

A STUDY OF FAMILY CHARACTERISTICS AND  
EATING PATTERNS OF MEALS EATEN  
AWAY FROM HOME

By

PATRICIA ANN TROTTER  
Bachelor of Science  
Colorado State University  
Fort Collins, Colorado  
March, 1970

Submitted to the Faculty of the Graduate College  
of the Oklahoma State University  
in partial fulfillment of the requirements  
for the Degree of  
MASTER OF SCIENCE  
July, 1980



A STUDY OF FAMILY CHARACTERISTICS AND  
EATING PATTERNS OF MEALS EATEN  
AWAY FROM HOME

Thesis Approved:

*Elaine Jorgensen*  
\_\_\_\_\_  
Thesis Adviser

*Joan Baird*  
\_\_\_\_\_

*Sharon York*  
\_\_\_\_\_

*Norman A. Durham*  
\_\_\_\_\_  
Dean of Graduate College

1063300

## PREFACE

This study was concerned with the relationship between selected personal variables and the eating patterns of meals consumed away from home by selected rural and urban Oklahoma families. Families in Alfalfa County and Guthrie, Oklahoma, were interviewed and provided the sample data for the Family Time Use Study.

The author expresses appreciation to those who conducted the interviews and collected the data for the Oklahoma Family Time Use Study. Grateful appreciation is also expressed to Karen Fox, who patiently guided the author through the complexity of computer language, programs, and analysis in addition to performing her own job responsibilities on the Family Time Use Project.

To her major adviser, the author expresses appreciation to Dr. Elaine Jorgenson, for her encouragement and assistance throughout this study. Appreciation is also expressed to the other committee members, Dr. Sharon Nickols and Dr. Joan Baird. Without their sincere interest and concern, this project could not have become a reality for the author. Sincere appreciation is especially expressed to Dr. Nickols for her guidance, patience, and time in directing the study.

Special thanks are in order to very special friends--Mickey Prescott and Kerry Gideon--for their continued support, laughter, understanding, friendship, and many shared hours of commuting to class from the western reaches of Oklahoma.

To my husband, Ethan, and children, Laura and Brian, a warm and loving hug of appreciation for your patience, encouragement, and helpfulness throughout this study.

## TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION . . . . .	1
Purpose and Objectives. . . . .	4
Hypotheses. . . . .	4
Assumptions . . . . .	5
Limitations . . . . .	5
Definitions . . . . .	6
II. REVIEW OF LITERATURE . . . . .	8
Current Trends. . . . .	8
Children in the Family. . . . .	9
Employed Homemaker. . . . .	10
Family Income . . . . .	11
Location of Residence of Family . . . . .	12
Family Lifestyles . . . . .	14
Food Service Industry . . . . .	15
Summary . . . . .	16
III. RESEARCH DESIGN. . . . .	18
Type of Research. . . . .	18
Population and Sample . . . . .	19
Instrumentation . . . . .	20
Analysis of Data. . . . .	21
IV. ANALYSIS OF THE DATA . . . . .	23
Characteristics of the Sample . . . . .	23
Number of Family Members Eating Meals Away From Home. . . . .	27
Type of Meals Eaten Away From Home by Family Members. . . . .	29
Location of Meals Eaten Away From Home. . . . .	31
Type of Meals Eaten Away From Home by Location. . . . .	34
Comparison of Rural and Urban Families and Eating Patterns . . . . .	35
Type of Meal . . . . .	36
Number of Family Members Eating Meals Away From Home. . . . .	36
Location of Meals Eaten Away From Home . . . . .	37
Relationship Between Selected Personal Variables and Meals Eaten Away From Home. . . . .	38
Age of Children. . . . .	38
Employment of the Wife . . . . .	40

Chapter	Page
Occupation of Spouse. . . . .	41
Occupation of Wife. . . . .	42
Income of Family. . . . .	43
Relationship Between Cost of Meals and Selected	
Personal Variables . . . . .	43
Age of the Younger Child. . . . .	44
Employment of Wife. . . . .	45
Occupation of Wife. . . . .	47
Summary. . . . .	47
 V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS . . . . .	 50
Summary of Present Research. . . . .	50
Comparison of Present Findings With Previous	
Research . . . . .	56
Recommendations. . . . .	57
Recommendations for Further Research. . . . .	58
Recommendations for Program Development . . . . .	59
 BIBLIOGRAPHY . . . . .	 61
 APPENDIX A - THE INSTRUMENT. . . . .	 64
 APPENDIX B - TABLES. . . . .	 67

LIST OF TABLES

Table	Page
I. Characteristics of the Sample. . . . .	24
II. Family Members Eating Meals Away From Home by Type of Meal, Day I and Day II. . . . .	28
III. Type of Meals Eaten Away From Home by Family Members . . . .	30
IV. Location of Meals Eaten Away From Home by Type of Meal . . .	32
V. Types of Meals Eaten Away From Home by Location. . . . .	34
VI. Comparison of Rural and Urban Families and Type of Meal. . .	37
VII. Residence and Location of Meals Eaten Away From Home . . . .	39
VIII. Mean Number of Meals Eaten Away From Home by Employment of Wife. . . . .	41
IX. Mean Number of Meals Eaten Away From Home by Occupation of Wife. . . . .	42
X. Cost of Lunch and Age of Younger Child . . . . .	45
XI. Relationship Between Cost of Lunch Eaten Away From Home and Employment of Wife . . . . .	46
XII. Relationship Between Cost of Lunch Away From Home and Occupation of Wife . . . . .	48
XIII. Summary of Findings. . . . .	53
XIV. Relationship Between Age of Children and Meals Eaten Away From Home. . . . .	68
XV. Relationship Between Occupation of Spouse and Meals Eaten Away From Home . . . . .	69
XVI. Relationship Between Income of Family and Meals Eaten Away From Home . . . . .	70

## CHAPTER I

### INTRODUCTION

The last 10 years have seen many social changes in America. Changes that have affected the family include increased employment of women, rising family income, and the changing lifestyles of family members. Some of those changes have had an impact on patterns of food consumption. Rizek (1978) indicated that these impacts have been contradictory.

On the one hand, Americans have cultivated a taste for continental dining and food preparation. On the other hand, there has been an explosion of fast food restaurants and take-out chains to meet the growing demand for convenient and inexpensive food (p. 3).

Food has been and probably always will be a major item for the family budget. Food has not only been consumed in the home, but has also been consumed away from home. A growing percentage of meals and snacks have been eaten away from home. Earlier research (LeBovit, 1965, p. 25) showed that approximately 14 percent of the meals and snacks eaten during the day occur away from home. A more recent study (Yankelovich, Skelly and White, 1978, p. 3) reported that 50 million Americans dine out an average of six times in any two-week period.

The employed woman has emerged as a significant social force. Blackwell (1978, p. 2) stated that ". . . 50.2 percent of all women between the ages of 16 and 65 were working outside the home in 1978, and it is expected that by the 1980's up to 70 percent of women 25 to



44 years old will be working." This meant that there has been more money available for food and other purchases, but less time to spend on household duties, including all the tasks associated with food.

The family income and its buying power has been a significant social change affecting families. The income of the family has been a major resource and, in most cases, has been the most important determinant of a family's living standards. Inflation most definitely has affected the cost of living as it has reduced the purchasing power of all families, and especially those who can least afford it. "Consumer prices have gone up by almost half since 1967 - 47 percent in the last five years" (Blackwell, 1979, p. 3). Blackwell (1979, p. 3) further noted that restaurant prices have increased by 54 percent in this same time period.

Because of the availability of foods that can be consumed away from home, such as school lunch programs, food distributed in vending machines, restaurants, and quick food places, the purchase of food consumed away from home has been a costly item for the family budget. A recent report (Yankelovich, Skelly and White, 1978, p. 3) indicated that one of every three consumers' food dollars are being spent on food outside the home.

The changing lifestyle of families has had an impact on family food consumption patterns. "Americans as a nation are a convenience-oriented people and in virtually no other business is this trait recognized and exploited to the extent that it is in the food industry" (Oppenheim, 1972, p. 180). Because of the service-oriented society, it has been recognized that

. . . we are eating more prepared convenience foods with more of the kitchen work already completed and built into

the food. This saves work in the home, but costs money. The cost of this built-in service has gone up more than the cost of the food ingredients in the prepared convenience foods. We are eating more meals out of the home where the cost of personal food service has risen much more rapidly than the price of the food (Butz, 1973, p. 4).

Today's typical American has been a customer of fast food restaurants. According to one source, ". . . in any one month, the consumer visits a fast food restaurant about nine times--five times to eat there and four times to take food out" (Wall Street Journal, October, 1978, p. 1). The source continued to report that ". . . over a six month period, 93 percent of all Americans over 12 years old patronized the restaurant at least once."

The availability of prepared food or the market environment of prepared food away from home has varied in urban and rural areas. The urban community has had a greater number of restaurants, quick food businesses, and cafeterias than has a rural community. To illustrate this point, one study indicated that ". . . the average expense for food away from home was lowest in farms, highest in urban areas, and in between in rural non-farm areas in each region of the country" (Food Consumption of Households, 1965, p. 2).

Research has indicated that the food consumption of family members away from home is on the increase (USDA Reports, 1976 and 1978; LeBovit, 1970). However, the eating patterns of meals consumed away from home have not been studied as thoroughly. As a result, educators lack the data on eating patterns that have been needed for planning effective educational programs for families. Filling this information void has provided the focus of this study of eating patterns of meals consumed away from home by Oklahoma families.

## Purpose and Objectives

The purpose of this study was to ascertain the relationship between selected personal variables and the eating patterns of meals consumed away from home by selected Oklahoma families. The following objectives have guided the study:

1. To analyze the differences between rural and urban families in their eating patterns of meals consumed away from home.
2. To assess the relationship of eating patterns of meals consumed away from home and selected personal variables, including the ages of the children, employment of wife, occupation of husband, occupation of wife, income, and location of residence.
3. To examine the relationship between the cost of meals consumed away from home and selected personal variables, including ages of the children, employment of wife, occupation of husband, occupation of wife, income, and location of residence.
4. To make recommendations for planning educational programs which would strengthen the decision-making process of family members in relation to the trends of eating meals away from home.

## Hypotheses

The following hypotheses guided the study:

- H<sub>1</sub>: There will be no significant difference between rural and urban families and their eating patterns of meals consumed away from home.
- H<sub>2</sub>: There will be no significant relationship between meals consumed away from home and selected personal variables, including ages of children, employment of wife, occupation

of husband, occupation of wife, income.

H<sub>3</sub>: There will be no significant relationship between the cost of the meals consumed away from home and selected personal variables, including ages of children, employment of wife, occupation of husband, occupation of wife, income, and location of residence.

#### Assumptions

The following assumptions existed for this study:

1. That the data from the Family Time Use Study, as conducted by the OSU Family Study Center, were valid and accurate.
2. That the homemaker (respondent) had an accurate recall of meals eaten away from home.
3. That the homemaker (respondent) was aware of other family members' eating patterns away from home.
4. That the week chosen to deliver the instrument was a typical week for each family.

#### Limitations

The following limitations existed for this study:

1. The geographical areas of the two sub-samples (an urban/suburban sample in Guthrie, Oklahoma, and a rural sample in Alfalfa County, Oklahoma) may not have been representative of the state's population as a whole.
2. The sample was heavily, though not exclusively, weighted in the middle and upper-middle socio-economic strata due to response of participants.

3. The wife/mother responded for the family members' recall of eating patterns to complete the study.
4. Families with two parents and two children comprised the samples; this type of family structure may not represent families as a whole in the state.

#### Definitions

The following definitions were used in this study:

1. Eating Patterns--the habits of family members as they consumed meals away from home. This includes where the meal was eaten, which meal was eaten, and the number of family members eating the meal.
2. Food Consumed Away From Home--any food or beverage (alcoholic and non-alcoholic) in meals purchased by the family for themselves away from home. The expense for such food and beverages includes sales tax and tips. Food eaten by the family in other homes or elsewhere as guests or employees for which no family expenses were incurred is also included. (Food Consumption of Households in United States, 1965.)
3. Rural--a county with no town of 2,500 inhabitants or more. Sample in this study consisted of families in Alfalfa County. (Statistical Abstracts of the United States, 1977.)
4. Urban--places of 2,500 inhabitants or more, incorporated as a city; unincorporated places of 2,500 inhabitants or more; and other territory included in urbanized areas. Sample in this study consisted of Guthrie, Oklahoma, and surrounding

housing developments. (Statistical Abstracts of the United States, 1977.)

5. Full-time Employment--gainfully employed 15 or more hours per week. (Walker, 1976.)
6. Part-time Employment--gainfully employed less than 15 hours per week. (Walker, 1976.)

## CHAPTER II

### REVIEW OF LITERATURE

The review of literature considered meaningful to this study was analyzed and summarized into seven parts. These included:

1. Current Trends
2. Children in the Family
3. Employed Homemaker
4. Family Income
5. Location of the Residence of the Family
6. Family Lifestyles
7. Food Service Industry

#### Current Trends

Eating away from home has been a trend during the past number of years that has increased in numbers and dollars. Butz (1973, p. 9) reported that in 1952, the nation spent \$11.6 billion on eating meals away from home and that by 1972, this amount has increased to nearly \$27 billion. The report (Butz, 1973, p. 9) also stated that this was an increase from \$74 per person in 1952 to \$128 per person in 1972 for food eaten away from home. In 1976, consumers spent \$52 billion for food away from home (Perspectives, 1978, p. 35), which represented 30 percent of expenditures for all food. By 1978, Americans had spent \$87 billion--35 percent of the total expenditures for food--on meals

and snacks eaten away from home (Impact, 1980, p. 3). This latest statistical report indicated that one out of three meals consumed by the average American was eaten away from home (Impact, 1980, p. 3).

Research related to this trend of eating away from home has been limited--particularly in establishing the reasons why families eat away from home. Neilson (1977, p. 4) stated that one common reason for eating out was ". . . to change the daily routine." Other reasons which Neilson (1977, p. 4) included were ". . . ease, enjoyment, and the 'special occasion' celebration."

Yankelovich, Skelly, and White (1978, p. 2) reported that no mention of food quality was made in the top six reasons for choosing a fast food restaurant. Instead, major factors outside of speed were "friendliness of employees, decor and variety--which contributes to the recreational experience of the consumer" (Yankelovich, Skelly, and White, 1978, p. 2). All members of the family were included in a study by Rubel (1972) to determine who ate out the most often. Rubel (1972, p. 8) reported that men predominated at the breakfast scene, working people at noon, and families at dinner time.

#### Children in the Family

The influence of the child was evident in regards to the family's pattern of eating meals away from home. Tripp (1978, p. 4) stated that ". . . 70 percent of those parents responding in the study said that children would rather eat at a fast food restaurant than a meal cooked at home." The study continued to state that the children in the family often decided to which fast food restaurant the family would go.



Fast food restaurants tended to be very popular with children-- in fact, many schools were offering special 'fast food lunches,' nutritionally enriched to entice the childish palates (Vincent, 1978, p. 8). The National School Lunch Program offered the same option to junior high and middle school students that has been offered to senior high students for the past two years: "The students may now take as few of the five menu items offered in school lunches. Formerly, they were required to take all five components, whether they ate them or not" (Vincent, 1978, p. 1). To help achieve the goal of getting the students to eat all of the school lunch, the schools were encouraged to serve nutritional meals that included the kinds of foods that kids like (Vincent, 1978, p. 1).

Not only did schools offer the lunch program to the students, but many schools also had a wide array of vending machines offering a variety of foods and food-stuffs to the student. A recent proposal by the USDA (Peterson, September, 1978), to ban the sale of candy, sodas, frozen desserts, and chewing gum in school cafeterias until after the last lunch period of the day, has been accepted and will take effect in September of 1980. The increased concern of parents, school officials, nutritionists, and others was that the sale of low nutrient per calorie density foods prior to or during meal periods may contribute substantially to increased plate waste, reduced participation in the school lunch program, and a general decline in the consumption of nutritious foods in school (Peterson, September, 1978).

#### Employed Homemaker

Two incomes in the family have been more common as a way of dealing

with the family's finances. Women have made a substantial contribution to the rising level of consumption experienced by families in recent years. Blackwell (1979, p. 2) noted that "Women in increasing numbers earn income for the family, with 50.2 percent of all women between the ages of 16 and 65 now employed outside the home." Even though the wife's income supplemented the family budget, working outside the home presented problems for the homemaker, including the lack of time for preparing meals (Yankelovich, Skelly, and White, 1975, p. 22). Even as they participated in the labor force, women provided most of the physical care and nurture of children and retained responsibility for the food habits and nutritional well-being of the families, according to a recent article from USDA (Economic Role of Women in Family Life, 1973).

Rizek and Peterkin (1980, p. 15) found that although 8 out of every 10 meals in working-women households came from home food supplies, these same households bought more meals away from home than other households. Of those meals eaten away from home by the working-women households, less than 1 out of every 20 meals were eaten without direct expense, such as guest meals, free school meals, or payment for services (Rizek and Peterkin, 1980, p. 15). It has been established that noon meals were most frequently eaten away from home, regardless of the employment of the female head (Rizek and Peterkin, 1980, p. 15).

#### Family Income

The increase in the cost-of-living has immediately affected the family budget. This increase was a concern of all families, regardless of the socio-economic standing. Lawyer (1978) stated that

An urban family of four with an intermediate budget experienced a 42.8 percent increase from 1972-76 in the cost of food consumed away from home. In the year of 1976, this family spent an average of \$1,005 for food consumed away from home. It is projected that by 1981, this four member urban family will be spending \$1,435 for food consumed away from home (p. 4).

Families therefore need to take their own circumstances into account when trying to determine what proportion of their income to spend for food. The percentage of income that a family spent for food depended on several factors: ". . . the make-up of the family, preferences and needs of family members, the financial assets of the family, and the demands of those assets" (Peterkin, 1973, p. 6).

Spending for food eaten away from home has a strong positive relationship with the level of family income. Salathe (1979, p. 6) found that high-income households spent more on away-from-home food than low-income households. Another research study (Gallo and Boehm, 1979, p. 28) supported those findings when they established that families earning less than \$5,000 spent 14 percent of their food dollar on food away from home while households earning over \$20,000 spent 29 percent of their food dollars on food away from home. As family income increased, the demand for food eaten away from home increased. Bunting (1979, p. 8) reported that in the time period from the first quarter of 1978 to the first quarter of 1979, expenditures for food eaten away from home were up 15 percent.

#### Location of Residence of Family

The location of the family residence had an influence on the eating patterns of food consumed away from home by the family members. An early research study found that the farm population spent less money on

food consumed away from home than the urban population (Food Consumption of Households in the United States, 1965). A more recent research study (Gallo and Boehm, 1979, p. 28) supported the earlier findings when it was established that in 1978, urban families spent more money per week (\$10.32) on food eaten away from home than did rural families (\$3.84).

Several reasons existed for explanation of the differences of eating patterns between rural and urban families. One reason was the fact that there were greater possibilities of more eating establishments in the urban areas as compared to rural areas.

Another possible reason for this difference in rural and urban food consumption away from home was the fact that the rural areas offered the family greater opportunities to grow their own produce. The interest in gardening in 1977 was at its highest level since the Victory Gardens of World War II (Yearbook of Agriculture, 1977). This increased interest in gardening has resulted largely from higher energy and labor costs in producing, processing, and transporting foods to the consumer's market. It has been estimated that an ". . . average family can save \$220 to \$300 annually on food costs by growing and processing fruits and vegetables at home" (Yearbook of Agriculture, 1977, p. 2).

Farm families, in 1975, spent 82 cents of the food dollar on food and non-alcoholic beverages used in the home. The expenditure for food consumed away from home accounted for 18 cents of the food dollar. The percentage of the food dollar used for food away from home tended to decrease as the farm income decreased (Thorp, 1976, p. 3).

## Family Lifestyles

The lifestyle of a family has been exposed to constant changes, due to the income of the family, age of the children, values and goals of family members. As income increased and lifestyles changes, consumers spent more of their food dollars on meals eaten away from home. Dress (1979, p. 10) reported that expenditures on meals and snacks eaten out have increased from \$1.00 out of every \$4.00 spent on food in 1960 to \$1.00 out of every \$3.00 in 1978.

Changing lifestyles that have affected the trend in eating meals away from home included teenagers' use of snack shops and hamburger stands and college students without facilities; employed women with less time to prepare meals at home; and older people less able to cook for themselves (Dress, 1979, p. 10). Findings from a recent survey established that differences in the type of meals, consumption by men and women, and employment existed in 1979.

Breakfast was eaten out by less than 5 percent of the respondents in the survey. Men were twice as likely to eat both lunch and the evening meal and five times as likely to eat breakfast out as the women respondents. Employed respondents were much more likely to eat lunch out than respondents who were not employed (What's Happening to Mealtime?, 1979, p. 13).

One lifestyle that was of interest to this researcher was the eating patterns of meals eaten away from home by family members. The process of identification with a group through eating together meant that the family's mealtime customs were of great importance to the growing child. Galdston (1976, p. 32) noted that this was especially so in the contemporary urban life because the other identification with a group through shared activities has been eroded by the absence of the

parents from the home for most of the day. "Thus, mealtimes are important for the creation in children of a feeling of belonging" (Galdston, 1976, p. 32). Galdston further states that in many homes, mealtimes provided the only opportunity for the members of the family to relate to each other and counter the fragmentation that afflicts so much of the family functions. However, another researcher reported ". . . that there are some indicators that family meals and food preparation are less significant as a part of family life than in the past" (Rizek, 1978, p. 3).

### Food Service Industry

The market for food away from home, including both public and institutional eating places, consisted of more than 500,000 outlets in 1979 (Dress, 1979, p. 12). Public eating places, which existed primarily for profit, may have been part of a larger facility (such as a soda fountain in a drug store) or separate eating places. The institutional sector included establishments where food service operation was usually supportive and often non-profit, such as universities, sanitoriums, and homes for children. Schools and hospitals were the largest markets in the institutional sector, according to Dress (1979, p. 12).

Consumers have established changing trends in the selection of the food service outlet at which they ate meals away from home. Current findings included the facts that

Almost 30 percent of food eaten away from home was eaten in conventional restaurants, lunchrooms, cafeterias, or was catered. This represents a decline from 45 percent 10 years earlier. Refreshment places, mostly fast-food establishments, increased their share of the away-from-home food market from 10 to 26 percent between 1965 and 1976. The share for other outlets, such as schools, stores, and recreational places declining during the same time period (Perspectives: Eating Out - Fast Food, 1978, p. 33).

Dress (1979, p. 12) noted that institutions usually served three times more people than did a public eating place, but because of the relatively small numbers the institutions accounted for less than 40 percent of the retail value of all food consumed away from home.

Fast food restaurants have increased in popularity in recent years. Industry statistics showed that between 25 and 30 percent of all meals consumed outside the home were eaten in fast food places (Wall Street Journal, October 12, 1978). Even though the fast food establishment has increased in popularity, consumers' attitudes towards fast foods was not always positive. In a recent study, Yankelovich, Skelly, and White (1978, p. 3) reported that ". . . 66 percent of consumers surveyed said that fast foods were worse than food at home." This same study continued to report that ". . . even among fast food fans (those who have gone to a fast food restaurant four or more times in the last month), 57 percent said fast food was inferior to food served in the home" (p. 3).

#### Summary

Whatever the reasons a family may have had for eating away from home, the trend was toward a high percentage of meals being consumed away from home. The age and lifestyles of the children in the family were one reason for this trend, as was the income factor, the homemaker's employment, the location of the home, the changing lifestyles of the family and its members, and the food service industry. This trend has been of concern to consumers, nutritionists, and educators, and offered the researcher an opportunity to analyze the factors which have affected this trend. As a result, the opportunities for the home

economist in education to share these findings with the public can be of great value to the consumer and the American family.



## CHAPTER III

### RESEARCH DESIGN

This chapter describes the plans for the implementation of analysis of data collected in the Family Time Use Study, as conducted by the Oklahoma State University Family Study Center. Included are the research design appropriate for the study, the population studied, and the selection of a sample. This chapter also contains a description of the instruments used, data collection, and the statistical procedure for analysis of the data.

#### Type of Research

The purpose of this particular study was to explore the relationship between selected personal variables and the eating patterns of meals consumed away from home of selected Oklahoma families. These personal variables included ages of children, employment of wife, occupation of husband, occupation of wife, income, and location of residence. To accomplish the purpose of the study, the descriptive type of research method was utilized and a survey was conducted. Because the objectives of the study called for data which could only be supplied by families, the survey research was considered a valid method of obtaining the data necessary to pursue the objectives. The interview method was the manner in which the data were collected.

Data collected by the Family Time Use Study was analyzed by the

researcher to accomplish the purpose of this particular research study. The Family Time Use Study was a replication of previous research conducted at Cornell University in New York in 1967 and published in 1976 by researchers under the direction of Dr. Kathryn Walker. Oklahoma was one of 11 states participating in the Interstate Family Time Use Study, conducted in 1977-78, which has contributed data to an expanding body of knowledge on household management.

#### Population and Sample

The Oklahoma data collection of the Interstate Family Time Use Study consisted of two samples, including the urban/suburban population of Guthrie, Oklahoma, and the rural and non-farm population of Alfalfa County, Oklahoma. The Guthrie sample was selected on the basis of convenience to Stillwater as well as the availability of a city directory which provided a sampling frame for the study. Alfalfa County was selected as a sample because it was judged to be typical of a rural, stable county in Oklahoma. In both samples, the researchers secured cooperation from school officials in locating two-child and two-parent families in the communities.

To obtain the samples, a variety of sources were used to create a sampling frame. Those included school records which listed two-parent and two-child families. Hospital birth records of those mothers with two live births were a source of potential respondents. City directories were also used in identifying possible families, as well as church cradle rolls.

The sample was then stratified into five age groups according to the age of the youngest child. These age groups consisted of (1) less

than 1 year old, (2) 1 year, but not over 2 years, (3) 2-5 years, (4) 6-11 years, and (5) 12-17 years. Using a random numbers table, 35 families were drawn to represent each segment of the year: fall/winter, spring, and summer. Those 35 families in each segment also equally represented each day of the week. A total of 105 families in each residence area was chosen, yielding a total sample of 210 families. Chance factors were those such as ethnic groups, socio-economic status, and education of parents.

#### Instrumentation

The data were collected in 1977-78 by instruments developed for the Interstate Family Time Use Study. These instruments were primarily the result of work done by researchers at Cornell University in 1967 and reported in 1976 by Walker. The instrument was pre-tested at Cornell University and determined to be valid and reliable. The instrument was used by Oklahoma and 10 other states that participated in the Interstate Family Time Use Study in collecting the same type of data. This researcher participated in data analysis, not data collection.

The interview method was used to collect data for this study. Each family selected by the stratified random sample method was sent a letter explaining the purpose and procedure of the study with request for the family's participation. The interviewer then contacted each homemaker of the family to arrange for an appointment in the home for the interview. The interview data were collected so that upon completion of the study, there was an interview for each day of the week in each of the five age categories for each of the three annual segments (fall/winter, spring, and summer).

During the initial interview, a specially trained interviewer assisted the homemaker to recall each family member's time use for the previous 24 hour period. Interviewers were trained by the use of video tape reproductions of interviews, and by studying interview manuals. They also completed trial interviews as well as appraisals of the interview process. Meal information was collected on each interview day. The data were collected on a chart (see Appendix A) which consisted of 17 different categories, divided into 24 60-minute segments.

The homemaker was then instructed to keep another chart for the next 24 hour period. The interviewer returned two days later to pick up the completed time chart. As a result, there was an interview for each day of the week, in each of the five age categories, and for each of the three annual segments (fall/winter, spring, and summer). Background data regarding the size of the dwelling, household equipment, occupations, education, and income were collected during the second visit by the interviewer.

#### Analysis of Data

Responses to data regarding the meals consumed away from home by family members were analyzed for this particular study by descriptive methods such as frequencies and percentages. Chi-square, t-tests, and analysis of variance were used to test the three hypotheses. T-tests were used to test the null  $H_1$  which stated that there will be no significant difference between rural and urban families and their eating patterns of meals consumed away from home. Hypothesis two, there will be no significant relationship between meals consumed away from home and selected personal variables, including ages of children, employment of

wife, occupation of husband, occupation of wife, and income, were tested by Chi-square and analysis of variance. Analysis of variance was used to test hypothesis three, which stated that there will be no significant relationship between the cost of the meals consumed away from home and selected personal variables, including ages of children, employment of wife, occupation of husband, occupation of wife, income and location of residence. An explanation for each analytical procedure is reported in Chapter IV with the findings of this study.

## CHAPTER IV

### ANALYSIS OF THE DATA

#### Characteristics of the Sample

The sample for this survey consisted of 210 families, with 105 in each of the urban and rural sub-samples. Each family consisted of two parents and two children. Characteristics of the sample are shown in Table I.

The age range of the homemaker was similar in both rural and urban families. The majority of the homemakers were in the 26-35 years of age category (54.3 percent of rural and 63.8 percent of urban). The smallest proportion was in the 46 years of age and over category (3.8 percent of rural and 7.6 percent of urban).

The age range of the spouse was similar in both rural and urban families. The majority of spouses were in the 26-35 years of age category (49.5 percent rural and 57.1 percent urban). The smallest proportion was in the 25 years of age and younger category (9.5 percent in both rural and urban families). Spouses tended to be slightly older than the homemakers.

A majority of the rural and urban homemakers (58.2 percent rural and 53.4 percent urban) had more than a high school education. Of the rural homemakers, 29.6 percent had attended some college or vocational-technical training beyond high school. An additional 27 percent of

TABLE I  
CHARACTERISTICS OF THE SAMPLE

Characteristics	Percentage of Rural Families n=105	Percentage of Urban Families n=105
Age of Homemaker		
25 years and younger	19.0	14.3
26-35 years	54.3	63.8
36-45 years	22.9	14.3
46 years and older	3.8	7.6
	<u>100.0%</u>	<u>100.0%</u>
Age of Spouse		
25 years and younger	9.5	9.5
26-35 years	49.5	57.1
36-45 years	31.4	20.0
46 years and older	9.5	13.3
	<u>99.9%</u>	<u>99.9%</u>
Education of Homemaker		
Grade School (1-8)	0.0	1.0
Partial High School (9-11)	2.9	7.6
High School Diploma	39.0	38.1
Vocational/Technical Training	8.6	10.5
Partial college, no degree	21.0	26.7
B.S. or B.A.	26.7	9.5
Master's	1.9	6.7
	<u>100.0%</u>	<u>100.1%</u>
Education of Spouse		
Grade School (1-8)	1.0	1.9
Partial High School (9-11)	3.8	9.5
High School Diploma	30.5	35.2
Vocational/Technical Training	4.8	3.8
Partial college, no degree	17.1	24.8
Associate Degree	1.0	0.0
B.S. or B.A.	34.3	14.3
Master's	6.7	6.7
Professional	1.0	3.8
	<u>100.2%</u>	<u>100.0%</u>
Employment of Homemaker		
0 hours	61.9	50.5
14 hours and less per week	8.6	12.4
15 hours and more per week	29.5	37.1
	<u>100.0%</u>	<u>100.0%</u>
Employment of Spouse		
14 hours and less per week	33.3	6.7
15 hours and more per week	66.7	93.3
	<u>100.0%</u>	<u>100.0%</u>
Occupation of Homemaker		
Service Worker	8.6	14.3
Laborer	1.0	0.0
Operative	1.0	6.7

TABLE I (Continued)

Characteristics	Percentage of Rural Families n=105	Percentage of Urban Families n=105
Craftsmen	1.0	4.8
Clerical	10.5	14.3
Sales Worker	3.8	2.9
Manager/Administrator	1.9	1.9
Professional-Technical	10.5	4.8
Full-time Homemaker	61.9	50.5
	<u>100.2%*</u>	<u>100.2%*</u>
Occupation of Spouse		
Service Worker	3.8	2.9
Laborer	9.5	6.7
Operative	9.5	18.1
Craftsmen	9.5	28.6
Clerical	1.0	2.9
Sales Worker	4.8	2.9
Manager/Administrator	46.7	20.0
Professional-Technical	14.3	18.1
Full-time Homemaker	1.0	0.0
	<u>100.1%*</u>	<u>100.2%*</u>
Family Income		
Less than \$7,500	1.0	4.9
\$ 7,500 - 9,999	13.3	7.6
\$10,000 - 11,999	14.3	5.7
\$12,000 - 14,999	13.3	11.4
\$15,000 - 19,999	17.1	35.2
\$20,000 - 24,999	4.8	17.1
\$25,000 - 49,999	10.5	9.5
\$50,000 - over	4.8	3.8
Don't know, not given	21.0	4.8
	<u>99.9%*</u>	<u>100.0%</u>
Home Ownership		
Own or buying	79.0	94.3
Rent	15.2	3.8
Other	5.7	1.9
	<u>99.9%*</u>	<u>100.0%</u>
Vehicle Ownership		
1 vehicle	8.6	12.4
2 vehicles	55.2	58.1
3 vehicles	23.8	21.0
4 or more vehicles	12.4	8.7
	<u>100.0%</u>	<u>102.0%</u>

NOTE: Due to the rounding of the individual statistics by the computer, the total number may vary slightly above or below 100%.



rural homemakers had college degrees. Over one-third of the urban homemakers had attended college or vocational-technical training beyond high school, with an additional 9.5 percent having obtained college degrees.

The majority of both rural and urban spouses (64.9 percent rural and 53.4 percent urban) had an education level higher than high school. Of the rural spouses 21.9 percent had attended some college or received vocational-technical training. An additional 34.3 percent of the rural spouses had obtained a B.S. or B.A. degree. Over one-fourth of the urban spouses had attended college or received vocational-technical training, with an additional 14.3 percent of urban spouses obtaining college degrees.

Employment of the spouse or homemaker has been defined as being gainfully employed 15 or more hours per week. Unemployed or part-time employed have been respectively defined as not being gainfully employed or being employed less than 15 hours per week. The majority of homemakers (70.5 percent rural and 62.9 percent urban) were either employed part-time or not employed at all outside the home. The majority of the spouses (66.7 percent rural and 93.3 percent urban) were employed full-time, 15 hours or more per week.

The homemaker's occupation was classified into nine categories as established by the Family Time Use Study. The full-time homemaker occupation comprised the majority of the sample (61.9 percent rural and 50.5 percent urban). Rural homemakers' occupations at the next highest frequencies were clerical (10.5 percent) and professional-technical (10.5 percent).

Eight categories of occupations were designated for spouses as established by the Family Time Use Study. The highest percentage

(46.7 percent) of rural spouses were classified as managers/administrators, which included the occupation of a farmer. The next highest frequency of rural spouses (14.3 percent) were classified as professional-technical occupations. The highest percentage of urban spouses was classified as craftsmen (28.6 percent). Managerial/administration (20 percent), professional-technical (18.1 percent), and operative (18.1 percent) occupations were next highest in frequency for urban spouses.

The proportion of rural and urban families reporting various levels of yearly income were different in each income level. The largest percentage in each sub-sample (17.1 percent rural and 35.2 percent urban) had a yearly income of \$15,000-\$19,000. The next highest frequency for urban families (17.1 percent) was a yearly income of \$20,000-\$24,999. Over one-fourth of the rural families indicated they did not know or they did not give information on their yearly income.

Home ownership by both rural and urban families had the highest frequency (79.0 percent rural and 94.3 percent urban) of housing arrangement. Of the rural families, 15.2 percent rented their homes as compared to only 3.8 percent of urban families who rented their homes.

Ownership of two vehicles used for transportation was indicated by 55.2 percent of rural families and 58.1 percent of urban families. Over one-fifth of the families owned three vehicles.

#### Number of Family Members Eating Meals

##### Away From Home

The first five questions in the survey established whether or not the family member(s) ate a meal away from home; what type(s) of meal(s) was (were) eaten; and how many family members ate the meal(s).

Information was recalled from the previous day for Day I and for Day II records. In order to determine how many family members were consuming meals away from home, data were analyzed and presented in Table II.

TABLE II  
FAMILY MEMBERS EATING MEALS AWAY FROM HOME  
BY TYPE OF MEAL, DAY I AND DAY II

Number of Family Members Eating Meal Away From Home	Percent of Breakfast Meals		Percent of Lunch Meals		Percent of Dinner Meals		Percent of Snack Meals	
	Day	Day	Day	Day	Day	Day	Day	Day
	I n=49	II n=34	I n=216	II n=204	I n=96	II n=76	I n=16	II n=10
One	73	76	76	72	42	42	38	40
Two	18	18	14	17	25	29	6	20
Three	4	3	7	7	17	12	25	10
Four	4	3	3	4	17	17	31	30
	<u>99</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>101</u>	<u>100</u>	<u>100</u>	<u>100</u>

NOTE: N equals total number of family members eating that particular meal on that particular day. Due to rounding of the percentage by the computer, the percentage may vary slightly above or below 100%.

Of the breakfasts eaten away from home, the majority were eaten by one family member on both Day I (73 percent) and Day II (76 percent). Of the lunches eaten away from home, it was more likely that only one family member ate the lunch. Lunches eaten away from home by one family

member accounted for 76 percent of the lunches on Day I and 72 percent on Day II.

Forty-two percent of the dinner meals eaten away from home on both days were eaten by one family member. Almost one-fourth of the dinner meals eaten away from home were eaten by two family members. Snacks were eaten away from home in highest frequency (38 percent and 40 percent) by one family member. Slightly less than one-third of the snacks eaten away from home were eaten by four family members.

Summarizing Table II, it was evident that regardless of the type of meal eaten away from home, it was more likely that the meal would be eaten by one family member. Approximately three-fourths of the breakfasts and lunches eaten away from home were eaten by one family member. While following the same trend, dinner was more likely to have been eaten away by two or more family members.

#### Type of Meals Eaten Away From Home by Family Members

In order to determine the frequency of the type of meals eaten by family members away from home, data from the first four questions on the survey provided the findings for Table III. Data were recalled from the previous day for Day I and for Day II records.

Of the total number of meals eaten away from home by one family member, lunches were eaten in highest frequency (67 percent and 70 percent). Dinner meals were next highest in frequency (16 percent and 15 percent) in being eaten by one family member away from home. The same pattern held true for the frequency of meals eaten by two family members away from home as almost one-half of the meals eaten were lunches and

TABLE III

## TYPE OF MEALS EATEN AWAY FROM HOME BY FAMILY MEMBERS

Number of Family Members Eating Away From Home	Percent of Breakfast Meals		Percent of Lunch Meals		Percent of Dinner Meals		Percent of Snack Meals		Total	
	Day	Day	Day	Day	Day	Day	Day	Day	Day	Day
	I n=49	II n=34	I n=216	II n=204	I n=96	II n=76	I n=16	II n=10	I	II
One	15	13	67	70	16	15	2	2	100	100
Two	14	9	48	53	37	34	2	4	101	99
Three	6	4	39	58	44	35	11	4	100	99
Four	7	4	23	35	53	50	17	12	100	101

NOTE: N equals total number of family members eating that particular meal on that particular day. Due to rounding of the percentage by the computer, the percentage may vary slightly above or below 100%.

over one-third of the meals eaten were dinner.

Following the same trend, the highest percentage (39 percent and 58 percent) of meals eaten away from home by three family members was the lunch meal, with the dinner meal next highest in frequency (44 percent and 35 percent). A deviation from the established pattern was the high frequency (53 percent and 50 percent) of dinner meals eaten by four family members. The lunch meal accounted for over one-fifth of Day I and over one-third of Day II meals eaten by four family members away from home. Snacks were reported lowest in frequency of the four types of meals for one, two, and three family members. However, snacks were third highest in frequency (17 percent and 12 percent) eaten away from home by four family members.

The findings of Table III did not indicate whether or not the meal eaten by two or more family members was the same meal eaten at the same time and same location by immediate family members. Rather, the findings established that regardless of the number of family members eating the meal, it was more likely that the lunch meal would be eaten away from home and that the dinner meal would be the meal eaten in next highest frequency.

#### Location of Meals Eaten Away From Home

Locations at which meals could be eaten away from home were recorded. Table IV reports the frequency of various locations at which types of meals were eaten away from home.

Of the total number of breakfasts eaten away from home, about one-third of them were eaten at restaurants. About one-fourth of the breakfasts eaten away from home were eaten at fast food businesses. Breakfasts

eaten at the homes of friends or relatives accounted for 12 percent of the meals on Day I and 26 percent of the meals on Day II. Over one-tenth of the breakfasts were eaten at school ceterias, with a greater number eaten on Day I (16 percent) than on Day II (12 percent).

TABLE IV  
LOCATION OF MEALS EATEN AWAY FROM HOME  
BY TYPE OF MEAL

Location	Percent of Breakfast Meals		Percent of Lunch Meals		Percent of Dinner Meals		Percent of Snack Meals	
	Day I	Day II	Day I	Day II	Day I	Day II	Day I	Day II
	n=49	n=34	n=216	n=204	n=96	n=76	n=16	n=10
Fast Food	27	21	19	16	31	26	50	50
School Cafeteria	16	12	36	37	0	0	0	0
Other* Cafeteria	6	3	5	7	8	3	0	0
Restaurant	33	29	19	24	34	28	19	20
Social Gathering	2	3	2	0	5	3	0	10
Friends/ Relatives	12	26	15	11	20	38	19	20
Don't Know	4	6	5	4	1	3	13	0
	<u>100</u>	<u>100</u>	<u>100</u>	<u>99</u>	<u>99</u>	<u>100</u>	<u>101</u>	<u>100</u>

\* Other cafeteria includes industrial, private cafeterias, and private clubs.

NOTE: Due to rounding of the percentages by the computer, the percentage may vary slightly above or below 100%.

eaten at the homes of friends or relatives accounted for 12 percent of the meals on Day I and 26 percent of the meals on Day II. Over one-tenth of the breakfasts were eaten at school cafeterias, with a greater number eaten on Day I (16 percent) than on Day II (12 percent).

School cafeterias provided over one-third of the lunches eaten away from home. Over one-fifth of the lunches were eaten at restaurants. The third most popular location for lunches eaten away from home was the fast food business (19 percent and 16 percent).

Restaurants accounted for most of the dinner meals eaten away from home (34 percent and 28 percent). On the average, dinners on Day I and Day II were eaten in nearly the same frequency at fast food businesses and at the homes of friends or relatives. Individually, however, a greater number of dinners were eaten at fast food businesses on Day I (31 percent) than on Day II (26 percent). In reverse, a greater percentage of dinners were eaten at the homes of friends or relatives on Day II (38 percent) than on Day I (20 percent).

One-half of the snacks were eaten at fast food businesses on both Day I and Day II. An additional one-fifth of the snacks were eaten at both restaurants and homes of friends or relatives.

Summarizing Table IV, it was evident that almost one-third of all meals (excluding snacks) eaten away from home were eaten at a restaurant. On the average, around one-fourth of all meals (excluding snacks) eaten away from home were eaten at fast food businesses and one-fifth of all meals (excluding snacks) eaten away from home were eaten at the home of friends or relatives. Social gatherings were lowest in frequency in regards to the location of meals eaten away from home.



## Type of Meals Eaten Away From

## Home by Location

The frequency of the different type of meals eaten at each location are presented in Table V. Data were recalled from the previous day for Day I and recalled for Day II records.

TABLE V  
TYPES OF MEALS EATEN AWAY FROM  
HOME BY LOCATION

Location	Breakfast		Lunch		Dinner		Snack		Total	
	Day I	Day II	Day I	Day II	Day I	Day II	Day I	Day II	Day I	Day II
	n=49	n=34	n=216	n=204	n=96	n=76	n=16	n=10		
Fast Food	14	11	44	50	33	31	9	8	100	100
School Cafeteria	9	5	91	95	0	0	0	0	100	100
Other Cafeteria*	14	5	50	84	36	11	0	0	100	100
Restaurant	17	12	44	59	35	26	3	2	99	99
Social Gathering	10	20	40	20	50	40	0	20	100	100
Friends/Relatives	10	15	53	35	32	47	15	3	100	100
Don't Know	13	15	67	69	7	15	13	0	100	99

\*Other cafeteria includes industrial and private cafeterias, and private clubs.

NOTE: Due to the rounding of the percentages by the computer, the percentage may vary slightly above or below 100%.

Of all meals eaten at fast food businesses, lunches were eaten in highest frequency (44 percent and 50 percent). Over one-third of the meals eaten at fast food businesses were the dinner meals for families reporting meals eaten away from home. The majority of meals eaten at school cafeterias were the lunches. Of the meals eaten at other cafeterias, the lunch meals were eaten in highest frequency. On Day I, 50 percent of the meals eaten at other cafeterias were lunches as compared to 84 percent on Day II. Most of the meals eaten at restaurants were the lunch meals (44 percent and 59 percent) with the dinner meal being next highest in frequency (35 percent and 26 percent).

Dinner meals constituted the majority of meals eaten at social gatherings. Another one-third of the meals eaten at social gatherings was the lunch meal. On Day I, no snacks were eaten at social gatherings, although on Day II 20 percent of the away-from-home eating of snacks were at social gatherings.

Regardless of the location, the meal most often eaten away from home was the lunch meal followed by the dinner meal.

#### Comparison of Rural and Urban Families and Eating Patterns

The first hypothesis of the study was: there will be no significant difference between rural and urban families and their eating patterns of meals consumed away from home. In order to test the hypothesis, a series of t-tests were conducted using as the dependent variables each of the dimensions of eating patterns. The dimensions included the mean number of meals for type of meal eaten, the mean number of family members eating the meal, and the mean number of meals eaten in each

location. The independent variable in each analysis was the residence of the family. The unit of analysis was the meal eaten away from home rather than families and their meals eaten away from home. Therefore, the difference between the meal and the family became the point of observation for hypothesis one.

### Type of Meal

The first variable in hypothesis one to be tested was the type of meal eaten away from home by family members. The mean score in Table VI was for two days of information regarding meals eaten away from home. Two dependent variables, breakfast and snacks, were of significance in the relationship to the independent variable, rural or urban residence.

Urban family members ate more breakfasts away from home than rural family members. The mean for urban families was .5 as compared to .3 for rural families. The t-test showed that there was a statistically significant difference (.056) between rural and urban families regarding the breakfast meals eaten away from home. Also significant (.031) was the higher frequency of snacks eaten away from home by rural families (.18) as compared to urban family members (.07). The standard deviation of urban breakfasts and rural snacks were large enough to explain the significant findings.

### Number of Family Members Eating Meals

#### Away From Home

A t-test of the second dependent variable of hypothesis one, the number of family members eating the meals away from home in relationship to the residence of the family, was applied to question five on the

survey, "How many household members ate this meal?" There was no statistically significant relationship between the dependent variable (number of family members eating the meal) and the independent variable (rural or urban residence). (No table is reported.)

TABLE VI  
COMPARISON OF RURAL AND URBAN FAMILIES AND  
TYPE OF MEAL

Type of Meal	Number of Cases	Range of Scores	Mean	Standard Deviation	T-Values	Significance Level
<b>Breakfast</b>						
Rural	105	0-3	.30	.59	-1.92	.056*
Urban	105	0-4	.50	.89		
<b>Lunch</b>						
Rural	105	0-8	2.0	1.85	.0	1.0
Urban	105	0-8	2.0	1.62		
<b>Dinner</b>						
Rural	105	0-4	.76	.92	- .80	.422
Urban	105	0-5	.88	1.13		
<b>Snack</b>						
Rural	105		.18	.46	2.18	.031*
Urban	105		.07	.29		

\* A significance level of .05 or less was indicative of or signifying a true difference.

#### Location of Meals Eaten Away From Home

The third variable of hypothesis one to be tested was the location

of the meals eaten away from home. Six categories or locations where meals were eaten away from home were included in the t-test of dependent (mean number of meals eaten away from home) and independent variables (rural or urban residence). The results of the t-test are shown in Table VII.

Urban families had the highest mean score of meals being eaten at fast food businesses, which was the only variable of statistical significance. Urban families were twice as likely to eat a meal at a fast food business as rural families. There was no statistically significant difference between rural and urban families regarding the remaining five locations of meals eaten away from home.

#### Relationship Between Selected Personal Variables and Meals Eaten Away From Home

The second hypothesis of the study was: there will be no relationship between meals consumed away from home and selected personal variables, including ages of children, employment of wife, occupation of spouse, occupation of wife, and family income. Families were the unit of analysis for hypothesis two with the findings reported in Tables VIII and IX.

#### Age of Children

The first variable of hypothesis two to be tested was the age of the children in the family. The age classification of the youngest child in the family, which consisted of two parents and two children, was used as the basis for establishing the categories of children's ages. Analysis by Chi-square showed that there was no statistical

TABLE VII  
RESIDENCE AND LOCATION OF MEALS EATEN AWAY  
FROM HOME

Location of Meal	Number of Cases	Range of Scores	Mean	Standard Deviation	T-Values	Significance Level
<b>Fast Food</b>						
Rural	105	0-3	.47	.71	-3.62	.000 **
Urban	105	0-8	1.01	1.36		
<b>School Cafeteria</b>						
Rural	105	0-6	.81	1.16	.24	.81
Urban	105	0-4	.77	1.19		
<b>Other* Cafeteria</b>						
Rural	105	0-4	.15	.53	-1.07	.29
Urban	105	0-4	.24	.63		
<b>Restaurant</b>						
Rural	105	0-5	.88	1.11	.63	.53
Urban	105	0-5	.78	1.08		
<b>Social Gathering</b>						
Rural	105	0-2	.09	3.4	.71	.48
Urban	105	0-2	.06	.27		
<b>Friends/Relatives</b>						
Rural	105	0-6	.65	1.18	.90	.37
Urban	105	0-6	.51	.97		

\* Other cafeteria category included industrial and private cafeterias and private clubs.

\*\* A significance level of .05 or less was indicative of or signifying a true difference.

NOTE: The possibilities of errors by chance were so minute that the computer did not carry the significance value beyond .000.

significance in the relationship between the age of the youngest child and the number of meals eaten away from home. Data from this analysis is reported in Appendix B, Table XIV.

Categories for the age of the younger child included: (1) less than 1 year old, (2) 1 year old, (3) 2-5 years, (4) 6-11 years, and (5) 12-17 years. There was a slight trend for families with the child 6-17 years of age to eat a larger proportion of five and more meals away from home than families with younger children. However, this trend was not of statistical significance.

#### Employment of Wife

The second variable of hypothesis two to be tested was the employment of the wife. The homemakers were classified into three categories of employment for the analysis of the relationship between the employment of the homemaker and the mean number of meals eaten away from home. The categories included: (1) full-time homemaker, (2) part-time employed homemaker (14 hours and less per week), and (3) full-time employed homemaker (15 hours and more per week). The variable was tested by analysis of variance and was found to be statistically significant (.0003). Table VIII presents the findings.

Families in which the homemaker was employed full-time outside the home had the highest mean number (4.23) of meals eaten away from home. The lowest mean number (2.48) of meals eaten away from home was reported by families in which the homemaker was employed part-time outside the home.

TABLE VIII  
 MEAN NUMBER OF MEALS EATEN AWAY FROM  
 HOME BY EMPLOYMENT OF WIFE

Wife's Employment	Number of Families	Mean Number of Meals Eaten Away From Home	Range of Scores	Standard Deviation
Full-time Homemaker	117	2.97	0.0-10.0	2.27
Part-time Employed Homemaker	23	2.48	0.0-6.0	1.88
Full-time Employed Homemaker	<u>70</u>	<u>4.23</u>	<u>0.0-10.0</u>	<u>2.39</u>
Totals	210	3.33	0.0-10.0	2.27

Significance .0003

#### Occupation of Spouse

The relationship between the occupation of the spouse and the number of meals eaten away from home was the third variable of hypothesis two to be tested. It was found to be not statistically significant, as indicated by the low Chi-square value (.54). Nine categories of occupations formed the independent variables in this analysis. There was somewhat of a trend for families in which the father was employed in a managerial or administrative occupation to eat a higher frequency of meals away from home than other families. Data from this analysis is presented in Appendix B, Table XV.



Occupation of the Wife

Analysis of variance was utilized to test the relationship between the occupation of the wife and the mean number of meals eaten away from home, which was the fourth variable of hypothesis two. Testing indicated the variable to be of statistical significance (.0000). The findings are presented in Table IX.

TABLE IX  
MEAN NUMBER OF MEALS EATEN AWAY FROM  
HOME BY OCCUPATION OF WIFE

Occupation of Wife	Number of Families	Mean Number of Meals Eaten Away from Home	Range of Scores	Standard Deviation
Service and Laborers	25	3.2	0.0-7.0	2.02
Operatives and Craftsmen	14	3.0	0.0-8.0	1.96
Clerical and Sales	33	4.79	0.0-10.0	2.63
Managerial, Administrative, Professional	20	5.0	0.0-10.0	2.75
Homemaker	<u>118</u>	<u>2.71</u>	<u>0.0-9.0</u>	<u>2.00</u>
Totals	210	3.33	0.0-10.0	2.35

Significance 0.000

NOTE: The possibilities of errors by chance were so minute that the computer did not carry the significance value beyond .0000.

Families in which the wife's occupation was managerial, administrative, or professional consumed the highest mean number (5.0) of meals away from home, although the total number of these families was next the lowest in the sample of 210 families. The lowest mean number (2.71) of meals eaten away from home were consumed by full-time homemaker families. This group had the highest number (118) of families in the sample.

#### Income of Family

The sixth and final variable of hypothesis two to be tested was the income of the family. Six categories of income levels were analyzed by Chi-square to determine the relationship between income of the family and the number of meals eaten away from home. Findings indicated there was no statistically significant relationship between the income and the number of meals eaten away from home. Data from these findings are presented in Appendix B, Table XVI.

#### Relationship Between Cost of Meals and Selected Personal Variables

Hypothesis three was: there will be no significant relationship between the cost of the meals consumed away from home and selected personal variables, including ages of children, employment of wife, occupation of spouse, occupation of wife, and family income. This hypothesis was explored through analysis of variance. Meals included in the analysis were breakfast, lunch, and dinner.

Families were the unit of analysis for hypothesis three. In the analysis, the number of family members eating the meal (breakfast, lunch or dinner) was tallied which then determined the per person cost per

meal. If more than one breakfast was eaten by family members, the mean cost of the total number of breakfasts was determined and an overall mean cost per person was determined. The same procedure was conducted for the lunch and dinner meals to determine the mean cost per person per meal.

It was found through analysis of variance that the relationship between the cost of the breakfast and dinner meals and the selected personal variables was not statistically significant. Likewise, the relationship between the cost of the lunch meal and the occupation of the husband as well as the family income were found to be not statistically significant. However, the relationship between the cost of the lunch and the age of the younger child, the employment of the wife, and the occupation of the wife was found to be statistically significant. Tables X, XI, and XII present the findings.

#### Age of the Younger Child

The age of the younger child in the family was the first variable in hypothesis three to be tested. The relationship between the mean cost of the lunches and the age of the younger child was studied by analysis of variance and was found to be of statistical significance (.001). The findings are presented in Table X.

Only the families which reported that one or more lunch meals were eaten away from home were included in the analysis. From a minimum cost of \$.10 to a maximum cost of \$5.00 for lunches eaten away from home, the mean cost was determined to be \$1.10 for a lunch meal.

The percentages of lunches eaten by all age groups were similar with the highest percentage (24 percent) eaten by families with the children 12 to 17 years of age. Families with preschool age children

and elementary age children had the lowest mean cost (\$.88 and \$.79) for lunches eaten away from home. Families with older children (12-17 years) had a mean cost of \$1.05 for lunches eaten away from home. This mean cost can be attributed to lunches eaten at school cafeterias. The highest mean cost (\$1.50) for lunches was spent by families with children less than one year old.

TABLE X

## COST OF LUNCH AND AGE OF YOUNGER CHILD

Age of Younger Child	Number of Lunches Eaten	Percentage of Lunches Eaten	Range of Costs	Mean Cost of Lunches Eaten Per Person
Less than 1 year	23	16	\$.24-\$5.00	\$1.59
1 year	25	18	\$.25-\$2.75	1.36
2-5 years	27	19	\$.11-\$2.81	.88
6-11 years	32	23	\$.18-\$3.33	.79
12-17 years	<u>33</u>	<u>24</u>	<u>\$.23-\$2.32</u>	<u>1.05</u>
Totals	140	100	\$.11-\$5.00	\$1.10

Significance .001

Employment of Wife

The second variable of hypothesis three to be tested was the employment of the wife. Independent variables, including full-time homemaker, part-time employed homemaker, and full-time employed homemaker, and the

dependent variable, the cost of the lunch, were studied by analysis of variance. It was shown that the relationship between the independent and dependent variables was statistically significant at the .003 level.

Full-time homemaker families ate almost half of the lunches eaten away from home with the highest mean cost (\$1.35) of all families. Families in which the wife was employed full-time ate 41 percent of the lunches and had the lowest mean cost, \$.85. Families with the wife employed part-time ate the fewest number of lunches but had a higher mean cost (\$1.04) than full-time employed homemaker families.

TABLE XI  
RELATIONSHIP BETWEEN COST OF LUNCH EATEN AWAY  
FROM HOME AND EMPLOYMENT OF WIFE

Employment	Number of Lunches Eaten Away From Home	Percentage of Lunches Eaten Away From Home	Range of Costs	Mean Cost of Lunches Eaten Away From Home
Full-time Homemaker	67	48	\$.15-\$5.00	\$1.33
Part-time Employment	15	11	\$.23-\$1.93	1.04
Full-time Employment	<u>58</u>	<u>41</u>	<u>\$.11-\$2.32</u>	<u>.85</u>
Totals	140	100	\$.11-\$5.00	\$1.10

Significance .003

### Occupation of Wife

Analysis of variance was utilized to assess the relationship between the cost of the lunch and the occupation of the wife, the third variable of hypothesis three. This relationship was found to be statistically significant (.005). The findings are presented in Table XII.

Almost one-half of the lunches eaten away from home were eaten by family members in which the wife was a full-time homemaker. These lunches had a mean cost of \$1.32, the highest in the sample. The next highest mean cost (\$1.20) was for lunches eaten by family members in which the wife was employed in clerical positions, even though they ate only 14 percent of the lunches. The lowest mean cost (\$.85) was spent for lunches by family members in which the homemaker was in a managerial, administrative, or professional occupation. The means of the meals in this analysis were the means for all family member meals, not just homemaker meals.

### Summary

It was determined that regardless of the type of meal eaten away from home, it was more likely to have been eaten by one person. The lunch meal was found to be eaten away from home in the highest frequency regardless of the number of family members eating the meal.

Restaurants were the most popular location for meals to be eaten away from home, regardless of the type of meal. While urban families ate a higher proportion of breakfasts away from home than rural families, the rural families were more likely to have eaten snacks away from home than did urban families. Urban families were twice as likely to eat meals at a fast food business as a rural family. Families in which the wife was

employed full-time outside the home ate the highest mean number of meals away from home. The highest mean number of meals eaten away from home was reported by families in which the wife was employed in managerial, administrative, or professional occupations.

TABLE XII  
RELATIONSHIP BETWEEN COST OF LUNCH AWAY  
FROM HOME AND OCCUPATION OF WIFE

Occupation	Number of Lunches Eaten Away From Home	Percentage of Lunches Eaten Away From Home	Range of Costs	Mean Cost of Lunches Eaten Away From Home Per Person
Service Laborers	19	14	\$.13-\$2.15	\$ .87
Operatives Craftsmen	9	6	\$.26-\$2.06	.86
Clerical	20	14	\$.33-\$2.50	1.20
Sales	6	4	\$.11-\$1.92	.92
Managerial, Administrative, Professional	18	13	\$.20-\$1.41	.58
Homemaker	<u>68</u>	<u>49</u>	<u>\$.15-\$5.00</u>	<u>1.32</u>
Totals	140	100	\$.11-\$5.00	\$1.10

Significance .005

Families with elementary-age children had the lowest mean cost of a lunch meal whereas a family with a younger child less than one year old had the highest mean cost of the lunch meal.

Full-time homemaker families ate almost one-half of the lunch meals away from home and had the highest mean cost for the lunch meal of all families. The lowest mean cost for lunch meals was reported by full-time employed homemaker families.



## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary of Present Research

The purpose of this research was to study the relationship between the eating patterns of meals consumed away from home by selected Oklahoma families and selected personal variables. These personal variables included ages of children, employment of wife, occupation of spouse, occupation of wife, income, and location of the family residence. The sample for the study was limited to 210 families, with 105 in each of the rural and urban sub-samples. Alfalfa County was selected as the rural sub-sample and Guthrie, Oklahoma was selected as the urban sub-sample. Each family consisted of two parents and two children.

The method of data collection was by personal interviews. The instrument used to collect the data had been developed and tested for the Interstate Family Time Use Study. Oklahoma was one of eleven states participating in the Family Time Use Study, which has contributed to an expanding body of knowledge on family resources.

The majority of the spouses and homemakers in the sample were in the 26 - 35 years of age category with the spouses tending to be slightly older than the homemakers. Education beyond high school had been obtained by more than one-half of the spouses and homemakers. The majority of the homemakers were employed part-time or not employed at

all outside the home. The majority of the spouses were employed full-time.

Over one-half of the rural and urban wives were classified as full-time homemakers for an occupation. The largest frequency (46.7 percent) of rural spouses was classified as managers and administrators (including farmers) whereas the largest percentage of urban spouses (28.6 percent) was classified as craftsmen. Yearly incomes of \$15,000 - 19,999 were reported in highest frequency in rural and urban families.

Home ownership by both rural and urban families had the highest frequency (79 percent rural and 94.3 percent urban) of housing arrangement. Over one-half of all the families reported ownership of two vehicles to be used for transportation.

Regardless of the type of meal eaten away from home, breakfast, lunch, dinner, or snack, it was more likely that the meal would be eaten by one family member. Breakfast and lunch meals were eaten in highest proportion by one person. However, the dinner meal eaten away from home was more likely to have been eaten by two or more family members.

Further study of the background characteristics indicated that regardless of how many family members ate the meal, the lunch meal was the most likely meal to be eaten away from home. Supportive of this statement was that further study showed that regardless of the location of where the meals were eaten, the lunch meal was the meal eaten away from home in highest frequency.

The highest proportion of all meals eaten away from home was eaten at restaurants with fast food businesses being second in

popularity as a location. Over one-fifth of the meals eaten away from home were eaten at the homes of friends or relatives.

Table XIII presents a summary of the findings of this present study. The null  $H_1$ , that there will be no significant difference between rural and urban families and their eating patterns of meals consumed away from home, was tested by a series of t-tests. Although it was found that the relationship between the number of family members eating meals away from home and rural and urban families was not of statistical significance, two other variables were statistically significant.

Urban families ate significantly more breakfasts away from home than did rural families. Further t-tests showed that rural families ate a significantly higher proportion of snacks away from home than did urban families. Mean scores indicated that urban families were twice as likely to eat a meal at a fast food business as rural families. There was no statistically significant difference between rural and urban families regarding the remaining five locations where meals were consumed away from home.

Analysis of Chi-square and analysis of variance tested the variables of the null  $H_2$ , which stated: there will be no significant relationship between the meals eaten away from home and the ages of the children, the employment of the wife, the occupation of the spouse, the occupation of the wife, and the family income. The employment of the wife and the occupation of the wife were found to be of statistical significance (.003 and .0000, respectively).

Families in which the wife was employed full-time ate the highest mean number of meals away from home. Of all families in which the wife was employed outside the home, the families in which the wives were

TABLE XIII  
SUMMARY OF FINDINGS

Hypothesis	Variable	Analysis	Findings	Significance
1. There will be no significant difference between rural and urban families and their eating patterns of meals eaten away from home.	1. Number of family members eating the meal.	1. t-tests	1. No significance	1. No significance
	2. Type of meal eaten away from home.	2. t-tests	2. Urban families ate more breakfasts away from home.	2. .056
	3. Location of meal eaten away from home.	3. t-tests	3. Urban families twice as likely to eat meals at fast food businesses as rural families.	3. .0000
2. There will be no significant relationship between meals eaten away from home and selected personal variables, including ages of children, employment of wife, occupation of spouse, occupation of wife, and income.	1. Age of younger children.	1. Chi-square	1. No significance	1. No significance
	2. Employment of wife.	2. Analysis of variance	2. Full-time employed homemaker families ate highest mean number of meals away from home.	2. .0003
	3. Occupation of spouse.	3. Chi-square	3. No significance	3. No significance
	4. Occupation of wife	4. Analysis of variance	4. Highest mean number of meals eaten away from home reported by families in which the wife was employed in managerial, administrative, or professional occupations.	4. .0000
	5. Income	5. Chi-square	5. No significance	5. No significance
3. There will be no significant relationship between cost of	1. Breakfast: and personal variables	1. Analysis of variance	1. No significance	1. No significance

TABLE XIII (Continued)

Hypothesis	Variable	Analysis	Findings	Significance
meals eaten away from home and selected personal variables, including ages of children, employment of wife, occupation of spouse, occupation of wife, and family income.	2. Dinner: and personal variables	2. Analysis of variance	2. No significance	2. No significance
	3. Lunch: and occupation of spouse and family income variables.	3. Analysis of variance	3. No significance	3. No significance
	4. Lunch: and age of children.	4. Analysis of variance	4. Families with school age children had lowest mean cost of lunch eaten away from home.	4. .001
	5. Lunch: and employment of wife.	5. Analysis of variance	5. Full-time homemaker families had highest mean cost of lunches eaten away from home.	5. .003
	6. Lunch: and occupation of wife.	6. Analysis of variance	6. Lowest mean cost of lunches eaten away from home consumed by families in which wife was employed in managerial, administrative, and professional occupations.	6. .005

NOTE: The possibilities of errors by chance were so minute that the computer did not carry the significance value beyond .0000.

employed in managerial, administrative and professional occupations had the highest mean number of meals eaten away from home.

Analysis of variance tested the null  $H_3$ , that there will be no significant relationship between the cost of the meals eaten away from home and selected personal variables, including ages of children, employment of wife, occupation of spouse, occupation of wife, and family income. It was determined that there was not a statistically significant relationship between the cost of the breakfast and dinner meals and the personal variables. Likewise, the relationship between the cost of the lunch meal and the occupation of the spouse as well as the family income were found to be not statistically significant. However, the age of the younger child (.001), the employment of the wife (.003), and the occupation of the wife (.005) were found to be of statistical significance.

The lowest mean cost (\$.88 and \$.79) for the lunch meal was consumed by families with pre-school and elementary age children. A higher mean cost (\$1.05) was recorded by families with older school age children (12 to 17 years of age). This low mean cost can be attributed to the lunches eaten at school cafeterias. Families with children less than one year old had the highest mean cost (\$1.50) for a lunch meal. This high mean cost can be attributed to the fact that because of the younger ages of the children in the family, school lunches were not consumed away from home.

The full-time employed homemaker families ate only 41 percent of the lunch meals and had the lowest mean cost, \$.85, whereas the full-time homemaker families ate almost one-half of the lunch meals and experienced the highest mean cost (\$1.33).

The lowest mean cost (\$.58) for the lunch meal was reported by

families in which the homemaker was employed in a managerial, administrative or professional occupation.

### Comparison of Present Findings

#### With Previous Research

School lunches for children in this study helped to establish the lowest mean costs of lunches for all families. The influence of children in the family on eating patterns was established by Tripp (1978, p. 4). Fast food lunches in the school lunch program have been initiated to entice the childish palates (Vincent, 1978, p. 8). Lunch meals at school cafeterias accounted for over one-third of the total number of lunches eaten away from home in this present study.

It had been established in a recent study by Rizek and Peterkin (1980, p. 15) that the noon meal was the meal most frequently eaten away from home, regardless of the employment of the homemaker. The findings of this present study support that statement.

Earlier research had also established that employed women households bought more meals away from home than other households (Rizek and Peterkin, 1980, p. 15). The findings of this present study indicated a similar trend as full-time employed homemaker families ate the highest mean number of meals away from home. This present study found that families in which the homemakers were employed in managerial, administrative, or professional occupations ate a higher mean number of meals away from home. This present study also found that full-time homemaker families had a higher mean cost for lunch meals than did families in which the homemaker was employed full-time.

Of interest to this researcher was the difference in the findings

of this present study and previous research regarding the impact of family income on eating patterns of meals eaten away from home. Salathe (1979, p. 6) determined that spending for food away from home had a strong and positive relationship with the level of family income. As the family income increased, the demand for food eaten away from home increased. According to the analysis of this present study, the level of family income had no impact on the eating patterns of the selected Oklahoma families.

The greater possibility of more eating establishments in urban areas as determined by earlier research (Food Consumption of Households in the U.S., 1965) was valid in this study. This researcher found that urban families were more likely to eat breakfasts away from home than rural families as well as the fact that urban families were two times as likely to eat a meal at a fast food business as rural families. This researcher has resided in the rural sample of the study, Alfalfa County, and can support the fact that the availability of fast food businesses in the rural sample were very limited.

Eating meals away from home together as a family was not established as a trend in this research study. Most meals, regardless of the type of meal, were eaten by one family member. Galdston (1976, p. 32) has stated that eating together meant that the family's mealtime customs were of importance. Yet Rizek (1978, p. 3) reported that family meals were less significant as a part of family life than in the past. Undoubtedly, families in this present sample have several possible reasons for not eating together as a family when eating meals away from home. School age children, employment of the wife, and location of the residence could be considered as valid reasons.



Following a nationwide trend, families in this present study were more likely to eat meals away from home at restaurants than at other locations. Fast food businesses accounted for one-fourth of the meals eaten away from home in this present study, which was consistent with a nationwide study in 1978 (Perspectives, p. 33).

### Recommendations

Because only 210 families in two counties in Oklahoma participated in this study, no claim was made to provide final answers in regards to eating patterns of meals eaten away from home. However, even if the research was seen as investigative, the results and implications are important to educators.

### Recommendations for Further Research

After completion of this study and analysis of the data, the following was recommended:

1. A similar study should be conducted using other rural and urban families in Oklahoma in order to verify the results reported here.
2. A more in-depth study could be conducted to determine the reasons why family members eat meals away from home and to determine the relationship between nutrition and meals eaten away from home.
3. A similar study could be conducted by using other types of family structures (one parent family, families with more than two children, and singles) as samples to expand the body of knowledge regarding eating patterns of meals consumed away from home.

### Recommendations for Program Development

There is a need for educational programs which would create an awareness of and strengthen the decision making process of family members in relationship to the trends of eating meals away from home. Because of the existence of influencing factors, such as the age of children, the employment of the wife, occupation of the spouse, occupation of the wife, family income, and the location of the family residence found in this and other studies, on where and when the family members eat away from home, better decision making could provide more satisfying experiences when meals are eaten away from home.

The trend of increasing numbers of meals and dollars being spent for meals eaten away from home has been established. Educators can utilize findings from this study and other current studies to increase the awareness of family members and individuals in the food industry of these trends, their relationship with family lifestyles, family food budgets, and consumer satisfaction. Educators in the elementary schools as well as secondary schools could provide valuable learning experiences for their students, specifically including the topic of eating away from home trends. Besides the classroom, areas where education can also be implemented for the young are in the 4-H programs, Future Homemakers of America, Scouting, and others. Opportunities for educational programs for adults could take place through community service programs, cooperative extension programs, college classes, and news media.

With the projection that families will continue to increase the amount of money spent on food away from home in the future, the need for educating the family members in satisfying decision-making experiences

is pressing. The opportunities for home economists in this area are numerous.

## BIBLIOGRAPHY

- A. C. Nielson Company, The Nielson Researcher. Number 1, 1977, (c)..
- Blackwell, D. Situation and major basic problems in family economics, consumer education, and safety. Program Suggestions. Stillwater, Oklahoma: Home Economics Cooperative Extension, Oklahoma State University, 1979-1980.
- Butz, E. What's Happened to Food Prices? Washington, D.C.: U.S. Department of Agriculture, Office of Communications, 1973, April.
- Bunting, Frederick A. Food spending and income. National Food Review. Washington, D.C.: Economics, Statistics, and Cooperative Services, U.S. Department of Agriculture, 1979, Summer.
- Dress, Michael V. An overview of the food industry. National Food Review. Washington, D.C.: Economics, Statistics, and Cooperative Services, U.S. Department of Agriculture, 1979, Spring.
- Economic role of women in family life. Family Economics Review. Washington, D.C.: Consumer and Food Economics Institute, U.S. Department of Agriculture, 1973, Fall.
- Food Consumption of Households in the United States. Washington, D.C.: U.S. Department of Agriculture Research Service, 1965, Spring.
- Galdston, R. The many meanings of food. Parents Magazine. Bergenfield, N.J., 1976, March.
- Gardening for food and fun. The Yearbook of Agriculture. Washington, D.C.: Consumer and Food Economics Institute, U.S. Department of Agriculture, 1978, Winter-Spring.
- Gallo, Anthony E. and Boehm, William T. Nationwide food consumption survey: results on spending. National Food Review. Washington, D.C.: Economics, Statistics, and Cooperative Services, U.S. Department of Agriculture, 1979, Spring.
- Impact. New York: Butterick Publishing Company, 1980, March.
- Lawyer, J. Family expenditures. Family Economics Review. Washington, D.C.: Consumer and Food Economics Institute, U.S. Department of Agriculture, 1978, August.

- LeBovit, C. Foods eaten away from home. National Food Situation. Washington, D.C.: U.S. Department of Agriculture, 1970, May.
- Oppenheim, I. Management of the Modern Home. New York: Macmillan Company, 1972.
- Perspectives: eating out-fast food. National Food Review. Washington, D.C.: Economics, Statistics, and Cooperative Services, U.S. Department of Agriculture (NFR-1), 1978.
- Peterkin, B. The part of the income that goes for food. Family Economics Review. Washington, D.C.: Consumer and Food Economics Institute, W.S. Department of Agriculture, 1973, Summer.
- Peterson, E. Junk foods in schools. Consumer News. Washington, D.C.: U.S. Office of Consumer Affairs, 1978 8 (18), September.
- Rizek, R. L. The 1977-78 nationwide food consumption survey. Family Economics Review. Washington, D.C.: Consumer and Food Economics Institute, W.S. Department of Agriculture, 1978, Fall.
- Rizek, Robert L. and Peterkin, Betty B. Food costs and practices of households with working women and elderly persons. Family Economic Review. Washington, D.C.: Consumer and Food Economics Institute, U.S. Department of Agriculture, 1980, Winter.
- Rubel, L. G. Away-from-home eating: characteristics and nutritional impact. Unpublished master's thesis, California State Polytechnic University, Pomona, 1972.
- Salathe, Larry E. Household expenditure patterns in the United States. National Food Review. Washington, D.C.: Economics, Statistics, and Cooperative Services, U.S. Department of Agriculture, (No. 1603), 1979, April.
- Service - U.S.D.A.'s Report to Consumers. Washington, D.C.: U.S. Department of Agriculture, 1977, August.
- Statistical Abstracts of the United States. Washington, D.C.: Bureau of the Census, 97th edition, 1977.
- Thesis Writing Manual. Stillwater, Oklahoma: The Graduate College, Oklahoma State University, 1975.
- Thorp, F. C. Family expenditures: the farm family living survey. Family Economics Review. Washington, D.C.: Consumer and Food Economics Review, U.S. Department of Agriculture, 1976, Spring.
- Tripp, M. Eating Out - The Wave of the Future? Chicago: Marion Tripp Communications, Inc., 1978, September.

Vincent, L. Choice school lunch. Service - U.S.D.A's Report to the Consumers. Washington, D.C.: Office of Governmental and Public Affairs, U.S. Department of Agriculture, 1978, September.

Walker, Kathryn. Time Use: A Measure of Household Production of Family Goods and Services. New York: Cornell University, 1976.

Wall Street Journal. 1978 (October 12), 62 (82).

What's Happening to Mealtime? A Nationwide Survey of the Planning and Preparation of Meals in American Households. New York: Ladies Home Journal, 1979, Spring.

Yankelovich, Skelly, and White. The General Mills American Family Report. Minneapolis, Minnesota: General Mills Consumer Center, 1975.

Yankelovich, Skelly, and White. Nutrition: A Study of Consumer's Attitudes and Behavior Toward Eating at Home and Out of Home. Study presented at Food Marketing Institute Convention, 1978.

**APPENDIX A**

**THE INSTRUMENT**

## INSTRUMENT

These questions specifically related to this study on eating patterns away from home and were part of the total Family Time Use Study instrument.

1. Yesterday did you or any household member eat a meal away from home that had NOT been prepared at home?
2. If YES, how many times were meals eaten away?
3. Starting with the first meal eaten away was it?
  - a morning meal
  - a noon meal
  - an evening meal
  - a snack
4. How many household members ate this meal?
5. From which of the following was this food obtained?
  - fast food
  - school cafeteria
  - industrial cafeteria
  - private cafeteria
  - a restaurant
  - private club or resort
  - social gathering
  - friend's or relative's house
  - don't know
6. What was the approximate cost including the tip, of this meal for all household members who ate it?
7. What was the highest grade in school you completed?
8. Last week were you employed?
9. What kind of work did you do?
10. What kind of industry or business were you employed in?
11. How many hours did you work for pay last week?
12. What is the usual number of hours you work for pay a week?
13. If you worked without pay in family business or farm, how many hours did you work last week?
14. Which category represents the total income before taxes for your household in the past twelve months? This includes wages and salaries, net income from business or farm, pensions, dividends,



interest, rent, Social Security payments and any other money received by members of your household?

15. Do you own or rent your home?
16. How many vehicles do you have that are used for transportation by members of your household?

**APPENDIX B**

**TABLES**

TABLE XIV  
RELATIONSHIP BETWEEN AGE OF CHILDREN  
AND MEALS EATEN AWAY FROM HOME

Number of Meals Eaten Away From Home	Age of Younger Child				
	Less Than One Year n=42	1-2 Years n=42	2-5 Years n=42	6-11 Years n=42	12-17 Years n=42
0	11.9%	9.5%	9.5%	4.8%	4.8%
1	26.2	21.4	9.5	9.5	4.8
2	16.7	23.8	28.6	23.8	14.3
3	16.7	14.3	23.8	16.7	14.3
4	14.3	14.3	7.1	9.5	16.7
5 and more	<u>14.3</u>	<u>16.7</u>	<u>21.4</u>	<u>35.7</u>	<u>45.2</u>
	100.1%*	100.0%	99.9%*	100.0%	100.1%*

n=42 families in each age category

Significance = .08

\*Due to the rounding off of percentages by the computer, the total percentages may be slightly above or below 100%.

TABLE XV  
 RELATIONSHIP BETWEEN OCCUPATION OF SPOUSE  
 AND MEALS EATEN AWAY FROM HOME

Spouse's Occupation	Number of Meals Eaten Away From Home						Total
	0	1	2	3	4	5	
Service Worker	14.3%	24.6	0.0	0.0	42.9	14.3	100.1%*
Laborer	5.9%	11.8	29.4	5.9	23.5	23.5	100.0%
Operative	3.4%	13.8	24.1	20.7	10.3	27.6	99.9%*
Craftsmen	15.0%	10.0	17.5	22.5	10.0	25.0	100.0%
Clerical	0.0%	0.0%	25.0	0.0	0.0	75.0	100.0%
Sales Worker	12.5%	0.0	25.0	25.0	12.5	25.0	100.0%
Manager/ Adminis- trator	8.6%	15.7	24.3	17.1	5.7	28.6	100.0%
Profes- sional	2.9%	17.6	17.6	17.6	20.6	23.5	99.8%*

Significance = .54

\*Due to the rounding off of the percentages by the computer, the total percentage may be slightly above or below 100%.

TABLE XVI  
 RELATIONSHIP BETWEEN INCOME OF FAMILY  
 AND MEALS EATEN AWAY FROM HOME

Family Income	Number of Meals Eaten						Total
	0	1	2	3	4	5	
Less than \$10,000	10.7%	17.9	17.9	14.3	10.7	28.6	100.1%*
\$10,000- \$15,000	2.1%	12.8	31.9	10.6	12.8	29.8	100.0%
\$15,000- \$20,000	10.9%	21.8	23.6	20.0	12.7	10.9	99.9%*
\$20,000- \$25,000	4.3%	21.7	17.4	17.4	8.7	30.4	99.9%*
\$25,000 and up	6.7%	6.7	16.7	20.0	13.3	36.7	100.1%*
Don't Know	14.8%	0.0	11.1	22.2	14.8	37.0	99.9%*

Significance = .30

\*Due to the rounding off of the percentages by the computer, the total percentage may be slightly above or below 100%.

VITA

Patricia Ann Trotter

Candidate for the Degree of

Master of Science

**Thesis:** A STUDY OF FAMILY CHARACTERISTICS AND EATING PATTERNS  
OF MEALS EATEN AWAY FROM HOME

**Major Field:** Home Economics Education

**Biographical:**

**Personal Data:** Born in Alva, Oklahoma, June 5, 1947, the daughter of Preston L. and Dorothy E. McNally; married to Ethan Trotter; two children, Laura Lyn and Brian Lee.

**Education:** Graduated from Hardtner High School, Hardtner, Kansas, in May, 1965; received Bachelor of Science degree in Vocational Home Economics Education from Colorado State University in March, 1970; completed requirements for the Master of Science degree at Oklahoma State University in July, 1980.

**Professional Experience:** Substitute teacher for American High School, Mannheim, Germany, 1970-71; Substitute teacher for South Barber Schools, Kiowa, Kansas, 1972-73; Extension Home Economist, Alfalfa County, 1974-77; Extension Home Economist, Woodward County, 1977-80; Northwest District 4-H Agent, Enid, 1980 to present.

**Professional Associations:** National Association of Extension 4-H Agents; Oklahoma Association of Extension 4-H Agents; Epsilon Sigma Phi; American Association of University Women.