week.
15. How do you decide what groceries to buy?
n. Choose majority of items from sales advertising in newspaper, store;
o. List briefly items needed and choose others on sight in the store;
p. Shop without 1ist;
q. Look at grocery shelves and then shop from memory of needs;
r. Make a complete list of all items before going to the store;
s. Keep a running 1ist.
16. In what type of grocery store do you shop? 1. Supermarket or chain; 2. Locally-owned grocery store or curb market.
17. What letter in section IV represents the group in which your weekly grocery cost falls? (Exclude non-grocery items and inc1ude the milk bill)
18. Is this amount set by a family budget?
19. If it was planned in a budget, on what basis was the amount set?
20. Do you keep any type of record of expenditures for groceries?
21. Under section $I$ of the card, give the letter of the group in which your combined family income of 1961 fell.
22. If you were to cut your foods cost, in what area would you cut?

## Planning -

23. When do you decide what to have for mea1s?
t. Work out as preparing; u. one day ahead; v. a few days ahead; w. a week or more ahead; $x$. other method.
24. How do you usually decide what to serve for breakfast? 1unch? dinner?
a. P1an from left-overs; b. daily set pattern; c. what is on hand; d. what we can afford; e. what is good for them; f. what they want; g. other.
25. What are your main difficulties in deciding what to serve? Nutritional Practice -
26. How often each week do you usually serve these foods?
(CARD 6)
27. Do you fee1 that your family meals are adequate in food values? h. Yes; i. no; j. undecided; k. usually.
28. Have you heard of the term "Basic Seven" and what does it mean to you? 1. Know1edge of term; m. no know1edge of term; n. incomplete answer.

Mea1 Management -
29. Indicate, if he1p is received, who he1ps you with these. (CARD 7)
30. Approximately how 1 ong do you spend in the preparation of breakfast? lunch? dinner?
31. How often do you serve these foods? How often do you use the prepared mixes? (PAPER)
32. Why do you, or why do you not, use convenience foods?
33. In what area or areas of food management do you feel that you need more information or he1p?

APPENDIX B
LETTER OF INTRODUCTION TO HOMEMAKERS

Dear Homemaker,
This is to introduce to you Phyllis Harris, a graduate student in the school of Home Economics at the Woman's College. Miss Harris is making a survey of food practices of homemakers to fulfill the thesis requirements for her Master's degree.

We appreciate the time and help that you are giving to make this study possible. Thank you for a most important contribution.

Cordially yours,

Mary Dickey, Assistant Professor, Foods and Nutrition

APPENDIX C. CARDS FOR RECORDING INTERVIEW INFORMATION
(CARD 1)

| SECTION I | H. 20-24 | J. 30-34 | L. $40-44$ | N. $50-54$ |
| :--- | :--- | :--- | :--- | :--- |
|  | I. $25-29$ | K. 35-39 | M. $45-49$ | O. $55-59$ <br> P. 60 and over |
|  |  |  |  |  |
| SECTION II | Q. $\$ 5-10$ | T. $\$ 21-25$ | W. $\$ 36-40$ |  |
|  | R. $\$ 11-15$ | U. $\$ 26-30$ | X. $\$ 40$ and over |  |
|  | S. $\$ 16-20$ | V. $\$ 31-35$ | Y. Do not know |  |
| SECTION III | A. $\$ 3000-3999$ | C. $\$ 5000-5999$ | E. $\$ 7000-7999$ |  |
|  | B. $\$ 4000-4999$ | D. $\$ 6000-5999$ | F. $\$ 8000-8999$ |  |
|  |  |  | G. $\$ 9000$ and over |  |


(CARD 3)

How many family members are usually present for each of these meals?

| Monday-Friday <br> Breakfast <br> Lunch <br> Dinner |
| :--- | | Saturday |
| :--- |
| Breakfast |
| Lunch |
| Dinner |, | Sunday |
| :--- |
| Breakfast |
| Lunch |
| Dinner |

And now place a check beside the meals above that you usually sit and eat together as a family.

You have received (A) grocery shopping, (B) food preparation, and (C) nutrition information from which of the following sources?

( B ( ${ }^{\text {High School }}$| Hollege |
| :--- |
| Home Demonstration |
| Relative and |
| Acquaintances |

(CARD 5)
9. What foods should be included in the family meals each day?

| Creen and yellow vegetables Servings: one two more |
| :--- |
| Oranges, tomatoes, or erapefruit |
| Potatoes, other vegetables \& fruit |
| Milk and milk products |
| Meat, poultry, fish, and eggs |
| Bread, flour, cereals |
| Butter and margarine |
| Desserts |
| 10. Citrus substitutes |
| 11. Protein substitutes |
| 12. Milk substitutes |

How often each week do you usually serve these foods?

1. Oreen and yellow vegetables
2. Orange, grapefruit, or tomatoes
3. Other fruits
4. Potatoes and other vegetables
5. Raw vegetables
6. Eggs
7. Meat, fish, or poultry
8. Breads
9. Cereals
10. Milk (amount daily) Adults Children $\qquad$
(CARD 7)

Indicate, if help is received, who helps you with these.

|  | Husband | Son | Daughter | Kelative | Maid |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Dishwashing |  |  |  |  |  |
| Putting dishes away |  |  |  |  |  |
| Crocery shopping |  |  |  |  |  |
| Putting groceries away |  |  |  |  |  |
| Setting the table |  |  |  |  |  |
| Preparation of food |  |  |  |  |  |
| Dishing up food |  |  |  |  |  |
| Storing left-over food |  |  |  |  |  |

How often do you serve these foods? How often do you use the prepared mixes?

| How often served |  |  |  |  |  | Frequency of using prepared mixes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Daily | $\begin{gathered} \hline 1-2 \text { per } \\ \text { week } \end{gathered}$ | $3-4 \mathrm{per}$ <br> week | Sometimes | Never | Always | Usually | Sometimes | Never |
| Biscuits |  |  |  |  |  |  |  |  |  |
| Yeast rolls |  |  |  |  |  |  |  |  |  |
| Muffins |  |  |  |  |  |  |  |  |  |
| Cakes |  |  |  |  |  |  |  |  |  |
| Cookies |  |  |  |  |  |  |  |  |  |
| Pancakes |  |  |  |  |  |  |  |  |  |
| Puddings |  |  |  |  |  |  |  |  |  |
| Pastry |  |  |  |  |  |  |  |  |  |
| Icings. |  |  |  |  |  |  |  |  |  |



Why do you, or why do you not, use convenience foods?

Do
Saves time in preparation
$\qquad$ Product turns out better Cheaper
Other $\qquad$

Do not
Prefer home-prepared product Costs more
Bakery product easier to use
Other

## APPENDIX D

## SCORING GUIDE FOR NUTRITION KNOWLEDGE AND PRACTICES

Scoring the Nutritional Know1edge--Correlated with Card 5:

| Question related to | Correct answer worth <br> (points) |
| :--- | :---: |
| Creen and yellow vegetables | 4 |
| Oranges, tomatoes, or grapefruit |  |
| Potatoes, other vegetables \& fruit | 1 |
| Milk and milk products | 2 |
| Meat, poultry, fish, and eggs | 4 |
| Bread, flour, cereals | 1 |
| Butter and margarine | $\underline{12}$ (total) |
| Desserts | 2 |
|  | 2 |
| Citrus substitutes | 2 |
| Protein substitutes | 18 (complete |
| Instead of milk to drink |  |
|  |  |

Scoring the Nutritiona1 Practices--Correlated with Card 6:

| Question related to | Correct answer worth <br> (points) |
| :--- | :---: |
| Green and yellow vegetables <br> Orange, grapefruit, or tomatoes | 1 |
| Other fruits | 1 |
| Potatoes and other vegetables | 2 |
| Raw vegetables |  |
| Eggs | 1 |
| Meat, fish, or poultry | 2 |
| Breads | 4 |
| Cereals | $\frac{1}{12}$ (total) |


[^0]:    ${ }^{1}$ C. M. Young, B. G. Wa1dner, and K. Berresford, "What the Homemaker Knows About Nutrition: Leve1 of Nutritional Know1edge," Journa1 of the American Dietetic Association, XXXII (March, 1956), 222.
    ${ }^{2}$ Janet L. Cameron, Study of Nutrition Information and Food Production and Conservation Practices of Rura1 Homemakers in Appomattox County, Virginia, July, 1951, (所acksburg, Virginia: Virginia Polytechnic Institute, Mimeograph Report, Apri1, 1952), p. 13.

[^1]:    ${ }^{25}$ C. M. Young, B. G. Wa1dner, and K. Berresford, "What the Homemaker Knows About Nutrition: Her Food Problems, Shopping Habits, and Sources of Information," Journa1 of the American Dietetic Association, XXXII (May, 1956), 429-434.
    ${ }^{26}$ Ibid.
    27 Feeding the Family: Some Problems Reported in a National Study of Home Demonstration Members, (United Stātes $\overline{\text { Department of } A g r i c u i t u r e, ~ F e d e r a l ~ E x t e n s i o n ~ S e r v i c e, ~}$ Extension Service Circular 526, Nationwide Study of 1957).

[^2]:    ${ }^{1}$ Young, op. cit., p. 216.
    2Dickens, op. cit., p. 6.

[^3]:    $17^{17}$ Van Syckie, op. cit., p. 120.
    18E1oise Cofer and Bertha Friend, "Trends in the Consumer Price Index for Food During the Past Decade," Family Economics Review, (Washington, D. C.: United States Department of Agriculture, June, 1962), pp. 12-15.

[^4]:    ${ }^{21}$ Cameron, 1 oc. cit.

[^5]:    27 Van Syckie, op. cit., p. 119.

[^6]:    $3^{30}$ Methany, 1 oc. cit.

