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ABSTRACT

INVESTIGATION OF CONSUMER BEHAVIOR RESEARCH IN THE AREA OF FOOD AS A BASIS FOR IMPROVED CONSUMER PROTECTION, EDUCATION AND RESEARCH

By

France Dufour

The purpose of this study was to review consumer research in the area of food done in the years 1955-1970 in order to determine the state of our knowledge about the consumer and identify areas where more information is needed. Research findings serve as a basis to draw implications for the improvement of consumer protection and educational programs and to formulate guidelines for future research designed to assist the consumer.

A total of 306 studies selected according to specific criteria were reviewed and their findings classified and analyzed. About 80 percent of the studies selected for review were conducted by the government or the academic community and the remainder were commercially-sponsored research.

Findings of the study suggest that, even if homemakers vary considerably in certain aspects of their food management, similarities among them are greater than differences. Housewives use different approaches to food management and

are generally satisfied with their performance. Family preferences dictate most of the food choices and selection is made on the basis of quality, cost and convenience but often appears ill-informed because of a lack of reliable criteria. Newspapers, magazines and cookbooks are popular sources of information and are widely used. Significant relationships were found between specific management practices and selected socio-economic variables but income and education are the most significant factors. Level of consumer knowledge about marketing and nutrition is low in all areas of information and at all educational levels.

The review of research indicates that, in order to increase the effectiveness of consumer protection and provide the consumer with the means he needs to make intelligent choices in the market place, there ought to be a revision of existing legislation and the enactment of new laws and regulations concerning labeling, grade designation, product standardization, packaging, and advertising. Furthermore, the shortcomings of consumer protection as it now exists could be alleviated in part if consumers were adequately represented at all governmental levels and were in a position to indicate what they want, voice their complaints and fight for a better enforcement of current laws.

Surveys of consumer education programs reveal that the quality of the educational effort is often affected when educators are working for organizations mixing promotional

and educational objectives or involved in work with both producers and consumers.

Research findings suggest that educators should concentrate their effort on the following: (1) motivate the homemaker to recognize the need to improve her knowledge of nutrition and food management; (2) reassess the content of educative materials in line with new or revised legislation and new scientific and technological developments in the food industry; (3) find new channels of communication, especially for specific groups that have been somewhat neglected in the past; and (4) be in the forefront in promoting the interest of the consumer. Suggestions to attain these objectives are offered in the study.

It appears that both increased consumer protection and improved educational programs are necessary for improved nutrition. At times, they can be substituted for one another for solving particular consumer problems. Too often, in the past, consumer protection and education have been seen in isolation. It is time that they be regarded as interdependent and interrelated.

Most consumer research done in the past was conducted by the government or commercial firms interested in promoting their own interests. Benefits from these studies have accrued to the consumer but investigations designed especially to assist the consumer would be more beneficial.

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Such research has been very limited and it is the responsibility of researchers in the academic community to fill the gap. Recommendations for research in this direction are given in the study.

INVESTIGATION OF CONSUMER BEHAVIOR RESEARCH IN
THE AREA OF FOOD AS A BASIS FOR IMPROVED
CONSUMER PROTECTION, EDUCATION AND RESEARCH

By
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CHAPTER I

INTRODUCTION

The last two decades are undoubtedly the period of greatest prosperity and technological innovation in the American history. In the last twenty-five years, every sector of the economy has experienced tremendous growth with a GNP reaching the 1,000 billion mark in 1970 (80).

Consumers have been a very important and well recognized factor in stimulating and sustaining this abundant activity of the American industrial system and this can be attributed to the following factors: (1) increase in population from 178.2 million in 1960 to 202.2 million in 1970; (2) increase in disposable personal income per capita from \$1,801 in 1957 to \$3,108 in 1970, an increase of almost 60 percent; and (3) increase in consumer expenditures from 176.4 billion dollars in 1957 to approximately 355 billion dollars by mid-1970 (80).

A sizeable portion of these dollars has been allocated to food expenditures with the demand for food maintained at a high level by the persistent rise in real income and the growth in population. While expenditures for food have risen along with consumer income, from \$306 per capita in

1949 to \$511 per capita in 1970, the proportion spent has trended lower--from 23.8 percent of disposable income in 1949 to an estimated 16.7 percent in 1970 (80), and this despite a 16 percent increase in food prices.

Constant innovations in the production, distribution and marketing of food products were important factors responsible for the situation we now enjoy.

More efficient techniques of production have permitted the increase in farm size while reducing the number of people engaged in farming; technological developments in food science have flooded the market with an abundance of new and revolutionary food products; prepackaged, ready-to-eat, frozen and gourmet foods, snack and engineered foods, analogs, etc.; new methods of storage, transportation and distribution have provided the consumer with fresh and seasonal products the year round and at prices that are not prohibitive; innovations in marketing and merchandising techniques, matched with the fantastic progress in the development of the mass media of communications, have become very influential in the way the American allocates his food dollar.

Changes in the food industry have been taking place along with changes in the American way of living. Listed below are some of the most significant changes in the past decades:

- 1) sociological changes--urbanization, higher educational levels, increase number of women in the working force,

decrease in family togetherness and rise of individuality, higher mobility, and boom in free time for sports and travel.

2) technological changes--an array of new appliances for the home and the kitchen, "convenience" and synthetic foods, mass media communications.

3) economical changes--increase in discretionary income, economic improvement of some members of minority groups.

Considering the profound transformation of the American society in the first half of the century, what are the expectations for the future?

Economists and sociologists who utilize available data to sketch a profile of the consumer of 1980 make the following predictions: (1) nearly half of the population will be living in suburban rings surrounding metropolitan areas and only a fourth will be living in the central city; (2) while the total population is expected to increase in numbers by 22 percent in 1982, the number of young adults in the 20-year-old to 39-year-old age group will increase by 34 percent and represent the largest single group of consumers. The impact of such a shift in the American population will be felt in all sectors of the economy: politics, education, family life, employment, and consumption; (3) median family income is expected to increase by 42 percent as compared to current income; (4) consumer prices will also increase, but at a slightly lower rate than income.

This picture of an ever affluent society is a basis for great rejoicing but we cannot ignore the problems the

consumer is facing today and the possibility that they will also follow the present trend and will increase with greater prosperity.

The procurement of food for the family is no simple task. It is one of the most important managerial activities performed by the homemaker on any single day. It is so for two main reasons: (1) it affects all members of the family not only physically, but also mentally and emotionally, and (2) it requires an extensive use of resources--money, time, energy, skills and abilities, knowledge, etc. Consequently, values and goals must be clarified and resources allocated in such a way that the end process enhances the well-being and the satisfaction of everybody in the family.

The tasks involved in bringing food from the store to the table are numerous and demanding. The homemaker or the person in charge of this particular area of home management has usually the following activities to perform: (1) food procurement--acquisition of knowledge about nutrition and food preparation; information gathering about prices, new products and processes; daily inventory of perishables; planning for shopping; visit(s) to the store(s); (2) food production--meal preparation and service; cleaning up; home preservation; and (3) food storage--inventory management and upkeep.

Each and everyone of these activities requires planning, controlling and evaluating with decision-making a central function at each step of the management process. Because

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their values and goals vary and because they are endowed with different economic and non-economic resources (quantitatively as well as qualitatively), homemakers differ in the amount and quality of their food management. Some do very little planning and, having decided how to best satisfy family members, follow a routine that they will be very reluctant to change. Others constantly reevaluate their food management practices and reorganize their behavior accordingly. All possible patterns may be found between these two extremes.

We would expect that with higher income, better education, and the opportunity to choose from the greatest abundance of foods in American history, the consumer of the 1970's would have the means and the sophistication necessary to plan and enjoy a balanced and adequate diet. This is not so.

The most recent nationwide survey of household food consumption (78) showed some revealing facts: (1) only 50 percent of the U. S. households had diets rated "good," as they met the Recommended Dietary Allowances set by the National Research Council for specific nutrients; (2) 30 percent of the households had "fair" diets, neither to be classified as good nor poor; (3) 20 percent had diets that were rated "poor," as they provided less than 2/3 of the allowance for one or more of the nutrients under study. Inadequate diets were observed in 40 percent of families with

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incomes under \$3,000. Poor diets were also found at higher income levels, even the highest.

A more significant finding of the survey was that more diets were graded poor in 1965 than in a similar study done in 1955. This result is consistent with the results obtained on nutrition research done by the American Medical Association from 1950 to 1968 (45). This means that the American diet has been deteriorating in the last ten years, despite an increase in the supply of food and in the income necessary to its procurement.

While it is possible that lack of money is the major cause of deficient nutrition for the poor, it is not the case for the majority of Americans who are anemic, overweight and subject to diet-related health problems. Part of the reason for the worsening of diet lies in the choices families make: increased consumption of snack foods and soft drinks at the expense of fruits, vegetables and milk. Even though the majority of consumers today are concerned with their health and ask many questions about the food they eat, nutrition knowledge has made little progress and people have only a vague understanding of their nutritional needs and the value of the various categories of foods. Moreover, many new food products are being marketed--as many as 24 new items every day according to the food industry (53)--that are usually publicized by huge advertising campaigns, without much nutritional information or even often with deceptive or exaggerate claims.

Added to the lack of nutritional knowledge is the impossibility for the consumer to make rational food choices in the market place. The new materials, processes and products have been introduced at such a rapid rate that even publishers of trade journals have had difficulty discussing and evaluating many recent developments. As was noted in the recommendations of the President's Committee on Consumer Interests, as far back as 1966 (71:1325):

Informed assistance to consumers in making their decisions is increasingly scarce. The retail revolution of self-service--where the package has become the silent salesman--has depersonalized the market place, imposing ... upon consumers an unaccustomed responsibility for self-guidance.

Starley Hunter (59:712) described the situation in a somewhat similar fashion:

... The ultimate consumer has little opportunity to express his wants and needs in time to influence the productive process; ... for lack of time to review a myriad of products, he may be unduly influenced by modern merchandising methods to buy poor quality goods or products he does not want....

This concern about the lack of information and the impersonality of the market place has contributed to the unfavorable attitude of many consumers toward the grocery industry. James Carman (49:14), associate professor of Business Administration at the University of California, recently told members of the National Association of Food Chains meeting in Chicago that:

The level of consumer discontent with the industry (might be) partially a function of marketing practices. In the grocery business in recent years merchandising seems to have had a negative influence on attitude.

The confidence of consumers in the American market place has always been vital for a healthy economy and in response to the growing problems, "consumerism" or the interest in consumer affairs has grown at amazing speed. Since the consumer message sent to Congress by President John F. Kennedy in March 1962, significant steps have been taken in different areas of consumer protection and consumer education: governmental agencies have been created, new laws have been enacted, consumer representatives have been given audience, consumer and business meetings have been held, consumer education programs have been launched, etc.

Nevertheless, it appears that this "uncoordinated maize of laws, agencies and programs frequently work at cross purposes and that the consumer's problems have been often considered only erratically, haphazardly, and sporadically" (46:139). This seems particularly true in the area of food. The government, while increasingly willing to protect the consumer against physical injury resulting from adulterated or unsanitary foods, operates under a large number of rather rigid, special-purpose rules and regulations and the law is out of touch with market realities, largely because it is essentially negative rather than affirmative in its approach--it forbids rather than requires. As was pointed out by Barber (41:1210), "government policy as it relates to the consumer is random, being responsive to narrowly-defined needs rather than the product of any comprehensive effort to assess the situation and develop appropriate, generalized

corrective programs." Many of the regulatory agencies whose activities serve consumer interests were designed for other purposes and the consumer-oriented activity is only an accidental by-product of their major functions. It has also been argued that several of those regulatory government agencies which are supposedly designed to be consumer-oriented have, over time, changed their orientation to servicing processors and handlers rather than protecting consumers (25). Moreover, enforcement procedures are very often inadequate and enforcement agencies proceed generally on a case-by-case basis, which prevent them to deal effectively with the dynamics of the market place.

The situation is worse when one considers the economic aspect. Economic losses sustained by the American consumer have been ignored in the recent past, notwithstanding the Fair Packaging and Labeling Act, introduced to the Congress by Senator Philip Hart and finally passed in an emasculated form after five years of hearings in July, 1966. This is a situation to deplore since, according to Mowbray (31:4):

"Consumers lose far more each year through the deception inherent in the sophisticated means of modern merchandising and by being effectively denied the information needed to make wise purchases than they do as the result of physical harm."

In response to the situation and in order to help homemakers improve their food management, concern for providing consumer information has been increasing. Consumer education

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programs have mushroomed in recent years and they are gaining acceptance increasingly in the State schools, in the University and in adult education courses. But there is a great variety in the quality of information and courses offered and, in many instances, the channels of communication with the consumers are lacking, so that valuable information does not reach many consumers.

To alleviate these problems, corrective solutions need to be worked out and programs have to be constantly re-evaluated and improved to meet rapid technological and social changes. If the consumer is to be placed in a position where he can make informed purchase decisions, both government action and appropriate information and education are essential. However, such action and information must be carefully designed to meet the problem at its source and not be oriented to the eradication of a few symptoms.

A sizeable amount of research has been done to assess the level of knowledge and the attitudes and opinions of consumers regarding food and food products. All aspects of food management have been studied, more or less extensively, and this first hand information from the consumers themselves can be successfully used for the reevaluation and improvement suggested above. In this study, it is the purpose of the investigator to review existing consumer research in the area of food done in the last 15 years (1955-1970) in order to:

- (1) obtain as clear a picture as possible of the consumer's knowledge, opinions and attitudes about food products; and

(2) identify the areas where more information is needed about the consumer's knowledge and expectations. In view of what we already know and what is still mere assumption about consumers, the investigator will examine the relevancy of present consumer legislation and education programs with respect to food and nutrition and will offer recommendations for improving consumer protection, consumer education and research.

Objectives

The objectives of the research are:

1. To review and analyze published and unpublished data about consumer behavior in the area of food for the years 1955-1970.
2. To survey current consumer protection and consumer educational programs in order to draw implications for their improvement.
3. To offer recommendations and suggestions for future research designed to assist the consumer.

Assumptions

This investigation is based on the assumption that consumer research in the area of food has been extensive but that most of it has been done for very specific purposes, narrowing considerably the influence it could have had on improving our knowledge of and our programs and legislation

for consumers. It is also assumed that it is valid to investigate consumer research in foods as well as consumer protection and consumer education programs as a basis for recommendations for improvement.

Definition of Terms

Food expenditures: Amount spent for food in a given period.

Food management behavior: Procedures involved in planning for the procurement, processing and serving of foods for the family. Includes: budgeting; home production and preservation; meal planning practices; motivations in selecting particular foods (convenience, frozen, prepackaged, etc.); communication channels used to learn about food and food products.

Food shopping behavior: Procedures used in the procurement of food for the family. Includes: who does the shopping, when and where; frequency of shopping and time spent; use of shopping lists; extent of shopping around; brand and store loyalty, etc.

Merchandising techniques: Any techniques employed by a manufacturer or a retailer to increase his sales. Includes: packaging; labeling; premium offers such as cents-off deals, coupons, trading stamps, games and contests, etc.; "specials" and loss-leaders; store displays, etc. Also includes advertising in any form.

Convenience foods: Any food item available to consumers in readily usable form, so that effort and/or time is saved. Some processes to make a food "convenient" are: washing, trimming, prepackaging, cooking, freezing, drying, etc. Convenience foods also includes any "ready-to-eat" or "heat-and-serve" food product.

Consumer protection: Refers to federal, state, or local agencies, laws, legislative proposals or programs aimed at insuring that the consumer gets sanitary and wholesome foods to his best economic advantage and in fair and honest dealing with the producer and retailer.

Consumer education: Any systematic program designed to develop "competencies" in all areas of consumership. Includes elementary, secondary, college and adult education.

Consumer information: Refers to the content of different programs used by government, industry, and consumer groups to convey information about specific products.

The purpose of this introductory chapter has been to justify the purpose of this research, to state the objectives and the assumptions underlying the study and to give a definition of some of the most important terms that will be used throughout the study. The following chapter attempts to review the literature pertinent to the research.

CHAPTER II

REVIEW OF LITERATURE

Human beings are continually involved in the process of choice, a vital problem for every one if we keep in mind the fact that the choices an individual makes will shape the character of his whole life.

Basically, human beings, as individuals or as members of a group such as the family unit, must continually choose among possible alternatives for the following reasons:

(1) they have almost unlimited and varied wants; (2) they have to pay a "price" for the goods and services that will satisfy their wants; and (3) they have a limited amount of human and non-human resources at their disposal. They are then faced with the problem of allocating their limited resources in a way that will give them some kind of satisfaction.

So many possible combinations are possible that the process of choice is becoming very complex, more so with the recent technological and scientific developments and with the increased level of living of the American population as a whole.

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Once a predominantly producing unit, engaged in the satisfaction of its basic needs, the family is now a major consuming unit and the consumption choices made to fulfill the needs and desires of the family members will affect not only their own well-being but the welfare of the whole economy. No wonder we have observed such a growing interest in the study of consumer behavior in the past few decades. Two basic approaches have been adopted for this purpose: one concentrates on understanding the behavior of individual consumers or consuming units, such as the family (micro behavior); the second is concerned with the behavior of the mass of consumers (macro behavior).

This research focuses on the study of consumers from a micro point of view. Such a study, as defined by Glock and Nicosia (56:22), "encompasses all the effort expended to describe and explain the consumer's act at a given point in time or through time." The consumption activities under consideration in this research are the decisions or choices relative to the procurement, preparation and utilization of food and food products.

In the first section of this chapter, the investigator defines consumer wants, traces the development of theories of consumption and describes the contributions of economics, sociology, psychology, and marketing to our present knowledge of the internal and external forces that influence and limit consumer choices. The second section reviews in a

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more specific fashion the most important factors influencing food choices and their effect on knowledge, opinions and attitudes, food management and shopping behavior in relation to food and food products.

Wants of Consumers

Consumers involved in the consumption decision process are faced with a complexity of wants--some they are aware of, some they do not even recognize. What are those wants and how are they defined?

In the literature, it is not clear if a distinction can be made between needs, wants, drives, urges, motives, wishes or desires of the consumers. These terms are often used interchangeably and, consequently, a variety of classifications has been suggested, depending on the academic training, the value system and the objectives of the classifier.

Economists have used a number of categories in writing about wants. Wyand in 1938 (38) talked about "primary" and "secondary" wants. For him, "primary wants" are those connected with the maintenance of a normal life, while "secondary wants" are cultural and important to happiness and general welfare. In the same year, Elizabeth Hoyt published her Consumption in Our Society (17) and she classified wants according to primary and secondary types of interests. Primary type of interests include sensory satisfactions as well as social contacts; secondary type of interests are

intellectual, technological, aesthetic and empathetic pursuits. In addition to these interests, Dr. Hoyt stressed that the desire for social approval is also a very strong force affecting consumption of the individual.

Cochrane and Bell (7) defined two types of human wants: (1) the physiological wants--individual requirements or "substantive things" consumers may want; and (2) the social or group-created wants--different forms that the substantive things take and resulting from social action. In this last category, they included wants derived from, limited or created by custom, fashion, imitation, conspicuous consumption, advertising and technological innovation. Cochrane and Bell indicated that both types of wants are not mutually exclusive and that at times they might be either inhibitive or creative forces for the individual.

Leland Gordon (13) used the same two classifications, but his second category--the social wants--is different from Cochrane and Bell's. Gordon's social wants--desire for language, religion, government, beauty, stimulants and sedatives--are more in line with Hoyt's secondary type of interests and they are defined as having their roots in what the individual wants but are expressed in terms of group contacts.

Behavioral scientists are also concerned with human needs and wants and they have attempted to classify them. Psychologists see needs as initiators of behavior pushing the individual into action and they define two general

categories of needs, biogenic and psychogenic. As described by Bayton (44), biogenic needs arise from physiological tension systems, while psychogenic needs are based upon psychological tension systems and are influenced by an individual's relation with others. For Bayton, there are three psychogenic needs: affectional, ego-bolstering and ego-defensive needs.

Nelson Foote (10) defined needs as stable characteristics that affect decisions or preferences and he acknowledged the influence of culture, environment and personality on the needs of every human being. He classified needs as physical and social-psychological and he maintained that, contrary to physical needs, social-psychological needs are non-cyclical and often reinforced over time. He recognized four social-psychological needs: need for achievement, affiliation, power and curiosity.

Koponen (24), experimenting with a system of classifying consumers according to their expressed psychological needs, used a classification similar to Foote's, even if the wording of the need is different: association instead of affiliation, dominance in lieu of power, change for creativity. He added to the list the need for analysis and the heterosexual need, based on attitudes toward sex.

Sociologists recognize the importance of individual needs, unique to the individual alone, and of social needs, without which society cannot survive. These social needs

are imparted to the individual as a member of society and through the culture of which he is a part. Bachelder (1) reviewed the classification of social needs as given by sociologists. He described Sumner's four social needs: (1) hunger--or need for physiological protection; (2) love; (3) vanity--need to belong; and (4) fear--need to find explanations for the unknown. Thomas calls the four social needs: security, response, recognition and new experience.

Marketing specialists interested in motivation as it relates to consumer behavior research have relied upon the work of psychologists, sociologists and economists to classify human needs and wants.

This brief review points out the fact that definition and classification of wants vary from basic survival needs to desires, wishes and values held by the individual. As expressed in the United Nations Report on International Definition and Measurement of Standards and Levels of Living (82:5):

Human needs and wants ... range from common biological needs ... to culturally defined motivations and wants which may differ from society to society or from individual to individual.

Regardless of how wants are classified, some generalizations can be made:

- 1) Human beings are besieged by multiple and often conflicting motives that make them aware of a want or need and lead them to make a decision.

- 2) The strength and immediacy of specific needs and wants vary over time, and their fulfillment may mean less satisfaction of other needs and wants.
- 3) Consumer decision-making is based on both conscious and unconscious wants.
- 4) Wants are social phenomena and the result of social conditioning. Socio-economic and technological factors affect them by bringing about variations and changes in tastes, attitudes and preferences of the consumer. Some of these factors are a limiting and conserving force while others give impetus to change and innovation.

Resources and the Satisfaction of Wants

The satisfaction of wants is made possible by the resources available to the individual or the family. Resources are defined by Deacon and Maloch (50:32) as:

... means which are available and recognized for their potential in meeting demands. Means are represented by those things which have 'want-satisfying' power and are instrumental in the reaching of desired ends.

Gross and Crandall (15:124) have divided resources in two categories: (1) human resources, which include knowledge, talents, skills and abilities, energy and health, personal traits and dispositions; (2) non-human resources: money, material goods and community facilities.

A great deal of work has lately been done in the field of resources by home management specialists who frequently refer to resourcefulness, or the combination of resources available to the individual or the family for fostering their values and achieving their goals (wants). According to Paolucci and O'Brien (69), resourcefulness includes five characteristics: (1) limitation--in quantity and quality; (2) usefulness--in time, place and form; (3) measurability; (4) transferability; and (5) interdependence.

It becomes evident then that resourcefulness contributes to the satisfaction of individual and family wants to a variable extent and in a multiplicity of fashions.

The allocation of limited resources to satisfy unlimited wants constitutes the problem of choice and has given rise to numerous theories to explain the consumption decision. The following section deals with these theories and their influence on consumer research.

Theories and Models of Consumption

Classical Theories of Consumption

The first theories developed to explain consumption were put forth by economists who were primarily interested in studying the reactions of consumers to changes in price and the effect of these changes on demand, or the quantities of commodities taken by the consumer.

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Economists explained consumer choice by introducing the concept of utility, or general sense of satisfaction derived from one or a combination of goods. Two theories developed, based on the concept of utility. The classical utility theory or cardinal utility theory stated that each consumer can measure exactly the utility he derives from each commodity consumed, and as he consumes more and more of one good, he becomes satiated and his satisfaction from that good starts to decrease. In the utility theory, price of the good is balanced with expected satisfaction from any additional unit consumed.

Neoclassical economists substituted for cardinal utility the assumption of ordinal utility, where a consumer is assumed to be able to rank his preferences for alternative combinations of goods. The theory did not require the measurement of utility, only the ordering of the degree of utility. Called the "indifference" explanation of consumer behavior, the theory rests on the assumption of transitivity, or consistency in the choices made between all possible pairs of alternatives.

Both cardinal and ordinal utility theories imply an "economic man" which is completely rational, aware of all possible alternatives, and always searching the combination of goods that will maximize satisfaction, or utility. Such variables as income, tastes and preferences, prices of

1. The first part of the document is a title page. It contains the title "THE HISTORY OF THE UNITED STATES OF AMERICA" and the author "BY JAMES MADISON".

substitute goods and services, quality of goods, are assumed to be constant.

Economic theorists soon found that demand or utility theory (or relations of prices and quantities of a good taken) could not explain the reconciliation of individual demands in family or community groups and offered little guidance to predict changes in consumer behavior. In his Theory of Consumer Demand: A Critical Appraisal, Clarkson (6:85) states that:

... the theories of utility and demand are sufficient to provide after-the-fact rationalizations of why an event occurred; but ... they are not sufficient to produce an explanation of an event before it has occurred.... Until interpretive rules are discovered which permit general empirical laws to be developed, the explanations of consumer behavior offered by the theory of demand will remain ingenious rationalizations that must be classified under an ex post facto explanatory schema.

Income and Consumer Behavior

The relationship between income and consumption was first described by Engel in 1857, when he used government data to study total expenditures in relation to income available to a sample of British families. His famous law of food consumption: "The poorer a family is, the greater the proportion of the total expenditures which it must use to procure food" is still widely accepted and it applies still when studies are done with conditions similar to the ones Engel worked with. When the law is applied to complex food economic systems, such as the United States, the evidence is not as clear cut and the expenditure patterns vary somewhat.

John Maynard Keynes, in 1936, formulated a theory of consumption based on what he calls "fundamental psychological law" or what could be referred to as introspection (22:96):

The fundamental psychological law, upon which we are entitled to depend with great confidence both a priori from our knowledge of human nature and from the detailed facts of experience, is that men are disposed, as a rule and on the average, to increase their consumption as their income increases, but not by as much as the increase in their income....

He called the phenomenon "the marginal propensity to consume." Now referred to as the "absolute-income hypothesis," his theory gave rise to a number of alternative hypotheses regarding relationships between income and consumption.

While the initial research in consumer behavior was primarily concerned with studying the effect of income and a few other variables on consumption and expenditures, developments in sociology, psychology, home management and business have considerably expanded our knowledge of the factors and processes involved in a consumer decision and have provided a wealth of data pertinent to the study of consumer behavior.

In the following section, we will review the contributions of the behavioral sciences to new approaches and models of consumer behavior.

Contributions of Sociology

Sociologists, on the whole, have not worked on consumer behavior, but they have contributed a significant amount of

concepts that are now incorporated in theories and models of consumption. These include: roles, reference group, social stratification, family life cycle, family life style, the developmental approach to the family, symbolic interaction, cultural norms, family interaction and power.

Lazarsfeld, in the mid-thirties, was the first sociologist to formulate a paradigm of consumer action (63). He described three sets of variables involved in any act of choice: predispositions, influences and product attributes. He did not first explain how these variables interact in the process of choice but many studies produced later within and outside the Lazarsfeld school showed the effect of these different variables on consumer action.

Pierre Martineau, relating social stratification to consumer behavior, showed that social class differences are more significant than income in determining buying behavior. In his words (66:122):

Everyone of us in his consumption pattern and style of life shows an awareness that there is some kind of a superiority-inferiority system operating, and that we must observe the symbolic patterns of our own class.

Research on influences or personal and impersonal stimuli which become internalized in the individual's phenomenal field has been done by Katz and Lazarsfeld and Rogers, among others. Katz and Lazarsfeld (21) pointed out the role played by opinion leaders in influencing decisions about purchases. The concepts of opinion leaders, roles and reference groups are closely related. Opinion leaders usually take the lead

in influencing the opinions of the other people in the same group or environment. Choices made by the opinion leader are frames of reference for his peers; conversely, the opinion leader, valuing his role in the group, is motivated by the needs of his "followers" in the decisions he makes.

Everett Rogers (36), developing his theory of the diffusion of innovations, proposed five categories of "adopters" of a new idea (technique or product): (1) the innovators; (2) the early adopters; (3) the early majority; (4) the late majority; and (5) the laggards. What is of interest to us here is the influence exerted by the "early adopters," the men to check with before adopting a new idea or technique. These men serve as role-models and they are respected by their peers. It is then essential for them "to continue to earn this esteem of (their) colleagues if (their) position in the social structure is to be maintained" (36:169). This is to say that there are reciprocal influences between the two groups which are important factors in their decision-making.

More recently, sociologists became interested, not in consumer choice per se, but in decision-making within the family. Blood and Wolfe (2) attributed a capital influence to power and authority in the decision-making between husbands and wives of the working class. They hypothesized that the power to make decisions is influenced by prescribed authority pattern (role) as well as other sources such as comparative

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resources brought into the marriage, competence, skills, etc. The balance of power of the husband depends upon a number of socio-economic factors: occupation, income, social status and residence. The same idea of power is found in Morgan's model of household decision-making but as a need that may be subordinated to some other needs, such as affiliation.

William Kenkel (61,62) attempted an empirical investigation of one aspect of spousal roles, namely the manner in which influence is distributed in an economic family decision-making problem. He found that influence is related to the couple's traditional marital roles and that there is a possible relationship between the roles played and the types of products purchased. This would seem to indicate that the factors involved in the act of choice vary according to the type of decision. This hypothesis has been proposed by other scientists interested in the consumption decision, namely home and family economists.

Komarovsky (23) was particularly concerned with the importance of "communication" between family members in arriving at decisions about purchases. She stressed role conception as a major factor in the demand for joint participation and personal communication between husband and wife. She suggested that if less complex persons are involved (less education, less exposure to differences, less participation in a great variety of social relationship), this would tend to lower the need and the capacity for communication. In her

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research study of family decision-making with different types of American families, Komarovsky found evidence that joint decision-making is more likely to occur with purchases involving a significant amount of money while there is a sort of specialization (to each his own, according to his skills and knowledge) for "smaller" purchases. Komarovsky also advanced the hypothesis that different social and economic households will operate differently in making their purchase decisions and that the pattern will also vary within the same family according to the type of decision made. She suggested that both extremes of the socio-economic hierarchy exhibit greater autonomy in spending money; the low-income because there is so little money to spend, that most of it goes for necessities; the higher-income, because the economic conditions are such that there is no great need to debate about expenditures. The middle-income group is expected to show the greatest cooperation in economic decisions because of their aspirations and striving for higher standard of living. Another explanation would be that the middle-class group, for the very reasons just mentioned above, have a large part of their income already committed which necessitates a careful allocation of the discretionary income left after the purchasing of basic necessities. The process of weighing possible alternatives, evaluating them and selecting the most satisfying course of action, if it is to be beneficial to the family, must almost necessarily involve

joint participation and constant communication between family members.

Borrowing concepts from earlier theoretical works, Hill and Hansen (58) proposed a developmental approach to studying the family. This framework was to be used later by Hill and Foote for their three-generation study of asset accumulation. In Hill's words (10:63,64):

As the family develops ... it builds a history of problem solutions, a pattern of decision-making, and a set of rudimentary family policies by which choices can be made involving children and the family's future and by which actions can be judged.

James Morgan, an economist dissatisfied with both the economic explanation and the complex motivational factors proposed by psychologists, studied household decision-making with the postulate that "somewhere between the magnificent complexity of the clinician's answer and the absurd simplicity of the economist's indifference surface, there must be a workable theoretical structure with which we can start" (30:87). He based his theory on interpersonal relationships within the family and developed a model in which he shows how an individual's preference for a course of action may contribute to a family decision about that particular alternative. Morgan, like the psychologists, stated that the individual evaluates every alternative in terms of his basic physical and socio-psychological needs; he also pointed out the importance of the situation or the environment in terms of incentives and expected outcomes. Current situation, generalizations from

previous experience, new information, habit and inertia, all affect incentives and expectations, either to enhance a desire for the alternative or to produce resistance to it.

The strength of one course of action is balanced against the expected satisfaction from other alternatives and the preference for one alternative "per se" is in turn measured against the satisfaction to be gained in interpersonal relationships with other members of the family. At this point again, the socio-psychological needs play an important part on the decision outcome. The own preference of the individual may take precedence if, for instance, his need for dominance or his ability to exert power are strong and recognized by the other members of the family. It might also be that the individual's need for affiliation led him to choose this particular alternative in order to elicit a warm response from his relatives. Another possibility is that although somebody else in the family could exert power and could influence the decision to his advantage, he has a greater desire for affiliation and is willing to forget his own preference in order to keep the family together.

Presenting his model at the fourth conference on Consumer Behavior at the University of Michigan in 1958, Morgan stated (52:23):

If one wants to investigate the process of decision-making in the family, it is not enough to measure the intensity with which each individual feels a desire for a particular action ... and his power in the family. We need to know also the degree to which he or she is concerned with (a) the desires and feelings of others in the family or (b) exerting power over the family generally.

Contributions of Psychology

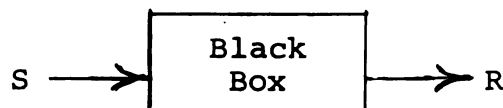
The research done on motivation, cognition and learning and such theories as Stimulus-Response, Field theory and the Self theory of Rogers contributed significantly to the development of new approaches and models of consumption.

While sociology was responsible for a better awareness of the importance of environmental and situational variables, psychology pointed out the relevancy of personal variables (traits, attitudes, perceptions, motives, etc.) in the study of any act of choice.

Applications of the Stimulus-Response Theory to Consumer Research

A large segment of the earlier research on consumer behavior has been conducted by or in the behalf of marketers and advertising agencies, more interested in finding ways to increase their market share than to develop models and theories of consumption.

Being concerned with everyday policy and conduct, researchers of this tradition attempted to assess consumer responses to a variety of stimuli (usually studied individually): change in prices, advertising campaign and promotion, package design, product and brand differentiation, etc. They explained the behavior episode with the following scheme:



S refers to the stimulus that arouses a need often believed to be an unconscious determinant or a "push" to action; R is the response or the observable behavior; and the Black Box is supposed to encompass the mental processes leading to the particular response. At this point, no attempt was made to assess and explain the content of the Black Box.

Subsequent psychological research has concentrated in studying the behavior or process that goes on in the Black Box, which content we may call the "intervening variables."

Motivation, Cognition and Learning

For behavioral scientists, motivation, cognition and learning are considered to be the basic psychological factors leading to human behavior.

Motivation refers to the needs, drives, urges, desires or wants that initiate behaviors. The different ways used to classify needs or wants have been described in the first section of this chapter. In recent years, scientists interested in consumer behavior have done extensive research on specific secondary or sociogenic needs, such as attitudes, expectations, opinions, dominance, etc., believed to be important "intervening variables" in the consumption decision. The research done in this area by sociologists has been described in a previous section. We now review some important contributions from the psychologists.

Cognitive processes have been emphasized by Bilkey and Bayton. Warren Bilkey (90) postulated that consumer behavior

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(or decision) is delineated by four main sets of influences: (1) biologically based needs, drives, and instincts; (2) socio-cultural environment; (3) institutional availability (which could also be listed under environment); and (4) immediate influences.

Bilkey applied the concept of Lewin's Field Theory to a study of family expenditures. He hypothesized that the purchase decision is determined by valence relationships, the desire for a good being a positive valence while the cost is seen as a negative valence. Whether the purchase will occur depends on the result of weighing positive and negative valences.

Bilkey described six important variables involved in the consumer expenditure behavior, four of them may be considered as personal variables while the last two are situational.

They are:

- 1) goals, or the short- or long-term objectives that the individual aims at or strives for;
- 2) past experiences, that help determine the way in which the individual interprets events and formulates his judgments;
- 3) expectations, or subjective probabilities that a particular choice or decision will result in a particular outcome;
- 4) habits, that relieve consumers of the necessity of giving careful consideration to every purchase;

- 5) past commitments, or constraints of any sort:
economic, legal, social; and
- 6) current prices.

Bilkey believed that a sudden change in a fairly constant price affects not only income and alternative opportunities but also attitudes toward what is a "fair price."

James Bayton (44), while recognizing the importance of motivational factors as initiators of behaviors, gave more emphasis to cognition and learning. He defined cognition as "the area in which all the mental phenomena (perception, memory, judging, thinking, etc.) are grouped" (44:282). According to him, cognitive processes are purposive--they serve the individual in his attempts to achieve satisfaction of his needs--and regulatory--they determine the direction and the particular steps taken to attain satisfaction. Bayton was one of the first to describe the process of choice in psychological terms. The process goes as follows:

- 1) a need is perceived that must be satisfied;
- 2) a variety of goal-objects, or alternatives, come into awareness as potential sources of gratification. Some alternatives may be unknown because the subject has no experience with the object; some may be judged irrelevant to the present decision situation;
- 3) attributes of the goal-objects serve as signs or cues to discriminate and differentiate among them.

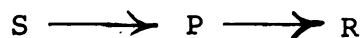
Bayton defined two kinds of attributes: (1) "stimulus

attributes" such as brand name, package, design, color, etc., and (2) "image attributes," perceived by the consumer as its being a prestige item or representing social stigma. These attributes are combined into the consumer's expectations about how the product may satisfy his needs. Generalizations are then made about the similarity of expectations from different goal-objects.

- 4) Finally, instrumental acts are necessary to buy and consume or utilize the chosen goal-object.

Bayton (44:288) explained that learning occurs when "the consumption or utilization of the goal-object leads to gratification of the initiating need," that is to say reinforcement. He maintained that reinforcement is necessary for learning to take place but he also argued that continued reinforcement may reduce the amount of cognitive activity by developing habits or repeated response patterns.

In 1963, Bayton (43) reformulated the stimulus-response paradigm by introducing perception as having the key role in consumer decision, schematically describing the phenomenon as:



(S for stimulus, P for perception and R for response).

In this model, perception becomes the unifying concept and all other psychological constructs such as motivation, attitudes, learning, are approached through this central

organizing theme. Bayton is not concerned here with the process of decision-making (or the steps taken to arrive at a decision) but with the perceptual content in consumer decision-making, in his words (43:1431):

... the substantive mental material (data, information) being acted upon in making the decision.

He is interested in "searching for the fundamental parameters involved in this content" (43:1431).

The concept of perception is very important to Gestalt psychologists who stressed the fact that every individual perceives the continually changing world as unique and private experiences often very different from the "absolute reality." What is important for every human being is not the world outside but the approximation of the reality that becomes his perceptual field. The differences between the "real" world and the "perceptual" world of the individual involve both omissions and distortions and arise in inferences and new perceptions. The organized set of perceptions held by the individual has been called "the Image" by Boulding (3).

Developing the image idea and borrowing from the self-theory of Rogers and Combs, Shaffer holds that the self-image, or "the organized conceptual pattern of perceptions the individual holds of himself" is a "pervading influence on perception--on the meaning imposed upon data as it enters the (perceptual) field" (96:9). According to him, the self image is an "evolving structure with new experience modifying the image but always in terms of the image as it exists at the time of the experience" (96:9).

Self-perception and perceptions of the situation are certainly important elements in consumer behavior but they say nothing of the processes involved in the act of choice. In a discussion of Bayton's paper, Joseph Gartner (55:1436) suggested that:

Once we understand the processes (of decision-making) by varying content,... we can observe the end product of the process and from this infer the manner in which content is perceived.

The interrelationships of a number of psychological variables have been examined by Walter Woods (76) who suggested that consumer and product variables are the two sets of factors determining the choices made by the consumer.

In the category of consumer variables, he included motives, cognitive structure and habit, which are different from individual to individual and are influential in the process of discrimination among products. Woods sees the market as being composed of: (1) a habit-determined group; (2) a cognitive group--sensitive to rational claims; (3) a price-cognitive group; (4) an impulse group--reacting mainly to physical appeals; (5) a group of "emotional" reactors; and (6) a group of new consumers not yet stabilized.

Woods maintained that maybe as much as 60 percent of the market is habit dominated, while 20 percent of the decisions made result from cognitive behavior. The other 20 percent results from consumer's responses to affective and symbolic appeals, which Woods described as "impulsive" and "irrational" behaviors. An important qualification not

mentioned by Woods is that every individual, at times, may shift from group to group according to the type of product bought, the mood he or she is in, the immediate influence, the available resources at the moment, etc.

Woods' classification of behaviors according to specific product qualities (affective) or the meaning attached to a particular product rather than its function (symbolic) is similar to Bayton's classification of product attributes into stimulus and image attributes. What Woods identified as product variables are not the particular attributes of a good such as size, color, brand, etc. but the "demand character" of the products which may be functional, hedonic or symbolic (prestige, maturity, status and anxiety).

Implicit in Woods' classification of consumer and product attributes is the importance of perception on the cognitive structure of the individual and on his reaction to product appeals.

George Katona, who is both a psychologist and an economist, has done extensive research on consumer behavior and it is under his leadership that the annual series of Surveys of Consumer Finances was initiated, first by the USDA and then at the Michigan Survey Research Center.

In his earlier work, Katona (19) emphasized the multiplicity of motives entering into decisions, some reinforcing one another and some conflicting with one another. He maintained that it is necessary and feasible to analyze motives,

keeping in mind that it is not enough to list them, but essential to find out about the strength and immediacy of the motives in order to make predictions.

While traditional economic theory recognized only one positive motivational force, the maximization of satisfaction (utility), psychological theories recognize negative motives as well, such as the reduction of tension and the avoidance of disequilibrium. Studying consumer motivation, Katona concluded that motivation can be strengthened by the presence of positive and negative motives and that highly motivated behavior may arise even without dissatisfaction, for instance in people who exhibit a high need for achievement.

According to Katona, what seems to be most important to the individual is to achieve his level of aspiration. This level of aspiration changes from time to time and it is usually lower than the ideal level but higher than the achieved level, so that people are continually striving to improve the conditions in which they live. Katona believes that aspirations usually grow with achievement and decline with failure. This would explain the strong desire of relatively high-income families to further increase their income while low-income families, because of continual frustrations, seem to lack motivation and exhibit an apparent absence of concern for striving toward specific goals. Other important

aspects of aspirations are: (1) that they are "reality-tested," that is, dependent of the consumer's situation and ability to buy; and (2) they are influenced by peers and frequently imposed upon the individual from the outside.

In contrast to many psychologists who believe that motives are difficult to ascertain because they are elusive and unconscious and consequently argue for the necessity of probing for the hidden motives, Katona maintained that even the superficial answer people give when asked about the "why" of their behavior may be of importance, even more so than the hidden motives, because these are often unique cases not to be generalized. Katona proposed that another fruitful method of discovering motives in addition to asking people directly is to compare the economic characteristics (income, age, liquid-asset holdings, etc.) of buyers and non-buyers of a particular item for a given year as well as the attitudes and expectations of the two groups concerning general economic conditions, prices and incomes.

Katona did extensive studies of the attitudes of consumers toward income, assets and expenditures. In relation to income, he suggested that the meaning of a given income is dependent on the situation in which the consumer finds himself: age, number of dependents, levels of aspirations, past income changes, income expectations and the consumer's position in the income distribution. These three last factors are closely related to Duesenberry's and Friedman's relative- and permanent-income hypotheses.

Levels of aspirations are also at work in developing attitudes toward assets. Katona pointed out that there is no absolute limit to the accumulation of a variety of assets--liquid assets, investments, inventories--except the continual conflict between savings and expenditures.

Attitudes toward expenditures depend, according to Katona, on past commitments, enabling conditions and precipitating circumstances. Past commitments refer to fixed or prior charges on the household budget; enabling conditions would mean "ability to buy" and are influenced by income (as explained above), taxation, assets and credit availability; precipitating circumstances are external variables that may trigger or arouse a need for a particular item--advertising, new invention, etc.--or produce a problem resolvable by means of a purchase--running out of a particular product, breakdown of an appliance, etc.

All along, Katona speaks about attitudes (or subject's attributes) because they are the intervening variables through which the other variables are perceived before they influence the act of choice. Since attitudes are part of the consumer's make-up and the other variables are attributes of the environment, consumer behavior is seen as the result of the interplay between an individual and his socio-economic environment. Social variables seem to be overlooked in Katona's paradigm, but they are implicit in the importance given to attitudes. We know that attitudes are shaped by past and present economic,

social and political factors. Once they become internalized, attitudes have an important role to play in the behavior of the individual.

Simon (73:48), comparing theories of decision-making in Economics and the Behavioral Sciences, stated:

The work on the formation of expectations represents a significant extension of classical theory. For, instead of taking the environment as a 'given', known to the economic decision-maker, it incorporates in the theory the process of acquiring knowledge about that environment. In doing so, it forces us to include in our model of economic man some of his properties as a learning, estimating, searching, information-processing organism.

A group of social psychologists, working on the process of decision-making (without any reference to consumer decision) described the phases of the decision process and then attempted to identify relationships among decision-making processes and personality characteristics, using paper and pencil tests with 100 pairs of adults. Brim et al. (4) focused their research on the evaluation phase--weighing alternatives--and on the strategy-selection phase--choosing--of the decision-making process. Various personality tests were administered and correlated with the decision-making procedures of the individuals studied. Brim and his co-workers defined three explanatory variables: (1) characteristics of the individual; (2) characteristics of the situation; and (3) characteristics resulting from the interaction of the two. The personality variables studied were:

(1) intellectual abilities; (2) motives--level of drive,

desire for certainty, twelve enduring personality traits, and unconscious motivational factors; and (3) beliefs: epistemological--those concerned with characteristics of nature, instrumental, cognitive complexity and dominance.

Results of the study showed that people who tend toward dependency will be more optimistic over outcomes of decisions, will consider fewer such outcomes in evaluating alternatives, and will be less "rational" in their preferential ranking of actions. Some differences in the decision-making process were also found according to social class and sex. The researchers concluded (4:234-235):

General values and orientations toward life, together with the cultural background of the respondents, seem to account for more variability in decision-making than the more traditional personality traits.... Verbal intelligence has a negligible relation to decision-making process.... Anxiety seems unrelated to whatever cognitive processes are involved in decision-making.

The study of problem-solving behavior contributed significantly to our knowledge of the personality, an important variable in the act of choice. The literature on the subject has been reviewed by Gagne(12) who indicated the following individual differences as having the strongest relationships with problem-solving: (1) amount of information stored; (2) ease of recall; (3) concept distinction; and (4) fluency of hypotheses, a very important concept defined as the difference in the facility which people combine rules into new hypotheses. Such concepts as flexibility, rigidity, vertical and lateral thinking and creativity may be important factors

in the cognitive processes of the individual as a consumer but no research has yet been done in this area.

Motivational Research

A consumer research that has become popularly known as motivation research draws extensively from clinical psychology and contends that needs, drives and motives--conscious or unconscious--are the key to understanding consumer behavior. Concentrating on the study of the consumer's attributes, researchers involved in motivation research developed a series of techniques: depth and group interviewing, narrative and picture probes, role playing, sentence completion, word association, etc., to probe into the remotest corners of man's mind in order to find reasons for behavior. In many instances, they fail to recognize that, not only the personality of the individual, but also the socio-cultural environment are basic determinants of motivation and cognition. They seemed to ignore the fact that the psychological make-up of an individual is dependent on the societal and cultural values he has internalized through the socialization and acculturation processes. Another flaw of the motivational research results from the assumption or inference that personal motives, whether biological or social, are generally in operation in all individuals, which is not always true in the case of socially determined motives.

Motivation research can be useful to study consumer's response to certain attributes of a product but it has often

been overvalued and misused in an attempt to know more about consumer motivation. While the devices and techniques of motivation research have helped determine some conscious and unconscious factors underlying consumer behavior, they have been less useful to study the consumption decision and they have limited use for prediction.

Contributions of Economics

In the conventional theories of consumption, psychological and socio-economic factors (other than income and price) were considered to remain constant (a *ceteris paribus* assumption). The formation of tastes and preferences was assumed to be outside the field of economics, and the subject's and product attributes were completely ignored.

The postwar developments brought about new dimensions to consumer behavior research.

Income and Consumer Behavior: New Hypotheses

Based on the fact that time-series data on ratios of consumption and savings to income did not adequately support Keynes' theory, economists (notably Duesenberry, Brady and Friedman) formulated and tested a "relative-income" hypothesis. They postulated and found evidence that one's consumption is dependent on actual consumption of others in his group and/or on his own past levels of consumption.

Duesenberry argued that imitation and/or emulation govern one's pattern of expenditures and he referred to the "demonstration effect," or the effect of the use of a product by one person on the purchase pattern of another. Such a phenomenon implies that preference patterns are not independent between individuals in a group. In Duesenberry's words (9:19):

A real understanding of the problem of consumer behavior must begin with a full recognition of the social character of consumption patterns.

Milton Friedman and Modigliani, Brumberg and Ando (M-B-A) proposed the "permanent-income hypothesis." They described consumer's expenditures as being related both to past and expected income as well as to current or actual income. Friedman (11) identified transitory and permanent components in current income and consumption of a consuming unit: transitory refers to present income and events while permanent represents the expected wealth over the consuming unit's lifetime (discounted to derive present values). Friedman assumed that transitory and permanent income as well as transitory and permanent consumption are not related in a systematic fashion and that permanent consumption has a fixed ratio to permanent income, depending on a variety of factors such as human resources of the consuming unit, their tastes and preferences, the interest rate, etc. A number of economists have questioned the validity of Friedman's assumptions.

Modigliani, Brumberg and Ando (27) also identified transitory and permanent components in income and consumption but they did not assume that they must necessarily be unrelated. Their basic propositions, on the whole, are similar to Friedman's.

Socio-economic Factors

Life cycle of the family. Using the family as opposed to the individual as the consuming unit, David and Morgan investigated the relationship between consumption and the family life cycle. David (8) was primarily concerned with economic factors and he postulated that family composition (age, sex, marital status, expectations, planning horizons and culturally defined needs) at a particular point in time largely determines the household preference function. While he did not empirically investigate expectations and planning horizons, he studied the size of the family in relation to consumption of selected durable goods. He found evidence of significant relationships between family size and such variables as frequency and kinds of goods purchased, and the substitution of goods for commercial services. He also found that age and marital status were important factors in the consumption of specific durable goods, like housing and automobiles.

Working at the Michigan Survey Research Center, James Morgan (28) investigated family decision-making expenditure patterns over the entire life cycle of a family using cross

section data of families classified according to the eight stages he defined. He found evidence of sequential purchases and of a replacement cycle of durable goods related to specific stages in the life cycle of the family.

Other socio-economic factors. Other socio-economic factors studied in relation to consumption have been education and occupation. Research done in this area pointed out that both factors affect preference for goods, long-run income expectations and attitudes toward savings, income and assets. Morgan (29) and Watts (37) did the most significant studies in this area. From their findings it would seem that the security and stability provided by a better education (and occupation) result in a greater capacity to plan ahead and a readiness to make commitments and to innovate or "try new things" more willingly.

Race and location have been incidentally incorporated into some of the consumer behavior studies but not in a systematic fashion.

Routine vs Genuine Decision-Making

Another important contribution of Katona, besides his research on motives, attitudes and expectations, is his distinction between routine behavior and genuine decisions. Katona never questions the consumer's rationality and he firmly believes that the consumer is not ignorant about economic news that is very important or very salient to him.

He contends that adaptability, which implies flexibility and learning, is the "prototype of intelligent behavior" (20).

Habits are a result of the consumer's ability to adapt to new situations; they are formed by repetition and are carried out quite automatically. On the other hand, problem-solving behavior is a highly selective process. It is characterized:

... by the arousal of a problem or question, by deliberation or thinking which involves reorganization in a specific direction, by understanding the requirements of the situation, by weighing alternatives and taking their consequences into consideration, and finally, by choosing among alternative courses of action. (20:140)

Genuine decision-making is a relatively rare occurrence; its main alternative is not impulsive but rather habitual behavior; it is usually a derivation from routine behavior following strong changes in motivation or in the environment; and changes due to decision-making tend to be substantial and abrupt.

Once made, many decisions--those involving frequent and smaller expenditures--usually lead to habitual or routine behavior over a long period of time. Breaking with habitual expenditure behavior may be very difficult when it is necessary to give up habitual satisfactions but it is made easier when it opens the possibility of satisfying further desires.

If we relate these characterizations of routine and genuine decision-making to the previous remarks on the perceptual field (p. 36) we could say that it is only when new data which are irrelevant to the image or to a set of

organized perceptions are observed that habitual behavior is replaced by genuine decision-making. Katona suggested that it is even possible that no genuine decisions are ever made in respect to certain regular expenditures. The individual will simply follow the pattern set by relatives or friends without any deliberation or appraisal of the situation.

George Katona described the process of decision-making as a rare occurrence, used mostly for major purchases and associated to certain personality characteristics and to different precipitating circumstances.

Ruby Norris was also concerned with the degree of conscious deliberation before purchases. She differentiated between short- and long-run theory of consumer demand (34). In the short-run--a period so short that no changes in income and consumption occur--consumer's expenditure patterns may vary in three possible ways: (1) areas where careful weighing is absent--expenditures are already established by past commitments or goods are so unimportant or low-priced ("petty goods") that the consumer does not feel it worthwhile to spend time in evaluating alternatives; (2) areas in which careful weighing occurs--habitually-used goods for which amount to be spent is large enough to influence other expenditures; and (3) dynamic residual, or the amount of money left after commitments and habitually-used goods have been bought.

In the long-run, Norris believed that commitments are usually carefully revised, estimates of what are "petty goods" may also be reascertained and habits, tastes and preferences

change significantly. Norris stressed the cultural influences as a major factor affecting long-run changes in the expenditure pattern of the consumer but she did not explain how these changes come about.

Shaffer defined the dynamic residual as the amount left after commitments, necessities and repetitively purchased luxuries have been bought (96:31). He maintained that this money left represents "experimental funds" and provides the greatest element of change in the cumulative process of consumption. Such goods and services acquired with the dynamic residual were not previously known to the consumer and his new experience may influence future purchase pattern in different ways: (1) the consumer's preference pattern may be modified; (2) newly acquired goods or services may become necessities and thus alter future expenditures; (3) new commitments may be created that will also affect the future purchase pattern; and (4) the existing bundle of goods is affected by the new acquisitions. Shaffer concluded that the larger the magnitude of the dynamic residual, the greater the potential influence of advertising on consumer choices.

Decision-Making as a Process

Economists as well as psychologists, such as Orville Brim and James Bayton, have worked on the theory and process of decision-making. They suggested that theories of utility and demand could be reformulated by testing a wide variety of individual decision-making behavior. The most significant

research in this area was conducted by Clarkson and Burk. Clarkson (6:126) suggested that consumer decision-making involves at least five sets of sub-processes: (1) decisions as to what proportion of income will be spent on each category of commodities over a specific period of time; (2) decisions concerning the use of cash or credit to obtain the good or service; (3) decisions involving choice among alternatives within each category of commodities. Some economists still believe that consumers will be motivated by the maximization of utility or finding the best alternative in terms of specific criteria; others suggest a satisficing model, where decision-making is based on search activity to meet certain aspiration levels; (4) another sub-process will be directed to handling expectations about future variations in a number of variables such as price, assets and income; and (5) the last set of decision processes will help control and evaluate over different periods of time.

Clarkson suggested that a theory of decision-making may be developed from the theory of human problem-solving developed by Newell, Shaw and Simon which explains behavior in terms of a set of basic information processes. These processes involve:

- (1) A control system consisting of a number of memories which contain symbolized information and are interconnected by various ordering relations....
 - (2) A number of primitive information processes, which operate on the information in the memories....
 - (3) A perfectly definite set of rules for combining these processes into whole programs of processes....
- (6:110)

Nicosia (33) developed a scheme integrating behavioral and marketing knowledge and their effect on the consumer decision processes. His framework can be tested by computer simulation but may be confusing because it incorporates a series of decisions by both the firm and the consumer. Nevertheless, further developments of the model may provide useful ways of improving experimental research and marketing theory.

Pack (40), studying decisions under uncertainty, described three models of decision-making:

- 1) rational models, where the actual decision made is compared with the optimal decision determined independently. This decision theory based on statistics and probabilities is seldom used for family consumption decision behavior.
- 2) irrational models derived from the structure of the person. Back says that:

Ideally, if we knew everything about the person, we could predict all his decisions according to these models, just as we can predict all rational decisions if we know the structure of the situation, the payoff, and the probabilities.

The problem is that what we know about an individual is a small part of him and not necessarily the part most indicative of his behavior.

- 3) non-rational models, that apply to situations of subjective uncertainty and individual autonomy. The sources of this model are not mathematical or psychodynamic, but rest more on the analysis of experience.

Back pointed out that models are idealized situations and that almost every decision is partially rational, irrational and non-rational. Each decision is determined jointly by the objective situation, the individual predispositions and the conscious commitment.

Other Approaches to Consumer Behavior

A theory of consumer efficiency was developed by Anthony Downs (51). He suggested that consumers are seeking maximum efficiency of consumption and he hypothesized that, in order to do so, consumers try to minimize the basic costs of consumption--in terms of money, time and energy spent. Money costs include not only the price of the good but also the cost of transportation and any income foregone by using time to shop around. Downs believed that consumers regard time as more important than money for low-cost, standardized items; and money more important than time for high-cost items. The relative importance varies depending upon consumer's income, specific prices, degree of standardization and time-pressure, in terms of both the time available and the value attached to leisure.

Lincoln Clark, in his book on consumer behavior (5:100), developed a diagram of the factors affecting consumer choices. Specific stable personality variables such as motives, needs and goals (measurable by T.A.T. or other projective tests) and also situational variables (incentives and constraints of each of them) and the way they are perceived by the individual

are the factors involved in the evaluation of the expected relative utilities of alternatives. In the decision-making process, they function differently according to the mental and psychological make-up of the individual: his abilities, his generalized habits and attitudes, his defense mechanisms and his abnormal or pathological responses to specific stimuli.

The research done by Marguerite Burk on food consumption has been extensive and very significant. A large segment of her work consisted in macroeconomic analysis of United States food consumption trends and patterns, but Burk also devoted much effort and time to studying food consumption behavior and expenditures of specific groups--children, upper-income families--and in developing conceptual frameworks and models to analyze the structure of the food consumption.

Burk proposed a systems approach to studying food economic behavior of the family (47). She sees the family as operating a set of systems, one of which is concerned with the economic functioning of the family. Five subsystems are necessary to the economic functions of the family:

- 1) Communication and decision-making, which involves planning and control at three different levels.

This subsystem coordinates and serves each of the other four economic subsystems.

- 2) Development of human capital, to increase knowledge, information and skills; to help clarify values; and to develop buymanship. This development is made

possible by formal education and search for relevant information.

- 3) Consumption, which include food procurement, information regarding family needs and market possibilities.
- 4) Production, or the processes necessary to the distribution and utilization of foods, i.e., food preparation, home preservation, etc.
- 5) Storage: inventory management, upkeep, etc.

For the systems to operate efficiently, information and decision-making are necessary at all levels and these are in turn affected by the social, psychological and economic factors described earlier in this chapter.

In her study of food expenditures of upper-income families, Burk utilized a conceptual framework she had developed previously. This framework shows the relationships between factors believed to influence consumption (48). The socio-economic variables are: (1) family structure and organization; (2) current social placement; (3) mobility history; and (4) economic situation. Two other socio-economic variables are considered: family value orientation and family life style. A third category of factors related to consumption enters from the supply side. Finally, the last category comprises the psychological factors: motivation, biogenic and sociogenic needs, cognition, "consumership," expectations and attitudes. The combination of all these factors result in such consumer actions as rate of expenditures for

all foods, relationships of food expenditures to total consumer expenditures, shares of food groups in total expenditures and several types of food buying practices.

Contributions of Home Management and
Family Economics

Home economists with a particular interest in home management and family economics have done a great deal of research in the general area of decision-making and have emphasized the importance of values, goals and resources in the process of choice among alternatives.

Decision-making was initially studied in relation to the total management process (15,32) and it is only in the last 15 or 20 years that research has concentrated on the process or the act of choice. Gross and Crandall (14) were pioneers in this area and their definition of decision-making as the "crux of management," the core from which depends all other phases of the process, opened new avenues for research.

Paolucci defined the decision-making process as:

- (1) identification of feasible alternatives--including goals and resources--;
- (2) evaluation of each alternative; and
- (3) selection of one alternative or mediation of conflicting alternatives. She pointed out the importance of accurate information and family participation in order to make conscious and effective decisions. In her words (70:342):

Adequate knowledge about the alternatives coupled with participation of family members in the decision-making provides the family with a twofold advantage: (1) improved decisions because they are based on more accurate information and (2) greater motivation to implement decisions.

Magrabi (65) defined decision as a system having as its object the selection of an alternative. The system is composed of a set of alternatives characterized by both subjective and objective relationships. The decision-maker, endowed with specific attitudes, skills and predispositions, operates in a circumscribed environment delineated by his own perception of the reality around him. Magrabi and Paolucci both differentiated between the field of choice or the "realm of possibilities" and the act of choice or the "processes involved in arriving at a decision."

Paolucci suggested differences between central and satellite decisions (95), an aspect of decision studied by Plonk for her doctoral dissertation (87). The concept of central and satellite decisions is important because it is related to most of the variables associated with the consumption decision. For instance, the decision of a married woman to seek gainful employment outside the home is a central decision that will bring about a number of satellite decisions in regard to home management practices, purchase of foods, use of public services, etc. It will also affect income, family members and activities in innumerable ways.

Personality characteristics of the decision-maker were studied by Bustrillos (84) and Halliday (85). In addition,

Halliday related personality factors to the type of decision and procedure used to make a particular choice.

Theoretical research was generally limited and most of the studies done by home management people concentrated on the different factors involved in specific household decisions, i.e., the buying of food, clothing and housing, the use of credit, etc. Factors most often studied were: education, income and social class, family life cycle, gainful employment of the wife and mother and the consumption pattern for specific goods and services. Knowledge, preferences, attitudes about products, laws, grades and standards for different commodities were also the subject of some research, but to a lesser extent.

Research on resources and the concept of resourcefulness has also a direct bearing on the study of consumer behavior. Resources, as identified by home economists, are an encompassing term for personality as well as economic variables and the review of literature on consumption demonstrated how important these variables are in the act of choice.

The research on values has proceeded in several directions, none of which directly relates to their influence on the consumption decision except in a very general sense. Values have sometimes been confused with needs, incentives or goals and home economists have shown an increasing concern for the clarification of the concept. Further research in this area could contribute significantly to the study of

consumer behavior. Scientists interested in the hows and whys of consumption are still baffled by the process of change in tastes and preferences, a phenomenon that might very well be related to the values held by the individual. How do changes come about? What are the most important factors involved in change of tastes and preferences? What are the characteristics of the people most prone to acquire new preferences? Most of the work done on the diffusion and adoption of innovations emphasize personal attributes of the individual as important variables related to the way they react to new ideas and techniques. Empathy, leadership and cosmopolitaness are among the important factors described by communication scientists. The relationship between values and change has not been explored extensively despite the fact that values are believed to play an essential role in the process. Home economists, with their concern for values as the reason behind individual and family behaviors, should direct their attention to such study. It is one area where they could make a valuable contribution.

Research in Consumer Behavior with Emphasis on Food

While the previous section was devoted to the study of consumption in general, the following section attempts to briefly review some of the literature on food consumption behavior. Borrowing and developing concepts from sociology, psychology and economics, scientists and scholars with a

particular interest in food and food products have done research in many areas of food consumption.

Research in food consumption can be classified into four main categories:

- 1) Surveys of household food consumption and expenditures at the national and/or regional level.
- 2) Study of consumer's knowledge, opinions, attitudes and preferences concerning food and food products.
- 3) Study of one or more aspects of food consumption: food planning, food procurement, food preparation, food preservation and storage, etc.
- 4) Research on consumer's response to marketing and merchandising techniques as they relate to food and food products.

A review of the most significant research in each category leads to the conclusion that food consumption is affected by economic, psychosocial and merchandising factors.

The government studies of food consumption and expenditures such as the 1965 Household Food Consumption Survey (77), the study of Food Consumption and Dietary Levels of Households in the United States (78) and the Survey of Consumer Expenditures done by the Bureau of Labor Statistics (81); and such studies as the Life Study of Consumer Expenditures (93), the annual Consumer Expenditures Study by the publishers of Supermarketing (98) and the Expenditure Patterns studies conducted by the National Industrial Conference Board

(94) suggest that the key factors responsible for variations in the family expenditures for food are: age, income, race, location (regionality, urbanization), stage in the family life cycle and size of the family. Occupation of head and education are also related to expenditures and they have often been associated in the analysis of findings. Education, particularly, may contribute to an increased awareness and knowledge about nutrition and result in a greater concern for the health of the family members. It may also reduce the number of misconceptions about food and food products.

Reports from research show that employment of homemaker is also a factor, but findings are contradictory (as we will see in the analysis of consumer research about foods).

Not only total amount spent but also choices among categories of foods are affected by these socio-economic factors.

Outside the family or external to it, price, quality and availability of food products are also important factors affecting decisions about food purchases. Gordon Bivens (91) mentioned two additional factors: credit and market structure. Availability of credit for various commodities other than food may have increased the family commitments and reduced the money available for food. On the other hand, if credit plans were widespread and easily available in food stores, the expenditure for food might be somewhat different. Market structure, as it affects competition, prices, quality and availability of goods is another important factor in food consumption choices.

In her study of the food consumption decision, Minden incorporated the factors just mentioned above in her approach to consumption decision (86) and suggested a few additional variables: (1) environmental determinants, such as current household inventory of goods, immediate and long-range family goals; (2) nature of the products, such as number and closeness of substitute products and relative degree of necessities; and (3) resource limitations, namely storage facilities at home and community facilities of the marketing area.

Preferences, attitudes and opinions about food and food products seem also to be affected by a number of psychological factors. Motives and needs have been studied more than any other factors in relation to food choices. Shapiro (97) indicated that women shoppers have three basic concerns when shopping for food: reduce work, please the family and enjoy the process of cooking. Each concern varies from one individual to the next and one is generally prevalent. Following his study of Chicago shoppers, Shapiro classified his sample in three categories:

- 1) The "work-oriented" women, with a main concern for minimizing the effort involved in food preparation. To this group, which represents 43 percent of the sample, convenience may be a prime factor in their food selection.
- 2) The "people-oriented" women, mainly concerned in

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pleasing the family members. They represent 40 percent of the total.

- 3) The "food-oriented" women, who just love to cook.

Their group, which is 13 percent of the total, will probably be more prone to innovate and try new foods and new recipes. Quality will probably be more important than price in their food purchases.

The work-oriented group may increase in the future because of such social changes as: (1) the greater number of women working part- or full-time outside the home or engaged in voluntary outside activities and (2) the diminishing number of people in domestic service. These trends will develop an interest and a need for food products that are worksavers.

Gardner (54) and later Marguerite Burk (92) described two very common motives for buying: (1) the striving to be economical and (2) the desire to emulate people of higher status. Burk called "economy-minded" those shoppers whose primary concerns are to buy low- or sale-priced items; and "reputation-strivers" those shoppers who seek products with established brand names that connote reliability and prestige.

Needs, habit and past experience affect the choice among alternatives by widening or restricting the field of choice. How these factors work has been explained earlier in this chapter. What was said regarding consumption in general will also be relevant to food consumption. Selected other psychological characteristics like mental flexibility and

resistance to sales pressure have also been mentioned as possible variables affecting food purchase decisions.

Consumer responses to product attributes, advertising and merchandising techniques have been researched extensively by marketing scientists. While we have a bulk of informations about consumers' reactions to physical qualities of a food product and to various promotional techniques, Bivens pointed out that we don't know "the relative importance of beauty in food products relative to such elements as price factors, safety factors and convenience factors" (91:44). We also need to investigate further the effects of advertising. Advertising contributes to consumer's knowledge about food products but it is also admitted that it creates confusion and that the identification of elements which will result in consumer's satisfaction is clouded by many promotional techniques. How is this to affect the food purchase decision? We do not have an answer yet.

Home economists, agricultural economists and marketing scientists working for the government or the industry did a sizeable amount of research on the food buying and management practices of rural and urban homemakers, young married students and elderly, low-income and upper-income housewives, handicapped, etc. The most comprehensive and significant research of the last 15 years in this particular area of food consumption behavior is analyzed in Chapter four.

Summary

This review of the literature on consumption and consumer behavior research is far from exhaustive but it points out to us the complexity of the consumption decision and the infinite number of variables which may influence individual and family behavior.

Because of his unlimited wants and the limited amount of resources available for their satisfaction, the individual (or the family) is faced with the problem of choice between few or many alternatives and he must choose even if his choice is to do nothing.

Consumption is one area of behavior where choices have to be made and in this area, like in any other areas of behavior, the decisions made are contingent upon pervasive and numerous conscious and unconscious factors, more or less controllable.

The individual consuming unit is involved in a decision problem at a particular time and in a particular place and thus, his locus of action is limited. Further boundaries are set by the psychological dispositions of the decision-maker--physical and social needs, value orientation, immediate and long-range goals, personality traits, beliefs, attitudes, opinions, skills and abilities, expectations, total life experience--and his sociocultural structure--written laws and rules, unwritten norms and customs, roles, social class, reference groups, etc.

These appear to set the frame of reference for the decision. These factors are interrelated and interact with each other, sometimes limiting the field of choice, at other times expanding it. They are not static, even if some of them--values, norms, customs, personality traits--seem more stable than others. They continually change and shift in a two-way process: they influence the decisions made and, in turn, they are affected by the consequences of the individual's actions.

These personal and cultural determinants are relevant to the decision situation. The decision situation or decision context is defined as the particular setting of the decision: type of decision, environmental conditions and circumstances, external stimuli, resource limitations and other constraints. Each and all of these variables will affect the consumption decision:

- 1) The type of decision will influence the amount of resources (time, energy, skills, etc.) devoted to the search for, the evaluation and the selection of alternatives.
- 2) Environmental conditions and circumstances--composition of the consuming unit, current household inventory, nature of the product, institutional availability, social placement, economic situation of the family and of the economy as a whole, etc.--will affect the number of possible alternatives, widening or restricting choices.

- 3) External stimuli--advertising, marketing and merchandising techniques, mass media, etc.--stem from the factors just mentioned and influence the consumption decision by arousing needs, shaping values, providing new facts and informations about products, and so on.
- 4) Limitations of resources, both human and non-human, as well as constraints influence the field and the act of choice. Human and non-human resources affect the way people perceive and evaluate alternatives and also affect the quantity and the quality of alternatives available to the individual consuming unit. Constraints of any sort--legal, cultural, social and economic--impose further restrictions and limitations upon the decision.

At this point, it can be summarized that all decisions involve a unique individual in a very particular environment at a specific time and place. The outcomes of the decisions are a function of both the decision-maker and the decision context. Furthermore, the processes used to arrive at a decision, as defined by psychologists and economists, if they are the same for every individual confronted with the act of choice, will also be affected by the decision-maker and the decision context. For instance, the search for and the evaluation of alternatives as well as the selection of a course of action will be affected, among other things, by the type of decision, the resources available, the constraints imposed

by the environment, by cognition and perception and by the individual's attitudes toward risk and uncertainty.

It is evident that this particular classification of variables influencing the consumption decision is one among a variety of ways to clarify the complex aspects of decision-making. Other classifications would serve this purpose as well or better: descriptions and definitions of concepts may be different, i.e., what is called resource by one scientist may be classified as attributes or dispositions by another; external stimuli may be described as situational factors, and so on.

Despite the fact that approaches to the study of consumer behavior may differ or models emphasize some aspects rather than others, every scientist interested in consumer behavior research recognizes the complexity of the process and the need to broaden the research done in this area. Science, industry and consumers, all will benefit in the process.

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CHAPTER III

METHODOLOGY

Research on consumer behavior in the area of food (reviewed for this dissertation) was conducted by the following organizations: (1) universities; (2) government; and (3) industry.

University research includes two categories: (1) studies done by one or more faculty members interested in some particular aspects of food consumption; and (2) student dissertations for the completion of a master's or doctoral degree. Government-sponsored research comprises studies done by various departments of the United States Department of Agriculture and research published by Agricultural Experiment Stations and Extension Services across the states as well as special projects, i.e., nutrition studies conducted by the Department of Public Health. Commercially-conducted research includes studies done by or for various sectors of the food industry: manufacturers, retailers, marketing and advertising agencies, magazines, etc.

For the purpose of this dissertation, a total of 306 different studies done by these different organizations were reviewed. As evidenced by Table I, more than 80 percent of

TABLE I
CLASSIFICATION OF RESEARCH SELECTED FOR REVIEW

	University Research			Government-sponsored Research			Commercially-Conducted Research	Total
	Ph.D.'s	Master's	Faculty	Agri. Exp. Sta. and Ext. Service	USDA and Other			
Personal interviews	25	17	27	88	17	16	190	
Interviews in the store	4	2	3	3	-	10	22	
Mail surveys	2	21	-	5	-	17	45	
Telephone surveys	2	-	2	3	-	1	8	
Panels	6	4	9	11	3	8	41	
Total	39	44	41	110	20	52	306	

the studies selected for review were published by the government and the academic community. The relatively small contribution of the commercial sector is due to the fact that the findings of most research conducted by business firms are not easily available and if they are, an abridged version is often offered. Moreover, a sizeable proportion of this research is published in magazines without any reference to the research design and to the statistical tools used for data analysis.

Aside from availability, selection of research to be reviewed was guided by the objectives of the dissertation and by the definition of some criteria for evaluating the findings reported by the investigators.

One of the main concerns of the author was to summarize the actual state of our knowledge on consumer behavior in the area of food. This was considered more important than a thorough critique of every piece of research in this area. Nevertheless, since the organizations sponsoring or directing the research project, the techniques employed to secure the data and the statistical tools used for their analysis are all important factors influencing the results obtained, an attempt was made to make sure of the validity and reliability of the findings reported by examining every piece of research according to the following criteria:

- 1) Is statement of purpose clearly defined? Are the hypotheses and assumptions clearly stated, if any?
What are the limitations of the study?

- 2) What were the sampling methods used? Are they well described? Is the sample representative of the universe studied? Was this verified and how?
- 3) If an instrument or schedule was used to collect the information, has it been tested for validity and reliability? Is the questionnaire adequate to secure relevant data? Was it tested previously and how?
- 4) Are the statistical techniques appropriate for the purpose of the study?
- 5) Are the findings of the study clearly reported?
- 6) What contributions does the research make to our knowledge about consumer behavior?

In most instances, only the studies that were satisfactory according to these criteria were retained for reviewing. When a piece of research was found to lack some of the attributes of "good" research but was reporting information that was not to be secured otherwise, the findings were included but mention was made of the shortcomings of the study.

Evaluating Different Techniques Used for Investigating Consumer Behavior

A number of techniques have been found useful for investigating consumer behavior: personal interviews, mail surveys, telephone surveys and panel studies. Every one of these has advantages as well as shortcomings and a brief statement of the relative merits of these various techniques

is in order, since all of them were used in the studies selected for review.

Personal Interviews

A little over sixty percent of the studies reviewed relied on personal interviews for data collection. Most government-sponsored and a majority of university research studies were done by face-to-face contacts while about one-third of the commercially-conducted research utilized the technique.

Personal interviews offer the following advantages: (1) they allow better control of the sample, and (2) more questions can be asked and, as a result, more information can usually be obtained. On the other hand, interviews are time-consuming, they tend to be given too hastily and personal bias are often introduced by the interviewer, especially with questions involving an expression of opinion (42,57).

Interviews at the point of purchase were used in some of the research reported in the next chapter. When such a technique is used only to select a sample of respondents that will be interviewed later in a more appropriate setting, the investigator may get the benefits attributed to personal interviews but we can doubt the randomness of such a sample. On the other hand, if interviews in the stores are intended to be the sole means of collecting the required data, not only randomness is questionable but the conditions of the

interview are such that the advantages of the technique are lost for all practical purposes.

Mail Surveys

Mail surveys represent less than 15 percent of the studies reviewed. They were used mostly in commercially-conducted research and by students working toward a master's degree.

Aside from its low cost as compared to personal interviews, Shaffer (89) sees the following advantages of the mail technique: (1) a wide geographic distribution of respondents is possible; (2) it is useful in reaching specific classes of people; (3) there is no interviewer bias; and (4) no identification of respondents is necessary so that more honest replies can be obtained in certain subject areas. Problems with this technique center around the low return rates and the tendency for mail surveys to exhibit an education and income bias. Authorities in the field (63,68,75,89) believe that there is present in the response to any mail questionnaire as many as 50 percent or more of the total who reply to most other questionnaires they receive. Thus the sample can never be called truly "representative" of the universe being sampled. Wallace (75) maintains that mail surveys should not be used to sample a heterogeneous universe.

Telephone Surveys

Information collected by telephone surveys constitute only 2 percent of the research reviewed and in half of the

cases, telephone surveys were used along with personal interviews or mail surveys.

The technique is useful for the following reasons:

(1) economy; (2) rapidity in collecting data and simplicity of the procedure; and (3) ease of getting interviews with upper-income groups. In addition, biases resulting from the characteristics of the interviewer are minimized and call-backs are easier to handle. On the other hand, disadvantages are many: (1) the rate of refusal is higher than with personal interviews; (2) the questionnaire must necessarily be short and only a restricted amount and type of information can be secured; (3) socio-economic characteristics of the respondent may be hard to determine; and (4) there is no adequate way to handle "not-at-home," "busy" signals and refusals.

Panel Studies

Panels, by definition, are constituted of a list or group of persons selected for a specific purpose. When applied to consumer research, panels may be of two kinds. In one case, the sample of consumers selected are involved in frequent, regular and continuous reporting of their purchasing behavior. Such a panel is meant to be a longitudinal measure of change and trends. In the other case, panel members are recruited by the investigator for a specific purpose, but once they have fulfilled their task, they are under no obligation to report on a regular basis. They may be asked again in the

future but every one of their contributions is a unique event, no different than if they were interviewed personally at home, by telephone or through the mail.

Panels represent approximately thirteen percent of the studies selected for review. In some cases, they were organized by University researchers¹ and lasted from two to ten years, contributing a host of information about behavior and attitude toward food and food products. In other instances, they are set up by commercial firms, magazines and newspapers, retailers, etc., and they are used repetitively for a variety of purposes.² Data collected by these various organizations are often made available to independent researchers (University or government staff members) and most of the Ph.D. and Master's dissertations reporting the use of panels for their research utilized such information.

Panels can usually collect more data from a given respondent than any other survey techniques and if used over a long period of time, changes with respect to particular variables can be more accurately measured. Moreover, a succession of variables can be introduced into the panel or into portions of the panel and their effect studied in various

¹Consumer panels for the specific study of consumer behavior in the area of food have been organized at Michigan State University, Berkeley, Louisiana State, Raleigh (North Carolina) and in Atlanta.

²Results from the following panels are reported in Chapter IV: Chicago Tribune, Good Housekeeping, National Family Opinion, and government panels.

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ways. Operating a panel over a long period presents many problems, namely in regard to recruiting panel members; handling mortality, conditioning and reporting biases; and maintaining sufficient cooperation and rapport as to stimulate accurate response for the duration of the panel.

Summarizing Limitations of the Research Reviewed

Restrictions inherent to the techniques used to collect the data are only one aspect to consider when evaluating research results. A summary follows of the other limitations that were believed to influence the findings of the studies selected for review.

Sampling

Size of sample. As a rule, the samples used were sufficiently large to be representative of the universe studied. The major exception concerns dissertations done utilizing personal interviews. In these cases, samples were very small and, consequently, generalizations of the findings should be made with reservations.

Randomness. It has already been mentioned that randomness was questionable in the case of interviews at the point of purchase, but such research was relatively a small percentage of the total number of studies reviewed. "Convenient" samples, which also limit the generalization of findings, were used by most students at the Master's level and by some

investigators working in Agricultural Experiment Station or the Extension Service.

Questionnaire or Schedule Used

Response variation encountered with different questionnaire forms cannot be ascertained but it appears that the layout and the phrasing of the questions and the length of the questionnaire may have influenced the results considerably. For instance:

- 1) Respondents who were given a list of items to choose from usually mentioned more items than respondents who had no choice given and had to think of their answers themselves.
- 2) Closed-end questions about opinions, attitudes and knowledge generally elicited more answers than open-end ones.
- 3) When respondents were asked to rank items--1st, 2nd, 3rd choice--the answers varied according to the number of choices possible, i.e., items were omitted that might have been included by the respondent if five instead of three choices had been available.
- 4) The meaning of some of the terms used in the questionnaire--"convenience," "impulse purchase," etc.--was not always clear or explained. As a result, what the investigator had in mind when he designed the question and when he analyzed the results may have been different than what the respondent was thinking when he gave his answer.

In addition, questionnaires sent through the mail often failed to motivate respondents to answer with care and precision. This was evidenced by the number of items that had to be ignored because of incomplete or useless information.

The possibility of biases introduced by the investigator in the case of personal interviews has already been mentioned. Other limitations due to the preparation and/or administration of the questionnaire used for specific studies were listed when reporting results.

Analysis of the Results

Statistical computations, mostly descriptive, were generally appropriate for the type of research done. Nevertheless, two comments should be made regarding the association reported between particular consumption behaviors and selected socio-economic characteristics. First, in many instances, no test for significance was administered to measure differences between subjects, which limits the value or the real meaning of the findings. Secondly, factor analysis and/or multiple classification analysis (MCA) should have been used by more investigators for identifying the relative importance of specific socio-economic characteristics. Such techniques would have provided the researcher with better information concerning both identification and magnitude of relationships between several predictor variables and a dependent variable.

Methods of treating missing information were usually reported in the government-sponsored research and in some

university research, whether they were methods applied before any statistics were estimated or adjustments applied after statistical computations. Commercially-conducted research may have used similar methods to adjust for missing dwelling units, non-response, incomplete interviews and incomplete families but information on how the statistical analysis of the results was made was usually lacking in the studies reviewed.

In concluding this chapter, it should be mentioned that the task of comparing findings from studies so different in scope, orientation and design can be as trying as the effort required to reconstruct a broken mosaic or a giant puzzle but it is hoped that the results obtained will add substantially to the existing knowledge in the area of consumer behavior in relation to food and food products and provide a basis for improved consumer protection, consumer education and research.

CHAPTER IV

ANALYSIS FROM CONSUMER BEHAVIOR RESEARCH

This chapter is concerned with the reports and analyses of more than 300 studies pertinent to consumer behavior research in the area of food. Findings from these studies have been presented under the following sections:

- I. Motivational Factors Influencing Food Management
- II. Budgeting and Menu Planning
- III. Shopping Practices
- IV. Behavior in the Store
- V. Attitudes Toward Selected Marketing and Merchandising Practices
- VI. Meal Preparation and Service
- VII. Knowledge About Food and Nutrition
- VIII. Summary of Research Reviewed

Each section has been organized to present a compilation of research results. Associations or relationships between the behavior studied and selected socio-economic characteristics were reported, when available.

Motivational Factors Influencing
Food Management

Behaviors and attitudes toward food shopping and preparation are affected by how the homemaker perceives her role as the food provider and by what are the goals she has set for herself. Most women are concerned with providing well-balanced nourishing meals that their family will like. Nevertheless, they are often restricted by the income and time at their disposal. Moreover, while some housewives enjoy cooking for family and company, others dislike preparing meals but nonetheless feel obligated to perform as well as possible. As a result, differences observed among homemakers in regard to time pressures and/or attitudes toward food preparation will show in their concern and motivations when shopping for and preparing food.

Several studies have been done to evaluate or determine the key motivational factors in food buying. In an attempt to find how housewives differed in the ways they decide what foods to buy, Trier [287,288]¹ asked 242 homemakers representing various income groups to reply to each of 37 statements on a 5-point scale. In addition, women were classified according to eight personality traits, eight socio-economic characteristics and role and self-perception.² Replies were

¹ [] refer to the "List of Research Analyzed," pp. 290-319.

² Socio-economic variables included: size of family, type of family, age of wife, education of wife, number of working members in the family, occupation of husband, income of family

analyzed and factors revealed were as follows (in order of degree of difference in attitude): cost of food, influence from friends, influence from parents, influence from husband, food preparation time, food value, food quality and mass media.

These results do not necessarily mean that cost of food is more important than other factors, for example food value, which was in sixth place. They mean only that women differed more in their attitudes toward cost than in their attitudes toward other factors.

None of the sociological variables had any significant relationship to cost-consciousness, time-consciousness, time-value and mass media. Better-educated housewives were more likely to be influenced by friends and parents, while husbands' influence was positively related to social status. The younger the housewife and the younger her children, the more likely she was to be influenced by her parents; older homemakers, on the other hand, placed greater stress on quality of food.

The more dominating wives were influenced by friends, husbands and mass media. Possibly, as was pointed out by the author, well-educated and dominant wives are more active in their search for food information and more discriminating and intelligent in their use of it. Non-conformists

and percentage of income spent for food. Personality traits were: dominance, conformity, gregariousness, warmth, emotional control, optimism, self-confidence and orderliness.

emphasized the idea of using little time. Housewives ranking high on orderliness and conformity stressed food value. Trier found that wives generally viewed the use of prepared foods (convenience) as not consistent with their role. It is, therefore, the "non-conformist" who most readily accepts them.

Spaeth [266] classified 211 Lansing families into the following categories, according to their observed and verbalized attitudes toward shopping: (1) price-orientation; (2) quality-orientation; (3) convenience-orientation; (4) preplanning-orientation; (5) information-seeking-orientation; (6) calculation-orientation; (7) other-orientation; (8) parent-orientation; and (9) dominance.

Spaeth reported that price, quality and convenience-oriented shopping attitudes were unrelated to per capita income and age of the homemaker. Housewives who scored low in price-orientation also scored low on convenience shopping attitudes. Homemakers highly oriented toward convenience were also highly oriented toward preplanning, information-seeking and calculation.

Hudson and Danner [150] utilized the same categories to determine how professionally employed women made their food buying decisions. Results showed that friends and quality were the most important factors, followed by preplanning and convenience. Mass media, parents, cost and husband dominance were at the bottom of the list.

Minden [201] reviewed 200 studies to determine the importance of price, convenience and quality in the selection

of foods. She revealed that quality was the most important consideration; price and economy were second; and convenience and time management, third. Minden found that homemakers tended to buy a specific quality of foods according to the intended use. Most homemakers could report on food costs for recent periods even if they had limited knowledge of the prices of individual items. Convenience was more important in the selection of the store.

Zehner [335] reported that homemakers' goals were to prepare nutritious meals, get the most "value" from food money spent and provide appealing and satisfying meals for all members of the family. With increased income, women tended to move away from the economic to the more psychological aspect of food. Mize [202] used 18 statements about food marketing choices to classify the 7,059 homemakers in her study into three groups: (1) the homemaker who buys from habit--habitual; (2) the homemaker who analyzes needs and finds justifiable reasons for her actions--rational; and (3) the housewife who follows no set patterns of action, often departing from prevailing practices, and who makes decisions rapidly--innovative.

Seventy percent of homemakers were classified as rational, 15 percent as habitual and about the same proportion as innovative in their approach to making choices about food for household consumption. Age, education, income and marketing knowledge levels were related to behavioral types

of homemakers: younger women with more education and income and higher levels of marketing knowledge were more likely to be innovative and rational in their shopping behavior than women over 60 and those with less education and income. Since marketing knowledge was positively related to education, years of schooling may be the intervening variable.

Hoobler in 1959 [144] and Porter et al. in 1961 [226] investigated motivational factors for food buying and meal planning. Homemakers were asked to choose the six statements (among sixteen) that corresponded to their most important preoccupations in food shopping. Cost, health and nutrition and selection were most important; family wishes and time preparation were second in importance; appearance, prestige and achievement were third. Porter et al. reported that quality and nutritive value were more important to families with higher income while low-income homemakers were more concerned with saving money on food; however, the differences were not statistically significant. Education and income were inversely related to concern for status and prestige.

The Chicago Tribune Survey [1] utilized a scale developed by Shapiro & Associates to measure attitudes toward food shopping. The scale positioned women into one of the three following categories according to their approach to food preparation: (1) work--concern with avoiding work and reducing effort; (2) people--concern with pleasing friends and

family members; and (3) food--enjoyment in the preparation of family meals. Results from the 1958 and 1970 Chicago Tribune surveys showed that cooking orientations have changed in the past decade:

1958	<u>Orientation</u>	1970
	<u>Percent of Homemakers</u>	
43	Work	27
40	People	24
17	Food	49

A number of factors could be responsible for this shift in orientation. The higher standard of living and the new value found in leisure activities have certainly contributed to a new concern for the good life. Preparing food has become an art and evidence of this fact is found every day in the supermarket offerings, in the gourmet section of most supermarket and chain stores and in the proliferation of cookbooks in the bookstores. Even women in gainful employment have more labor-saving appliances at their disposal and the time element is not as much a problem as one may be tempted to believe.

In general, the majority of homemakers expressed satisfaction with their food shopping [56,150,219,272,335] and thought they succeeded in fulfilling the needs of their family. Low-income families said they needed more money to purchase all kinds of foods but generally did a very good job with what they had available [15,26,151]. From 35 to 40 percent of the families with medium income said they would

increase their expenditures for meats and dairy products if more money was available. Twenty percent of the upper-income families in the Burk study [35] admitted they would like to buy more and better meats. In time of inflation, homemakers tended to cut more on food than on non-food purchases. Ways of fighting increased food prices were many: watching more carefully for sales and specials, clipping coupons, buying economy sizes, shopping around more often, preparing more dishes at home, cutting on snacks and convenience foods and using less expensive cuts of meats [182,324].

Budgeting and Menu Planning

Attempt to Follow a Budget

Expenditures for food take such an important share of the family income that careful planning and food budgeting should be a major concern of every homemaker. This is not always the case, however. Research findings suggest that from 33 to 80 percent of homemakers make some attempt to follow a budget, with about 30 to 40 percent doing it on a more or less regular basis.

In half of the studies reviewed, more than 40 percent, and in some instances, up to 69 percent of the homemakers, did not keep any food records (Table II). Which is not to say that they have no idea at all of the amount of money spent for food. As a matter of fact, in Minden's study [201], a very high percentage of homemakers, while unable to quote

TABLE II
PERCENTAGE OF HOMEMAKERS KEEPING A FOOD BUDGET¹

Study Number	Usually	Sometimes	Never	Attempt To	Do Not Attempt
84				56.8	43.2
89				33	67
125	31		69		
174				70	30
210				56.5	43.5
220	37	44	19		
244				62.5	
260				52	48
265				53	47
300	7	46	47		
324	46.4	20.8	32.8		

¹Additional information about each study tabulated by study numbers in the Appendix.

prices of individual items, could report total food costs for recent periods of time. These results led the author to suggest that consumers use price as a frame of reference with the total food budget in mind, and also as a means of making adjustments in spending.

There are a wide variety of approaches to the food budget: (1) no attempt at budgeting--cost is no concern, and the homemaker buys whatever is wanted; (2) no fixed budget but general idea of the maximum amount to be spent on food in a given period--long-range planning with flexible limitations; (3) more or less rigid food budget; and (4) spending what is left after paying other necessary bills.

1

The second approach, general idea of the maximum amount to be spent within a given period, seemed to be most common [84,89,91,210,211,260,335,337]. Several researchers investigated various aspects of budgeting. Zehner [335,337] studied the relationship between approach to the food budget and such variables as income and education of homemakers. She reported that significantly more women with a higher income and education beyond high school used a flexible and long-range approach while those with less education and a lower income relied on a more formal spending guide. She also studied the husband's attitude toward food expenditures and food buying. Of the households with husbands present (98 percent of the sample), 31 percent of the wives thought their husbands were very interested in food buying decisions; 31 percent believed their husbands were mildly to fairly interested; and 36 percent said their husbands were completely indifferent and did not care about the amount of money spent on food. Income level was the most significant variable: the higher the income, the greater the possibility that homemakers considered their husbands indifferent toward food expenditures.

Shaffer [249] found that the approach used to food budgeting significantly influenced the type of purchases and the selection of a store.

Findings about relationships between socio-economic variables and whether or not homemakers follow a budget are

somewhat contradictory. Ottenhouse [220], Schmalder [244] and Shetler [260] found no significant differences by socioeconomic characteristics, but their samples consisted of mothers of senior high school students enrolled in home economics classes and might not be representative of the total population. Nevertheless, Shetler pointed to some trends: higher income and more home economics training were associated with less budgeting. Since homemakers having more training in home economics were also the ones who enjoyed a higher income, income may be the intervening variable.

Lamkin et al. [174], in their study of the food practices of young families reported the same negative association between income and food budgeting. Moreover, they found a significant relationship between the use of a spending plan and weekly food expenditures. Below a certain level, more homemakers tended to follow some kind of budget. If we assume that the lower the income, the lower the level of expenditures, these results reinforce the association between income and interest in food budgeting.

On the other hand, Williams [324] found no consistent pattern between amount spent for groceries and the attempt to follow a budget. Her sample consisted of young student wives and differed from Lamkin's subjects in many aspects: higher level of education, more home economics training, more wives in gainful employment and younger homemakers.

Results of other studies [129,210,260,300] showed the same inconsistent pattern. This suggests the possibility that a multiplicity of factors are, in fact, affecting whether or not the homemaker will follow some kind of spending plan.

Meal Planning

Planning specific menus before shopping is practiced by less than 40 percent of the homemakers [8,201,219,335]. The general tendency is to buy the food first, sometimes with specific items in mind, then plan menus around the food items purchased.

When is the planning done. The majority of homemakers planned their meals on a day-to-day basis, either prior to meal time or at the beginning of the day [8,89,125,211,265,324,333]. One study [333] reported that younger, better-educated homemakers and those who had studied foods did more advance planning. The reverse was true in the lower-income brackets.

Amount and type of planning. The amount of planning and the decisions made as to the foods to be served vary according to the meal and the occasion. Generally, breakfast is either not planned at all or has evolved into a daily set pattern fixed by family preferences [125,300]. Formal lunch is a thing of the past for a significant number of households and it is mostly served in families with young children. In such cases, family preferences, leftovers, time at hand and routine seem to dictate the type of meals served.

Dinner has become the main meal of the day and is usually planned in most of the households. The majority of homemakers plan this meal around meat or a meat substitute and they are more likely, for the occasion, to spend more time in meal preparation and consider such factors as variety in flavor and texture and "good nutrition."

Factors Considered in Meal Planning

Investigations of factors considered in menu planning are indeed very limited. However, many researchers studied the factors influencing food buying decisions and since both aspects of food management are closely related and cannot be disassociated (one buys according to plans and/or one plans according to what was bought), findings in this area reveal also the priorities established by the homemaker when feeding her family (Table III).

Preferences of the family members seemed to be the number one factor in meal planning. Shaffer [247] investigated consumer attitudes toward 157 food items and he reported that the most common reason given for not buying food products was that "someone in the family did not like it." High price was an important reason for not purchasing specific foods such as cream and beefsteak.

Motivational factors for meal planning were investigated by Hoobler [144]. Cost, health and nutrition and selection were most important; family wishes and time and preparation pressures were less important; appearance, prestige and achievement were the least important.

TABLE III

INFLUENCES AFFECTING MENU PLANNING AND FOOD BUYING DECISIONS¹

Study Number	Cost	Family Preferences	Friends and Relatives	Percentage			Variety Quality	Season
				Nutritional Value	Time--Ease of preparation			
22		41	27					
89	95 ²	99	73	83				
128	86 ²	95		85	64		68	56
202	16 ⁴	37		13				
219	81 ²	98					93	
219	22 ³	91		25	5		28	
272	11 ⁴	64		37				
292	26 ³	33					24	
333	25 ³	34		44	7		19	

¹Some homemakers reported more than one influence.²Categories suggested by investigator.³Categories not suggested by investigator.⁴First choice.

In other studies [7,22,83,128,219,292,333], cost and nutritional value occupied still a prominent role, but family likes and dislikes were considered more important. Ease and amount of preparation, variety in flavor and texture, and season were also frequently mentioned. Bailey [8] found that only 6 percent of the homemakers in her study planned their meals around the "Basic 4" or "Basic 7"; six out of ten used no guide at all but planned according to family preferences and cost.

Young et al. [333] reported no significant differences between families of different income levels but Hoobler [144] and Van de Mark [292] found that families with higher income were more concerned with family preferences, health and nutrition, and quality of foods while the low-income group was primarily concerned with cost (keeping within budget limits). In both studies, younger homemakers were more likely to be interested in the amount and ease of preparation. Education was positively associated with concern for nutrition and variety in the meals served to the family. Training in or knowledge of nutrition showed a similar pattern.

Problems in meal planning. Almost 4 out of 10 homemakers acknowledged problems about planning and buying foods for their family. Younger homemakers, who have not developed yet their own routine and better-educated ones probably because of greater expectations, appeared to have more concerns than older homemakers.

Problems ranged from getting more variety into meals to suiting family nutritional needs and keeping expenditures for food within certain limits. Motivating family members to eat various foods and adjusting to their likes and dislikes were also common concerns [70,144,201,303,333]. These findings were substantiated by the desire for help expressed by more than 60 percent of the homemakers in various studies [113,125,144,201,244,292,333]. When asked for suggestions about the kind of information that would be helpful to them, these homemakers showed great interest in the following areas:

- 1) budgeting and food buying--ways of buying more economically and keeping within the average budget; information on "good" and "best" buys; ways to prepare cheaper cuts of meats; low-cost substitutes; etc.
- 2) variety in the meals--help with meal planning, menus and recipes; suggestions for using fancy foods; information about new products; new recipes; etc.
- 3) nutrition--how to develop better eating habits; information about diets and diet foods; ways to prepare better-balanced meals; etc.
- 4) food preparation--ideas to prepare specific foods such as salads, vegetables and desserts; cooking information for meats; suggestions for quick meals; time-saving ideas; etc.

Minden [201] investigated homemakers' receptiveness to different programs suggested to improve their meal planning.

1

Generally speaking, ideas about "new and different" foods, food preparation, price and economizing, and selection of the "right food" were of higher interest to most homemakers than ideas about improving food buying and marketing knowledge and nutrition information. All these various approaches but one were of high or medium interest to 74 to 84 percent of the homemakers. Nutrition information was the only approach to be of low interest to almost 50 percent of the sample.

When analyzed by socio-economic characteristics, a few differences were found. Price and economizing appealed most to the middle-income group; food preparation and nutrition information were of more interest to women with better education. Younger homemakers were more receptive to information about nutrition while a higher percentage of older women in the sample showed less interest in a number of the suggested approaches.

Sources of Information About Food Buying and Meal Planning

Most homemakers appeared to be interested in food information for various reasons: help with menu planning, aid in shopping, suggestions for food preparation, seasonal information about food products, etc. But the exposure and the media used to gather such information vary considerably among homemakers.

Results of research are sometimes contradictory, but this may be due to a number of factors: (1) phrasing or

wording of the questions asked; (2) emphasis on some sources of information and omission of others in the questionnaire; (3) number of choices possible; and (4) interests of the investigator. Discrepancies between figures obtained are also dependent on the formulation of the question; for example, whether the respondents were choosing their answers from a list of media or sources suggested by the author or whether they had to name the sources used to get food information, without any help from the investigator.

Sources of information used by the homemakers. Notwithstanding the restrictions just mentioned on the reliability of the findings, some general trends are evident (Table IV):

1) Family members are the most influential when it comes to deciding what food to buy. As pointed out earlier, their preferences dictate what the homemaker will eventually purchase at the food store. Advice and ideas also come from friends and relatives but they are less important than outside sources, particularly newspapers.

2) Advertisements about food and food products are popular, especially newspaper ads which are the primary source of information outside the family. From 30 to 75 percent of the homemakers read food advertisements in newspapers and approximately one out of five are influenced by television or radio commercials. The annual surveys done by Burgoyne Index Incorporated show a 15 percent gain in advertising readership from 1954 to 1965 [243]. Samples, leaflets



TABLE IV

SOURCES OF INFORMATION ABOUT FOOD PLANNING AND/OR SHOPPING¹

% of homemakers utilizing														
Study number	Newspaper ads	Food section in newspaper	Magazines	Family members	Friends and relatives	TV	Radio	Store displays	Store samples	Extension service Government	Cooking demonstrations	Information on labels	Leaflets	Cookbooks
8	52 ²	32					16				7			38
8	33 ³	26					18				9			14
22	53	16	40			24	7	27	21	2	9		14	42
25	38 ²	12	25	28				16	11		4	32	6	35
25	34 ³	18	12	25				10	9		3	26	5	27
27	29		41			18	2							
34	75					17	14							
35	59					18	4							
84	67	62	48	96	62	20	12	30	18	19	14	23	15	53
89	83	58	50	87						18				
122	52 ²	15	27	53	42	38	14	20	31		7	60	11	40
122	39 ³	5	8	45	28	22	18	16	24		7	47	5	25
125	52		25		52	30	18				4			40
144	60					14	8			1			17	
179	62		25		46	18	14	52				34	72	
183	35	11	21			16	3	19			6	32	7	34
210	68	52	51	77	55	25	8	35	32	40	31	40	27	53
260	74	50	45	93	49	23	10	41	29	35	32	32	19	54
295 ⁴	29 ²	16		23	17			17	20		3	16	2	30
295 ⁴	25 ³	6		17	15			18	18		3	16	3	12
295 ⁵	41 ²	8	28	29	19			22	6		2	37	5	41
295 ⁵	30 ³	4	10	25	14			14	8		1	35	8	28

¹More than one answer possible. Figures rounded.²White³Negro⁴Alabama⁵Georgia

distributed by the store or by other agencies, store displays, mail-out coupons and recipes for a specific product or commodity, are also important for about 25 percent of the homemakers [48,50,223,238,293]. (Percentages might be higher when consumers are probed about one type of advertising only.)

3) Magazine articles and advertisements are a valuable source of information for white, middle-class homemakers; from 25 to 50 percent use them more or less regularly as a source of information for food buying and meal planning.

4) Cookbooks are consulted extensively by about 25 to 50 percent of the homemakers, mostly for menu planning and food preparation. Many homemakers also view them as a "good" source of information for nutrition [185,272,331].

5) A sizeable number of women rely also on information on food labels and packages for help in food buying and food preparation.

6) Cooking demonstrations, televised or not, are not very popular with the majority of the homemakers and, in most cases, approximately one out of ten mentioned them as possible source of information, and then only when specifically included in the questionnaire.

7) Many homemakers are aware of the existence of government services concerned with food (Extension Service, Consumer and Marketing Information Program, etc.) but only one out of four (and sometimes less) mentioned them as a regular source of information. The proportion might actually be

higher since a substantial part of the information released by these agencies is often incorporated in newspaper articles and in the food section of most weeklies and dailies and homemakers may not be aware of the origin of the information.

Several researchers have investigated relationships between socio-economic characteristics and preferences for specific sources of information. Preference for newspaper ads was positively associated with age and education [22,35,79,119,122,179,239,249,256,289]. Innovative, white homemakers, suburbanites and families in the middle-income group were also more likely to consult newspaper advertisements than non-white, city dwellers, and both low- and upper-income groups [8,59,79,202,249,295]. Magazine articles, cookbooks, family preferences and friends and relatives were more likely to influence white homemakers with higher education and income [8,22,25,79,119,122,260,289,295]. City dwellers showed greater interest in store circulars and posters than families living in the suburban areas [124]. Non-white, younger homemakers and low-income families used TV and radio ads more extensively than other groups [8,144,159,239,289,295]. Employment of the wife did not seem to affect preferences for a particular source of information.

Evaluating consumer and marketing information programs (CMI). People involved in Consumer and Marketing Information (CMI) Programs are conscious of the fact that sources of information available to consumers are not used to

the fullest. Investigations have been made to assess such programs and to evaluate homemakers' attitude toward the services offered.

Matthews and Ueland [196,197] investigated the CMI program in Louisville and found that nearly 40 percent of the respondents were never reached by any of the media used regularly in the program (radio, TV, newspaper). Of those ever contacted, 46 percent were reached by one media only. Newspaper was the most popular source of information, with 45 percent ever reached and 30 percent more or less regular readers of the marketing column. Radio and television were listened to or watched occasionally by approximately 20 percent of the homemakers. Seven to eight percent only were contacted regularly by these two media. TV programs appeared to have more interest for low-income families. When asked about how much use they made of the information received, fewer homemakers answered affirmatively and newspaper information seemed to be used more often. Use of newspaper information was positively related to education and income.

Burgess [34] did an investigation of the ways consumers in California get their food information. Questionnaires were not geared to any particular extension program but part of them were sent to homemakers enrolled in the Extension program. Results agreed with those of Matthews and Ueland: most homemakers referred to newspapers for food buying helps and 15 to 17 percent also listened to the radio and watched

television. The higher percentage obtained in this study may be dependent upon the higher percentage of Extension members in the sample.

Borton [27,28] conducted personal interviews in one city and telephone surveys in twelve cities to evaluate consumer use of mass media for food information. He reported that 37 percent of the homemakers interviewed read the newspaper food page daily while 44 percent were occasional readers. Approximately two-thirds of them also read magazines for information about food. Television and radio were far less popular. Magazine and newspaper readership was positively associated with education and income. TV viewing was not significantly related to age, income or education.

In an attempt to evaluate the potential of the marketing program, Borton completed 6,802 telephone surveys in 12 Michigan cities. He found that, on the whole, the program was reaching a little more than half of the homemakers through a combination of all three media. On a weekly basis, somewhat less than one-third of the homemakers were reached by the program. In all cities but one, newspaper was the most popular media of information. In the seven cities where TV programs were presented, from 12 to 50 percent of the homemakers had seen the agent previously, but only 4 to 22 percent had watched the program on the day of the survey.

Selected releases of the CMI Program and homemaker's attitudes as well as professional opinions of 14 respondents

toward this type of information were evaluated by Gillespie [113,114]. She reported that, on the whole, 63 percent of the consumers read the releases as often as once a month and approximately 85 percent found some value in the information given. Generally speaking, professional respondents and the author were more critical of the releases than were the consumers.

Porter et al. [226,227] and Johnston [159] found differences between socio-economic characteristics and media preferred for marketing information. Education and income were inversely related to radio listening but there was no consistent pattern for television viewing. More urban than rural homemakers were regular readers of newspapers.

These investigations of the CMI program in various parts of the country suggest that the majority of homemakers get their food information from newspapers. Radio and television take approximately an equal share of the remainder. As a whole, a sizeable number of consumers are reached by one or more media on a regular or occasional basis but there is evidence that not all of them use the information regularly.

Education, income and location appear to be positively associated to newspaper readership but there is no consistent pattern for radio or TV viewing.

Type of information wanted. When asked what type of information they were most interested in [27,28,34,113,144,

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159,292], the majority of homemakers mentioned economic information as their primary concern: how to get good buys, value comparisons, seasonal outlook and prices. Selection of foods in terms of quality, taste and freshness was another important area of interest. Meal planning, food preparation were next on the list. Nutritional information and ways of identifying grades and varieties were less frequently mentioned. Either consumers are not particularly interested in those aspects of food management or they feel they have satisfactory knowledge in these areas. The section dealing with consumer knowledge about food and food products will show that this is not the case.

Planning for Shopping

Planning for shopping can be done in a number of ways: some homemakers plan their menus in detail for a defined period or plan around specific foods (generally meats) and build menus from stocks of other foods on a meal-to-meal basis; others do not have any definite plan but use the food advertisements available before going to the store to decide about the foods to buy; many homemakers plan in a very general way for enough meat, vegetables and staples to last until the next shopping trip, with or without consideration for the season, the advertised "specials," etc. Needless to say, these different methods are not mutually exclusive and may be used interchangeably; yet, there are some indications that women tend to adopt one method and use it more frequently.

Whatever the method or the combination of methods used, homemakers usually perform one or more of the following tasks: reading and comparing newspaper ads; preparing a partial or complete list; planning for substitutions; consulting food articles in magazines, newspapers and cookbooks; clipping and/or sorting coupons; etc.

The extent of some of these preliminary steps to food shopping is discussed in the following section.

Preparing a shopping list. The possibility, exposed in Chapter III, that results from university-sponsored research may differ significantly from commercially-sponsored studies seems to find some justification in this particular area of consumer behavior. Results from 34 studies show that, when interviewed by members of the university community, a much higher proportion of homemakers said they prepared a list before going shopping than when interviewed by investigators from the industry. This may be due to a number of factors. More of the university-sponsored studies were done by interviews and direct contacts with the homemakers and it is possible that the respondents tried to favorably impress the investigator. In many of the commercially-sponsored studies, homemakers were interviewed in the store and were asked if they had a list on that particular day, a case which might not be representative of their habitual behavior. Industry-sponsored studies utilized bigger samples for their surveys so the results obtained may be more reliable.

According to 80 percent of the studies reviewed, from 50 to 90 percent of the homemakers prepared a more or less complete shopping list before going shopping (Table V). As shown in the table, the practice varies considerably depending on the group studied and there is no discernible pattern as to whether or not homemakers prepare their list on a regular basis or only occasionally.

Homemakers used more than one way to set up their list. Zehner [335] reported that seven out of ten women decided upon half or more of their food items before they reached the store. More than 50 percent planned on supplementing their shopping list at the point of purchase. Harris [125] found evidence of a similar pattern and she also mentioned that, for some homemakers, keeping a running or cumulative list or checking cupboards are usual means of preparing their food shopping. Fagot [89] and Peterson [222] reported similar findings. In addition, Peterson found that 38 percent of the respondents in her sample always arranged their list according to the layout of the store in order to save time and energy. An additional 37 percent did so once in a while.

Lamkin et al. [174] indicated that most homemakers kept their list general enough so that some decisions could be made at the store, especially for kinds of produce, baked products and snack items. Women who did not make a list said they "had in mind" what they wanted and made other decisions

TABLE V

PERCENTAGE OF HOMEMAKERS PREPARING A SHOPPING LIST
AND TYPE OF LIST PREPARED

Study number	Prepare a list	Do not prepare a list	Usually	Sometimes	Never	Complete list	Partial list	No answer
1	66	34						
26			48	16	36			
53	86	14						
72			19	71	10			
84			70.4	19.2	10.4			
95	70	30						
112			73	19	8			
121		33 ¹						
121		50 ²						
125	66	33						1
144	87	13						
146	36	64						
160	60	40						
174			52	20	28			
179			52	18	30			
195	65	35						
210			40.2	23.1	16.7			20
220			40.2	37.4	22.4			
222			64	31	5			
244			47	31.5	21.5			
260	66	34						
261			35	50	15			
265	75	25						
272			44	38.1	17.9			
273	71	29						
279	37.4	62.6						
283	45.1	54.9						
324			72.4	14.6	13			
335	77	22						1

¹White²Negro

in the store as well. An investigation of consumers in Milwaukee and St. Louis [95] showed that shopping lists were non-restrictive and mainly a collection of basic, needed items. Approximately 15 percent of the respondents said that their list was restrictive. This fact would suggest that an overwhelming majority of homemakers are prone to some decision-making in the store.

Of the 66 percent of respondents in the Chicago Tribune survey [1] who reported using a shopping list, 37 percent filled their list as items were used in the home; 26 percent listed the items needed before going shopping; 25 percent consulted the ads to make their list and sometimes brought the ad to the store; and 22 percent supplemented their list by decisions in the store. (One or more answers were given by the respondents.)

Positive relationships between education and income and the use of a list were reported by many researchers [1,147, 174,201,210,220,222,244,273,335]. Race and occupation of the head of the household seemed also to be related to the use of a shopping list: families in which the head is white and is engaged in a white-collar or a professional occupation were more likely to use a list than non-white and blue-collars and laborers. Age and place of residence did not show a consistent pattern.

Reading newspaper ads. Since newspaper advertising was named more often than any other printed media as a source of

information for food buying decisions, it appears that homemakers are avid readers of newspaper ads when planning their food shopping. Results of the majority of studies concerned with this area of consumer behavior confirm the fact that 50 to 75 percent of homemakers read newspaper ads before going shopping [1,14,59,179,184,249,285]. There are a few exceptions to this general consensus, however. In one study, only 25 percent of the homemakers performed this pre-shopping task; but the sample consisted of student wives who, for the most part, did not receive a newspaper regularly [188]. The Seventh DuPont Consumer Buying Habits Study [283] showed that only 3 out of 10 women checked newspaper ads before shopping. On the other hand, the latest consumer survey by the Chicago Tribune [1] revealed that 95 percent of the consumers interviewed did read the food ads, the greater majority of them on a regular basis.

Newspaper advertisement pages are consulted extensively. Stubbs [273] found that seven out of ten of the ad-readers in her sample read from one to three newspaper ads regularly; one out of two read three or more; 7 percent read all grocery ads available. The average number of ads read per ad-reading shopper was 2.4 to 2.9 (depending on the city) in the 1966 survey by Burgoyne Index Incorporated [285]. The same survey also revealed that 50 percent of the ad-reading shoppers read 3 or more different store ads before going shopping.

Reading of newspaper advertisements contributed significantly to food buying decisions. Shaffer [249] interviewed 1,200 urban homemakers and reported that 45 percent of his sample believed they were influenced by newspaper ads in what they bought and 30 percent in where they shopped. Among the ad-readers, the percentages were 72 and 49 percent, respectively.

Homemakers used the newspaper ads in a variety of ways: to check "best buys" and "specials" at their usual shopping place; to compare prices between stores; to prepare their shopping list; to decide which meats to buy; to find meal suggestions; to clip food coupons when available, etc. Shopping around was often in direct relationship to newspaper ads readership [1,59,147,184,188,201,222,273].

Few investigators have studied associations between newspaper ad reading and socio-economic characteristics. Trends seemed to indicate that homemakers over 40 years of age, low- or middle-income families and women with larger households were more likely to be regular ad-readers [1,147,179,249]. Education and home economics training showed no consistent pattern. No mention was made of other characteristics in the studies reviewed.

Kohls and Britney [163] found a significant relationship between reading food ads and general orientation of homemakers toward food buying: those who put more emphasis on price did read food advertisements more often and more

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Figure 1

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extensively; less reading was correlated with more concern for convenience and/or quality. The investigators pointed out, however, that these results may just show that women concerned with prices read the food ads as a logical means to get their information.

Shopping Practices

Who Does Grocery Shopping

The wife generally takes responsibility for grocery shopping. Findings of 29 studies revealed that shopping trips for food are made by women alone in 50 to 90 percent of the cases (see Table VI). The proportion is higher for homemakers residing in urban or suburban areas than for rural women [125,146,159,205,226]. More employed than non-employed women tend to shop alone [8,125] and the higher the income of the family the higher the possibility that the homemaker assumes total responsibility for food shopping [35,146].

Children or other members of the family often accompany the homemaker but they seldom do the shopping by themselves. Husbands do shop alone sometimes but they are more likely to accompany their wives, especially in young and middle-income families [128,146,201,226]. Negro husbands shop alone more often than white husbands [8,121,146] whether in urban or rural areas.

Education as an influential factor has been ignored in most of the studies reviewed.

TABLE VI
WHO DOES GROCERY SHOPPING¹

Study Number	Percentage			
	Wife	Husband	Both	Other
8	73	10	16	1
26	57	24	13	6
35	75			25
53	44	14	44	
77	67		12	
89	69	2	14	15
121	50		25	
125	90	4	6	
128	50	10	40	
144	38	9	25	28
146	69	16	15	
159	94	6		
160	60	32		8
174	76	9	15	
188	25	7.5	67.5	
195	74	14	8	4
204		55	40 ⁴	
205	63	15	10	12
219	40		37	23
220	66.6	8.6	24.8	
222	71		19	10
226	89 ²	4	6	1
226	82 ³	2	14	2
253	68	16	13	3
261	65	14	20	1
272	71	3	26	
273	91	4		5
279	54.7	10.5	8.6	26.2
333	64	9	17	10

¹More than one choice possible

²Urban

³Rural

⁴With children--60% if no children.

Frequency of Shopping

Findings of many studies are confusing, mainly because of the wording of the question asked the subjects participating in the studies. In some instances, the researcher defined clearly the categories and choices were numerous (once a week, twice, three times, more, etc.) but most of the time categories were more encompassing, which makes compilation of the results somewhat difficult. It is also possible that, in some cases, findings were distorted by the type of study. For example, when homemakers participating in a study about meats, dairy or egg products are asked about their general shopping practices, they might give their answer in terms of these particular products rather than for their food shopping as a whole. Some peculiar answers seem to corroborate this fact.

Generally, once-a-week shopping was most common for about 50 percent of the homemakers. However, large groups of homemakers shopped two or three times a week, mostly to supplement their major trip, and a sizeable number did not appear to follow any particular pattern. The series of annual studies of supermarket shoppers conducted since 1954 by Burgoyne Index Incorporated of Cincinnati point to a trend toward more frequent shopping (Table VII).

Schapker [243] attributes this change to a number of factors: (1) introduction of early-week advertising; (2) week-day evenings and Sunday openings; (3) multiple-car

TABLE VII

TREND IN FREQUENCY OF SHOPPING TRIPS TO SUPERMARKETS

Frequency of Shopping Trips	Percentage of Supermarket Shoppers						
	1954	1961	1962	1963	1964	1965	1966
Once a week or less	62	59	51	55	54	48	47
Twice a week	18	23	25	24	24	26	25
Three times a week	10	12	12	14	13	13	16
Four or five times a week	4	4	6	6	7	7	-
Every day	6	2	4	2	2	3	5

Source: adapted from the 13th Annual Study of Supermarket Shoppers, Burgoyne Index Inc., New York, Chicago, October, 1969.

ownership; and (4) games and contests related to number of visits to the store.

It is also possible that the burgeoning of discount stores has changed food shopping patterns significantly. Visits to the discount stores have become a new way for the homemaker to occupy her spare time and she usually comes out of the store with additional food items in her shopping bag. Bishop and Brown [24], investigating factors associated with grocery shopping behavior, found that frequency of trips was significantly related to the location of the store.

There are some indications in the studies reviewed that homemakers with larger families and those who live in larger cities shop more often [35,59,201,226,260] while shopping is less frequent when the wife is employed outside the home [8,35,152,199,201] and when she has better and more storage facilities [75,174,201].

There was no evidence of a significant relationship between frequency of shopping trips and income; however, average expenditures for shopping trips was inversely related to shopping frequency. Age of the homemaker did not appear to be an important factor, but research in this area is too small to draw any valid conclusions.

Timing of Shopping Trips

Time of week. According to the studies reviewed, homemakers do most of their food shopping during the last part of the week, with Friday and Saturday the most popular days.

These findings are also supported by Greenbaum's and Ponder's analysis of sales in nine Ohio supermarkets [116,225]. In recent years, the number of Wednesday shoppers has increased noticeably and there are indications that the distribution of double trading stamps on that particular day in many parts of the country is the reason for such a change.

When given the choice (in the design of the questionnaire), from 4 to 37 percent of the homemakers indicated no preference as to the days most favored for food shopping. One longitudinal study [253] indicated that there may be a trend away from week-end shopping in favor of the first part of the week. The main reasons respondents shop during the early part of the week are "less crowded stores" and "better quality" [1,46,226]; shoppers who prefer Thursday, Friday or Saturday do so for a variety of reasons; "payday," "stock-up for the week-end," "more time available," "week-end specials," etc. [1,46,226].

A very small percentage of homemakers go food shopping on Sundays. Reasons for such a behavior have not been investigated extensively. Surveys conducted in Detroit by the University of Michigan [278] and annual studies by the Burgoyne Index Inc. Company [285] revealed that more than 50 percent of the sample felt that it was wrong to do business on Sunday. In the Detroit study, one-third even wanted to make it illegal. Opposition to Sunday openings seemed to increase with age and church membership and decreased with higher education and income.

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Large, young families with full-time homemakers as well as suburban dwellers tend to shop in the middle of the week while city dwellers, older families and families with an employed woman concentrate most of their shopping on Fridays and Saturdays [59,128,201,324]. Burk, in her study of upper-income families [35], found associations between shopping early in the week and such factors as higher social position and a high level of education of the wife. Young medium-size families also tended to fit this pattern.

Time of day. All but one of the studies reporting on preferences for shopping at a particular time of day found that 23 to 35 percent of the homemakers do not favor any particular period of the day and shop at their convenience. However, the majority of homemakers indicated some preferences: from 14 to 67 percent would rather shop in the morning; 20 to 56 would prefer the afternoon; 5 to 32, the evening hours. Mealtime hours are the least preferred time, for obvious reasons. These findings partly agree with Greenbaum's results [116]. In his economic analysis of consumer shopping patterns in five supermarkets, he found that during the first five business days of the week, peak sales generally occurred between 4:00 and 7:00 p.m. No mention was made of the peak hours for Saturdays.

Motives vary for the choice of a particular time: morning shoppers enjoy the less-crowded store while evening shoppers have to shop at night because they work during the day or do not have access to a car at any other time [46].

Burk [35] found evidence that the three factors most related to time of shopping are: stage in the family life cycle, social placement (based on husband's year of schooling and the ranking of his occupation), and incidence and extent of the wife's employment. Morning and afternoon shop-pings are most affected by these socio-economic characteristics. Families with young children and families higher in the social scale are more likely to shop in the morning; late afternoon or evening shopping seem more convenient for smaller households or families without children. Evening shopping is common practice for wives working part- or full-time. A word of caution is in order: we have to keep in mind that Burk was studying upper-income families and that these findings may not apply to the general population. For example, families with young children may opt for morning shopping because they can afford to pay for a baby-sitter, which might not be the case for young families in the middle or lower-income groups.

Time Spent in Shopping

Judging from the data available, it appears that food shoppers do not spend much time in the food store (Table VIII). National surveys done by DuPont in 1965 [279,283] and A & P Stores in 1970 [147] reported that the average customer spends 26 to 27 minutes in the supermarket (including shopping, checkout and bagging) in his major end-of-the-week buying excursion. Other studies [72,126,220,290] confirm the

TABLE VIII
TIME SPENT IN GROCERY STORE

Study Number	Percentage			
	30 Min. or less	30-60 min.	About one hour	More than one hour
72	49		46	5
220	23	39	38	
279	64.2	26.1	9.7	
290	22	22		38

fact that 50 to 90 percent of the homemakers devote less than one hour to their food shopping, most of them spending little more than 30 minutes in the store. Trumbull [290], commenting on a series of surveys done by National Family Opinion, reported that rural families were more likely to spend a shorter time in the grocery store while a greater proportion of city dwellers extended their food shopping from one to two hours in some cases. The report makes no mention of the type of store patronized by customers, which is an important factor to consider in relation to duration of shopping trips. No evidence was found in the literature reviewed in respect to relationship between time spent in food shopping and other socio-economic variables.

Type of Store Preferred

An overwhelming majority of homemakers prefer the supermarket, whether nationally or regionally owned, when it comes to food shopping (Table IX). This pattern holds true for general food shopping as well as for specific categories of food products such as meats, poultry and dairy products. A relatively important number of homemakers also shop extensively in locally-owned supermarkets and neighborhood or small grocery stores. In some instances, this might be the only choice available to them; in other cases, convenience of location becomes a primary factor in their selection of a store.

Despite the fact that discount stores have been taking an increasing share of the market in recent years, a surprisingly small proportion of homemakers mentioned them as the store they preferred. This should not be misleading, however; it is reasonable to assume that discount stores may have been confused with supermarkets in the respondent's mind.

Preferences for a particular type of store are probably related to particular socio-economic characteristics. Unfortunately, research done in this area is very meager. Alice Stubbs [273] interviewed 1,314 families from 23 urban and 12 rural communities in Texas and she found that rural families were more likely to shop for food in a locally-owned grocery while national chain stores were mostly patronized by urban homemakers with high income and education.

TABLE IX

TYPE OF STORE PREFERRED¹

Study Number	Percentage					No Preference
	Chain Store Supermarket	Convenience Specialty Store	Discount Store	Independent Supermarket	Neighborhood Store	
8	65			28	25	2
33	56-59			19		
35	39		5	37		19
40	42				11	47
72	64			19		11
75	60			10	25	
84	86.4	4.8			64	2.4
125	97					3
144	83				16	
210	88.9					6.5
220	76.6		6.5		14.9	1.9
244	79.2		5.1		10.1	25.1
273	62			37		1
310	60	5			18	12

¹ Respondents gave more than one preference in some cases or gave no answer.² Market, cooperatives, community associations, etc.

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Burk [35] reported some relationship between preference for a particular type of store and social position. Patrons of independent supermarkets (specializing in high quality line) were in the higher social position, had higher incomes and had the head of the household in a managerial or professional occupation. On the other hand, discount store shoppers tended to have lower incomes and rank lower in occupational and educational levels.

Wife's employment also seemed to be associated to choice among types of stores [8,35]. More non-working wives patronized small independent stores and many of the wives that regularly went to the discount stores were employed part-time.

Bailey [8] compared Negro and white shoppers and she found that Negro were more likely to be patrons of privately-owned grocery or small independent stores while white homemakers shopped predominantly in chain stores or supermarkets. This behavior may be explained by income and place of residence rather than race: more Negro than white families live in cities and are in the lower income levels so their shopping in small grocery stores may be dependent upon such factors as availability of credit, transportation, location of stores, etc.

Bymers and Murray [40] studied food marketing practices of older households and they reported that 42 percent of the families did their food shopping at the supermarket. About

33 percent patronized a neighborhood store, but only one out of ten seemed to rely on this source of supply exclusively.

Reasons for selecting a particular store. Because homemakers' desires and interests are many and varied, there is no single reason for selecting a particular food store. It is very revealing to observe, however, that when respondents have to answer a closed-end question (when they are asked to choose among a list of motives suggested by the researcher), a greater number of reasons are given and the percentage for any particular category is much higher than when the subjects are left to answer an open-end question (no choices given by the author of the survey). Nevertheless, findings from all studies are quite consistent (Table X).

Most of the studies reviewed acknowledged the central importance of price, convenience and quality in the selection of a food store [57,201,319]. Price is the most important reason in about 50 percent of the cases, but there is no indication as to whether it is the general pricing policy of the store or the price of some categories of food products that is a major factor for consideration. It appears that customers form impressions of the overall prices charged by the store rather than memorize specific prices of items.

The term "convenience" usually refers to the location of the store, but it is not always clearly defined. Is it location in relation to home, to other stores, to access roads and highways? Convenience may also mean much more: ample

TABLE X

REASONS FOR SELECTING FOOD STORE¹

Study Number	Percentage									
	Product Values					Convenience				
	Price	Quality	Variety	Meat	Produce	Other	Location	Personnel	Business Behavior	Values Stamps
1	37	35	46	30	20	29	62			8
8	30	11					38			3
84	60.8		44.8	69.6		39.2	59.2	36.8		
128	93	34	74	86	61	39	61	46		53
144	72	27	42			34	34			
150	15	15		38		21	49			
174	50+									
200	60	6.7	13.3	20	13.3	13.3	60			7
210	13	38.9		22.6		8.3	12	8.3		26.6
220	58		36.5		30	16	38.2	27.1		1.9
285	30.5		7.2		3.5	11	13.7			50.5
319	46	24	23		21	16	29	27		2
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¹More than one choice possible.

parking facilities, parcel pick-up, check cashing, convenient hours, etc. Most studies do not distinguish between the different meanings of the term. Data show that the distance traveled for food shopping varies considerably [146]. Is five miles or more from home to the store a "convenient location" or is it called convenient because of easy access? This and similar issues have not received much attention. The only evidence available [24,163] stresses the importance of convenience, without further explanations. It could be profitable to investigate these different aspects of convenience more adequately.

Quality of the food in general and, more importantly, the quality of specific items is another significant variable. In some instances, the quality of meats will be the decisive factor for selection of a particular store. Quality of produce is also considered but to a smaller extent.

Kohls and Britney [163] developed a model to show the different values affecting the choice of a store. They labeled them: (1) values of convenience--location, physical layout, product mix and facilities; (2) values of products--prices, quality, variety; and (3) values of business behavior--personnel, store features such as trading stamps, etc. Their compilation of the results of twelve studies dealing with consumer selection of food stores showed that 51 percent of all the reasons given referred to product values, 32 percent to convenience values, and 17 percent to business behavior

values. Their own findings from a panel of urban families show the following:

<u>Basic decision-making orientation</u>	<u>Percentage of panel</u>
convenience reasons	15
price reasons	22
quality reasons	17
price-convenience combinations	11
quality-convenience combinations	22
no consistent patterns	13
	<hr/> 100

Results of the studies reviewed for this research stress the fact that product values (price, quality, variety) and convenience values (mainly location of the store) are chief factors in the consumer's selection of a store. Values associated with merchandising and marketing of food products (courtesy of the personnel, service, cleanliness, etc.) are often considered but they are less important to most homemakers.

Among business behavior values, trading stamps follow a very erratic pattern. In two studies [128,220], as many as 50 percent of the homemakers rated the giving of trading stamps above or as high as convenience and quality when listing their reasons for the selection of a particular store; in other studies [1,4,8,174,200,210], stamps were at the bottom of the list and apparently not a very significant factor. (Trading stamps will be dealt with more extensively in another section of this chapter.)

Past behavior often influences the selection of a food store. A study of supermarket customers in Milwaukee and

St. Louis [95] revealed that families who recently moved to a new town or to a different neighborhood usually show a preference for the store they shopped at their last residence. When asked about their reasons, 75 percent believed they shopped in the store with the lowest prices, which was not necessarily the case. According to the author [95:40]: "Apparently, once a habit pattern is established, a shopper justifies her store selection by convincing herself that her store is, at the very least, competitive." Even when they have many complaints and dislikes, consumers do not seem to be prepared to change easily, mainly for reason of convenience.

Possible relationships between reasons for selecting a store and a variety of socio-economic characteristics have not been researched very extensively. Income appears to be more significant than any other variables studied. While price and convenience are usually more important for low-income families, higher-income households are more likely to select a store for reasons such as quality of the food products, service and personnel, etc. [35,144,163,224].

Bailey [8] reported that more Negro than white homemakers were concerned with price in selecting their food store, but this may be related to income rather than race. Kohls and Britney [163] found evidence that the middle-income group is the most unpredictable and the more likely to give a variety of reasons for their selection. They also reported

that age, education and shopping practices are not significant factors.

Food interests and attitudes of homemakers were correlated with their rationale for selecting a store and the results showed agreement between the two variables for almost 80 percent of the sample, which speaks for some "rationality" among consumers.

Loyalty to a store. The multiplicity of factors influencing food buying and the increased number of supermarkets, convenience and discount stores in recent years would suggest that it is now possible and more convenient for shoppers to patronize more than one store for food shopping. Evidence from the literature reviewed shows that this is indeed the case.

The majority of women, 50 to 90 percent, shop regularly in two or three stores [5, 6, 46, 59, 92, 146, 147, 163, 174, 194, 200, 243, 262]. The pattern was different fifteen years ago. The annual surveys of Burgoyne Index Incorporated [285] reveal that while 41 percent of shoppers patronized one supermarket exclusively in 1954, the number had dropped to 18 percent in 1966. Percentage of housewives shopping in more than one supermarket went from 59 to 82 percent in the same period. Surveys of the Chicago Tribune in 1957 and 1963 showed similar trends [194].

Many causes are responsible for the collapse of loyalty to a particular store: new networks of highways and expressways, overlapping of price lines, convenience and accessibility

of transportation, discount stores, competition in weekly "store specials," etc.

Motives for shopping around stem from the many factors influencing the selection of a store: good prices, wide selection, general quality of food products or quality of specific foods (meats, produce), convenient location, preferred brands, deal-offers, evening shopping, delivery, credit, etc. No single store can usually offer all these advantages and most women find a solution to the problem by visiting two or three stores in order to fill their food basket in the best possible time at the best possible price.

Does it pay to shop around? A USDA report (126) says that homemakers can save up to 6 percent on their weekly food bill by shopping the different food stores in their area of residence. McFadden [200] recorded weekly food prices in 3 supermarkets and 4 independent stores of Lafayette, Indiana, for a period of 16 weeks. A market basket of 26 common items (week food supply for 2 persons) was selected and prices on these items were collected in all stores near the end of each week (Thursday evening, Friday or Saturday). McFadden found that shopping around was the best method and would result in savings of 5.5 to 9.9 percent. Selecting one store and buying special items in bigger quantities did not necessarily afford the greatest price advantage. The investigator pointed out, however, that facilities for storage and time involved should be considered before drawing definite conclusions.

According to Cunningham [74], store loyalty should not be measured by the number of stores in which a family shops but by the proportion of a family's food expenditures made in one particular store, what he called the "first store" of their choice. Findings in this area indicate that the majority of homemakers do most of their shopping at a favorite store, however the favorite store may change over time [74,147,163]. In this respect, the A & P study of 1970 [146] revealed that 45.5 percent of the families had over 5 years loyalty to A & P stores in the area.

Cunningham studied store loyalty in this context and he revealed the following facts:

- 1) families with high first store loyalty did not necessarily shop in fewer stores but concentrated most of their purchases in the preferred store;
- 2) 86 percent of the group studied had been essentially loyal to a specific store during the year of the study.

In a study by Kohls and Britney [163], 63 percent of the panel members had the same shopping pattern in 1958 and 1961, the two years of the study.

- 3) store loyalty was independent of the total amount spent for food purchases;
- 4) families were more loyal to chains than to independent or specialty stores. (This finding agrees with the preference for chain stores expressed by most housewives. See page 122.)

- 5) families with high store loyalty did not necessarily have high brand loyalties.

Similar findings were reported by Enis [88] who also revealed that the perception of marketing strategy by consumers was the major determinant of food store loyalty. Kohls and Britney [163] reported a significant relationship between loyalty and reasons given for the selection of a store: consumers emphasizing quality were more loyal than those concerned mainly with convenience or price. There was a small relationship between food interests and loyalty: homemakers interested in convenience in choosing their food products were more loyal than housewives interested in shopping for "good prices" only. Reading ads was not related to loyalty.

In most studies [88,92,163], relationships between store loyalty and income, education and size of the family were not of sufficient magnitude to be used in the identification of loyal consumers. Age and family composition were statistically significant: younger families were more loyal to the "favorite store" and younger homemakers did generally less shopping around [92,163]. Kohls and Britney [163] explained that their pattern of buying is not established yet; they have less knowledge and also less time to shop around because of their young children. Medium-size households were found to have the most mobile travel patterns for grocery expenditures [240].

Two surveys conducted by business and industry [59,146] indicated that city dwellers were more loyal to their store than suburbanites or rural homemakers. Number of stores available and transportation facilities may be significant reasons for such a pattern. Carman [44] found no significant relationship between store loyalty and "deal-proneness," or the propensity to shop for lower prices and all kinds of deals.

Behavior in the Store

Store displays and flyers, deals and store specials, "double-day" for trading stamps and more than 8,000 products on the shelves consistently solicit the homemaker doing her grocery shopping. On the other hand, money and time are limited and the housewife must make her choice hastily to the best of her knowledge.

Consumer educators have exhorted the homemaker to read labels, compare prices and packages in order to get the best for the money spent. But it is doubtful that this control and evaluation are possible when data available suggest that women spend about 30 minutes in the store on the average (see page 120).

The following section examines results of various studies done to evaluate a wide range of store behaviors:

- 1) Label reading behavior
- 2) Price comparisons

- 3) Brand choices
- 4) Unplanned and impulse purchases
- 5) Selection of various food products:

Meats and Poultry
Fish and Seafood
Fruits and Vegetables
Eggs and Dairy Products
Convenience Foods

Label Reading Behavior

Labels were read mostly for product identification and factual information by 50 to 95 percent of the homemakers [53,54,85,153,181,208,220,222,315]. Such results, however, should not lead the reader to believe that the majority of homemakers read labels as a matter of course when doing their shopping. Questions asked for information in this particular area of consumer behavior were very general and, consequently, do not tell us much.

Are labels read as a general practice or only when buying an unfamiliar product? Are they read in the store before purchases are made or at home for "serving directions"? What are the types of information usually sought on the labels: price, brand name, size, number of servings, directions for preparation, recipes, list of contents, etc.? These distinctions were not made by most investigators and had they been included in the studies, results might have been different and certainly more enlightening.

Homemakers in a national survey by National Family Opinion [290] were asked to rank their preferences for six

items on can labels. Choices were suggested by the researcher: four items were related to preparation and service, one to calorie content and one to deal-offering (premium offer). Items dealing with the serving of the food were ranked higher than the other two by the majority of homemakers.

In another national survey designed to assess homemakers' opinions about packaging [96,97,98], more items were included for the respondents to choose from and results indicated that serving directions and number of servings were still important but less than size or weight and contents of the package (which were not included in the study mentioned earlier).

Brand name, size or weight, number of servings and price were considered in that order when reading labels for canned fruits and vegetables [181].

These results seem to indicate that homemakers rely on labels for a variety of reasons but it has not been ascertained if the information is used to discriminate between products on the basis of size and quality.

Price Comparisons

Price comparisons were made mostly at home and less often in the store. Reading ads and shopping around were the most common ways of finding about price differentials between stores. Limited data available in the literature reviewed suggest that the majority of homemakers did not

usually compare prices in relation to size when shopping. The average time spent in the store is further evidence supporting this observation.

Women did compare prices when shopping for specific categories of foods--meats, produce, dairy products--but the quantity of packages available on the shelves, the proliferation of sizes for each product plus the use of fractional sizes by most food manufacturers complicate the task to a point where it is almost impossible for the average homemaker to attempt any meaningful cost-size comparisons.

Consumer advocates, legislators and businessmen have recognized this fact and they have proposed "unit-pricing" as a possible solution to the problem. Several supermarkets across the nation have experimented various methods of unit-pricing; some stores have even tested consumers' reactions to the innovation. Results to date indicate that, as a rule, homemakers did not use the system extensively and to its fullest advantage [106,221]. Reports were that low-income consumers, who would need it the most, benefit less than any other group from the introduction of unit-pricing. This is not to say that the idea is not promising; but the method is new and it will take a while before consumers develop a habit of using it. Education in this area may be of great help to the majority of housewives.

Brand Choices

Competition faced by chain stores and supermarkets has increased tremendously in recent years and retailers have become aware of the need to differentiate their offerings from those of their competitors. One means to accomplish this purpose has been the development of private or store brands. Private brands, also called "distributor brands," are those owned by firms whose primary function is distribution; they compete in the market place with "manufacturer's" or "nationally advertised brands," or those owned by firms whose primary function is manufacturing.

In 1959, approximately 84 percent of all supermarkets carried some private labels [338]. In 1970, this figure was probably higher. In the meantime, the number of items carried under private labels has soared and, as pointed out by Weiss in 1963 [313], quality of private brands is comparable to manufacturers' brands and frequently come off the same manufacturer lines as do manufacturer brands.

Consumer preferences for types of brands. Despite the facts mentioned above, results from various studies at the national or local level seem to indicate that, while consumers buy both manufacturers' and distributors' brands, they have a preference for the nationally advertised as opposed to the store brands (1,38,41,100,109,117,130,212,217, 285].

Results from a private brands study organized for the National Commission on Food Marketing [117] indicated that 34 percent of the women interviewed showed strong preferences for well-known brands, 14 percent preferred less well-known and 52 percent bought both. A recent survey by the Chicago Tribune [1] found that 48 percent of the homemakers purchased only brand labels while 10 percent bought only private labels.

Reasons for preferences were not always clearly defined but most women said they bought well-known brands because they considered them better in terms of confidence in quality, dependability and the like. In some studies [45,155,191], a significant number of housewives said they were willing to pay a premium for a well-known brand. Private brands were thought to be cheaper and about one-third of the homemakers bought them for "experimenting" and "looking for variety."

Brand loyalty. These attitudes toward brands become stabilized as consumers repeat their purchases of a particular brand and develop into loyalty for a specific brand. Research available suggested that preference for a particular family brand was a basic dimension of consumer brand choice [17,109,110,291]. Tucker, reporting on various studies [291], suggested that brand loyalty is a function of the frequency and regularity with which a brand has been selected in the past and of the type of product involved. He pointed out that consumers vary greatly in their susceptibility to brand loyalty.

According to Farley [90], many "outside" variables can cause variation in brand loyalty: (1) price activity (not necessarily price level); (2) importance of the product to the consumer--time and money spent; (3) product characteristics; (4) market distribution--many brands widely available; and (5) availability--number of brands available.

Cavallo [45] investigated brand switching at the point of purchase and he reported that the closer to "superior" a shopper rated the brand she intended to buy, the less likely she was to switch within the store.

Effects of selected variables on brand choices. Psychological and sociological characteristics did not seem to be strong predictors in explaining attitude toward private brands [17,99,100,115,212,213,313]. Myers [213] reported that personality variables explained less than 5 percent of the total variance in private brand attitude. Sociological variables were not strong but superior to personality variables. Wives in gainful employment showed smaller acceptance of private brands. Income was a poor predictor of attitude.

In partial contradiction to these statements are the results of a few other studies. An audit of six stores by Progressive Grocer [228,229] revealed that private brand purchasing was inversely related to income and expenditures for food. White, larger families and those with higher income were more likely to have a positive attitude toward private brands [1,100,186]. Tucker [291] and Stafford [268] found

definite evidence that reference groups influenced brand preferences. Brand loyalty did not seem to be affected by use of coupons or deal-proneness [44,236] but women who shopped for bargains were less likely to be brand loyal [201].

Unplanned Purchases--Impulse Buying

The two terms unplanned or impulse purchases are used interchangeably in the literature reviewed to suggest in-store decisions to buy one or more items not previously planned. Most items purchased on an unplanned basis have usually been purchased before. They represent either out-of-stock items of the same brand or inventory-addition purchases. In-store stimuli usually remind shoppers of present or future needs rather than evoking new needs.

Research results showed that the amount of unplanned purchases varied widely. From 18 to 86 percent of the total purchases have been reported as being the results of store decisions [154,201,254,260,261,279]. Impulse buying varied among the different foods, ranging from produce in the low-impulse category to baked goods and snacks in the high-impulse category. Several studies indicated that women who did not plan in advance were more receptive to various promotions at the point of purchase. Crabtree [72] indicated that displays, store demonstrations, distribution of recipes and leaflets affected impulse buying considerably. There was also evidence [72,83,158,261] that presence of the husband or children contributed significantly to an increase in the amount of unplanned purchases.

Kollat reported [167,168] that neither income, demographic nor personality variables affected customer unplanned purchasing behavior. Variables most susceptible to influence are: (1) size of the transaction--the higher the grocery bill the greater the number of unplanned purchases; (2) type of shopping trip--few unplanned purchases in "fill-in" as opposed to major trips; (3) presence of a shopping list--shoppers with a list had lower unplanned rates; and (4) number of years the shopping party has been married--greater experience with and exposure to food increased the possibility for more unplanned purchases.

Shopping for Meats, Poultry, Fish and Seafood

Meats, poultry, fish and seafood have always constituted the major component in the food budget, representing approximately one-third of the total expenditures for food eaten at home (80). Meats and poultry generally accounted for the bigger share of expenses in this particular category, but with the booming of the frozen industry in recent years, fish and seafood have been made readily available to homemakers and they have been served at family meals more often and in a greater variety of ways.

Other scientific and technological innovations in agriculture, processing, transportation and marketing, together with the general improvement in the standard of living have contributed significantly to the increase in consumption of

these high-quality protein foods observed in the last decade. Prices and the division of expenditures among the various kinds of meats, poultry, fish and seafood have also changed considerably for similar reasons.

Because of their special importance in the food budget and for scientific purposes also, preferences and attitudes of consumers toward meats and poultry have been studied extensively. Homemakers have been asked to reveal their buying habits, define their criteria for selection, voice their opinion about such innovations as self-service and frozen products, and state their preferences for various kinds of meats and poultry products. Fish and seafood have not been studied so extensively, but some data are also available.

Results from these studies are discussed in the following section under two headings: (1) meats and poultry and (2) fish and seafood.

Meats and Poultry

Buying meats and poultry is a primary concern for most families, mainly because of such factors as high price of most meats, selection problems, and lack of knowledge about and time involved in preparation and cooking.

Results of various studies [18,29,42,52,75,84,127,144,150,176,179,187,210,215,233,234,246,250,267,269,297,328] showed that:

1) Approximately 55 percent of the homemakers shopped once a week for meats, and an additional 20 to 25 percent twice.

2) Most homemakers preferred the supermarkets and the chain stores for buying their meats for such reasons as prices, convenience (all foods bought there), and variety (selection). The minority who favored specialty stores and meat markets emphasized quality, variety and reputation of the store.

3) Sixty to eighty percent of the families purchased from one source only [250,283] but the proportion of consumers who shopped around was important enough to suggest that many factors influence where and what to buy. Factors most often mentioned were quality, price and convenience of location [75,150,210,328]. Results of studies were not consistent as to the dominant factor in the selection of a store for meats and poultry buying: in some cases, quality was of prime importance and was often the decisive factor, not only for meat products but for general grocery shopping as well; in other instances, price was mentioned first by the majority of respondents. Business practices (service, personnel, cleanliness, etc.) were other variables considered but to a lesser degree.

Woods and Jenkins [328] reported that reasons for selecting a store where to buy meats and poultry were related to income and level of living--education and occupation of head.

4) Since women did most of the grocery shopping, they also bought meats and poultry for the family most of the time.

5) Household income and composition were the two most important variables affecting quantities purchased and expenditures for meats [187,323].

Pre-shopping plans for meats and poultry buying. Half or more of the homemakers did plan their meat and poultry purchases before going shopping [20,210,215,246,252,283,328]. As mentioned in the section on meal planning (page 93), meals are often planned around meat and poultry products. Lawyer [179] asked the homemakers in her sample to prepare a shopping list; 204 submitted market orders and of these, 87 percent listed meats, more than half of them even specifying kinds and cuts. Meat order was most often at the top of the list.

Consumers also consult the newspaper ads for "best buys" and "store specials." Neigh and Trotter [215] analyzed consumer response to meat-price specials and they reported that 55 percent of the homemakers did in fact shop for meat specials.

Response to kinds of specials varied and was related to income, age and education. Women who shopped at more than one store bought more specials. No association was found between freezing storage space and the purchase of meat specials. Of the meats offered at sale prices, beef was the most popular, followed by pork, sausage, luncheon meats and poultry.

Hoobler [144] found similar evidence. In Lawyer's study [179], 87 percent of the women admitted being influenced by advertised specials and, of this group, 42 percent purchased specials every week. The nationwide survey done by Weidenhamer et al. in 1969 [312] revealed that 60 percent of the homemakers were influenced by price specials, 34 percent of them most of the time.

In-store decisions. Planning leaves room for flexibility and homemakers often alter their plans in the store, for very pertinent reasons:

- 1) Prices--sales on other meat items, lower prices on other cuts, etc.
- 2) Appearance and quality factors--questionable or poor quality of items originally planned, unexpected offers that "looked very good," better quality or appearance of other items, displays, etc.
- 3) Availability--items planned not in stock, preferred brand or grade not sold at time of shopping, etc.

Moxey [210] and Douglas [84] found that only 6 to 8 percent of the homemakers stuck to their list when purchasing meats and poultry. Unplanned purchases were occasionally done for the "rational" motives listed above, but "impulse-buying" of lunch meats, sausage, barbequed meats, wieners and chicken parts were also frequent. Similar findings were reported in The 7th Du Pont Consumer Buying Habits Study [279].

Selection of meats and poultry: factors considered.

There are two aspects in the selection of meats and poultry: the homemaker must first decide what to buy (kind of meat, cuts, etc.) and then she must make her choice from what is available. These two operations do not always follow in this order. In many occasions, women check first to see what is available and "looks best" and decide on the spot (whether or not plans have been made earlier).

Deciding what to buy.--Family preferences are usually mentioned as the most important factor influencing the purchase of meats and poultry. Price and quality follow closely. Other factors considered are ease of preparation, interest in innovations and concern for nutrition [7,20,34, 203,210,226,292].

Homemakers will purchase the meats the family members like, but there is more than one choice possible (hopefully) and it is here that price will be the decisive factor between, say, chicken or pork or beef, chops, steaks or roasts. On the other hand, women will seldom buy a meat, however low the cost is, if the family dislikes it. Quality is important to all homemakers but only a few can purchase all kinds of meats and cuts without any consideration for their cost.

Mize [203] studied determinant factors and motivations in meat choices utilizing a scheduled questionnaire and projective techniques. She classified the 973 homemakers in her sample according to the strength for four motivational factors.

The results were as follows:

Motivation determinants of homemakers	Strength			
	Strong %	Moderate %	Little %	None %
1. Concerned about economic considerations	34	8	50	8
2. Influenced by family preferences	23	13	57	7
3. Consistent in applying knowledge to choices	19	24	40	17
4. Interested in innovations	20	7	38	35

Mize found that low-income families and younger homemakers showed strong interest for economic factors. Family preferences were a strong motivational determinant for women with higher income and higher standard of living and those less influenced by mass media. Consistency in applying knowledge to choices and interest in innovations were strong motivations for women with higher income and for those relying on mass media for their food information.

In addition, Mize compared the strength of motivational factors with adequacy of the diet for meats. Forty-one percent of the homemakers strongly interested in being consistent in applying their knowledge to choices had diets below the recommended allowances for meats; the percentage was more than doubled (84 to 89 percent) for the three other groups. These findings seem to indicate that there is more to good nutrition than sufficient income and education. Women who do not consistently apply their knowledge to meat choices and put other interests first may give plenty of food to

their family but many times at the expense of nutritional quality.

Moxey [210], Douglas [84] and Shetler [260] asked selected homemakers to rank the factors considered when buying meats. The following table shows the results obtained by these investigators (see page 150).

In all studies, price per pound was the first factor considered. Number of servings and total cost (in Douglas and Shetler studies) were next, followed by price per serving and time to cook. The findings confirm the importance of price in meat selection and also indicate that the importance of price per serving, suggested by specialists as the best yardstick for selection, has not been understood by the majority of homemakers in these studies.

The same three investigators studied criteria used by consumers for judging quality. Results obtained by Moxey [210] differed from the other two [84,260]. Moxey found that government grades were most important, followed by brand name, store reputation and appearance. In Shetler and Douglas studies, appearance was named first, which seems much more plausible. Brand name was the least important. The high importance given to government grades in all three studies may be questionable, especially for the reason that homemakers were probed for all meats and not only beef, which is the only graded meat available (not including poultry products). Consumers often confuse grade with

FACTORS CONSIDERED WHEN BUYING MEATS

	Price/lb			Number of Servings			Time to Cook			Price/ Serving			Total Cost		
	Rank			Rank			Rank			Rank			Rank		
	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
	%			%			%			%			%		
Moxey (1966) *	55	38	8	42	51	11	4	11	81	-	-	-	-	-	-
Douglas (1967) *	36	18	18	26	36	26	4	6	20	14	4	12	21	35	24
Shetler (1967) *	32	25	14	26	26	18	3	8	16	9	11	7	19	17	23

*Figures rounded to the nearest tenth.
4th and 5th ranks given in Douglas and Shetler studies only.

inspection (see section on consumer's knowledge, page 207) and it is possible that such occurrence may have biased the results. Samples of the three studies consisted of mothers of students enrolled in home economics classes, which are not representative of the whole United States population. Moreover, respondents may have answered the question with the desire to impress their daughter's teacher.

The nationwide survey conducted by Weidenhamer et al. [312] to assess homemakers' opinion about selected meats revealed that the use of meats is affected by a variety of attributes. Quality, taste, little waste and "helpful to eat" are most important for 49 to 64 percent of the homemakers. Of moderate importance are cooking possibilities, digestibility, safety, perishability and nutritional value (specific nutrients). These categories were suggested by the investigators and it is possible that answers would have been somewhat different if women had been left to their own listing of attributes.

Criteria for judging quality.--Data concerning quality judgments about meats are mostly for beef, since it is preferred to pork, lamb and veal and also more susceptible to vary considerably in quality.

Tenderness was the most desirable quality in beef and homemakers tried to evaluate it by the following characteristics: color and appearance, texture, amount of bone, cut, marbling and trimming [3,18,20,29,42,52,75,149,177,179,203,260,269,328]. The order of importance of these varied among

the various studies but color and amount of external fat were particularly important. Grades were mentioned at the bottom of the list or ignored in the studies reviewed and they could be of greater importance if homemakers knew more about them.

Mize [203] discovered that 60 percent of the women in her sample were unsure of their judgment about tenderness of meat. More often than not, they thought tenderness was related to cooking methods or tenderizing the meat by pounding or cubing. Six percent of the homemakers always used a meat tenderizer, regardless of the cut bought. Mize did not look for association between these attitudes about tenderness and selected socio-economic characteristics. Seventy-two percent of the women in a study by Seltzer [246] also used a meat tenderizer but 21 percent of them were not satisfied with it.

Woods and Jenkins [328] reported that marbling and grades as indication of tenderness were mentioned more often by better-educated homemakers with higher income and level of living. White respondents were more likely to mention fat while non-white used amount of bone more often as a criterion for meat selection.

Size or weight, skin color, plumpness and cleanliness were the most important factors considered when buying poultry [31,71,118,209,218,264,310]. Ranking varied among studies but weight and skin color were mentioned first more often than any other characteristics. Many homemakers indicated that number of pieces was more important than weight

when buying cut-up poultry. Brand name was relatively unimportant and grades were never or seldom mentioned.

Criteria for selection and selected socio-economic characteristics were studied by Mountney et al. [209]. They reported that weight was more likely to be important to white, young housewives and large families; plumpness, to older homemakers and those with a higher income.

Help with meat selection.--Investigators at Louisiana State University [177,328] found that women learned to select meat mostly by trial and error. Outside help came mainly from the butcher, close relatives--mother, husband--and friends. Magazine and newspaper articles were more popular than any other mass media of information. Home economics courses, cooking classes and demonstrations, government bulletins and Extension classes were at the bottom of the list.

Women with less education learned mostly by experience (trial and error) and better-educated housewives relied more on magazines, newspapers and knowledge from previous training with foods. White homemakers used advice from friends and relatives more often; non-white frequently watched television programs as an aid in meat selection [29,42,52,149, 177].

When homemakers manifested a desire to learn more about meat selection--30 percent in Weidenhamer's study [312] showed no interest whatsoever--they could not express what they

wanted except when suggestions were given by the investigators [84,210,260]. In such cases, information as to the cuts that are "best buys" and advice on preparation of selected cuts (mostly those which can be quickly fixed) were most desired. Information about new meat products available and nutritive value of particular cuts of meats were relatively less important.

Lawyer [179] reported similar findings. Difficulties with meat selection were first on a list of buying problems in a study by Burgess [34]. In this study, sixty-five percent of the housewives admitted they had problems with grades, quality of meat, cuts and their uses, evaluation of amount needed to feed the family and nutrition.

Complaints.--Three-fourths of the homemakers in a nationwide survey [312] voiced complaints against meats. Their grievances ranged from deceptive packaging to price, quality (freshness) and waste. Mize [203] reported similar causes of dissatisfaction among the homemakers in her sample.

Butcher vs Self-service. Generally speaking, the majority of homemakers prefer a butcher to the self-service for the selection of their meats. That is, they would rather buy their meat cut to order if cost and time were no consideration and if they had sufficient knowledge of different cuts [18,29,42,52,75,84,95,122,203,210,237,246,260,264,269,285,298].

Evidence is found in Table XI that preferences do not always dictate behavior. In many instances, and even if they showed preference for the service of a butcher, women in the studies reviewed bought most of their meats pre-packaged.

Homemakers found numerous advantages to prepackaged meats: (1) convenience--saves time, speeds shopping, ready to store, ready to use; (2) ease of selection--meat labeled as to cut, exact weight and cost known; (3) economy--exact price known, less bone and waste, cheaper; and (4) quality and variety--meat fresher, larger selection of sizes, more sanitary, cleaner, etc.

Ranking of these might vary but saving of time and known cost in relation to weight were the two most important factors for the majority of homemakers.

Negative attitudes toward prepackaging centered around the impossibility to inspect the meat bought. Housewives mentioned that they liked to see all sides of the meat and were often deceived by excess bone and fat concealed in the package. Complaints about freshness were also voiced. In this respect, dating of the package as a suggestion for improvement was mentioned in one of the studies [179].

Butcher service was appreciated for the following reasons: meat could be cut to specifications, quality was better (flavor, freshness) and inspection was facilitated. On the other hand, prices were often higher and the selection was time-consuming.

TABLE XI
SELF-SERVICE VERSUS BUTCHER SERVICE: HOMEMAKERS'
ATTITUDES AND PREFERENCES

Study Number	Usually Buy		Both %	Prefer	
	Prepackaged %	Cut to Order %		Butcher %	No Preference %
18				66	
75				56	8
75				66	9
75				71	5
84			34.4		
122	65.6			66	
203				56	
203				66	
203				71	
210				18.5	11.1
237	92			65	
246				64	
264	41 ⁴	43	16	57	10
264	88 ⁵			27	13
285	75	25		65	
298	21	57	18	40	47
312	28	17	53		
322	61 ⁶	47			
322	55 ⁷	58			

¹Low-income families; ²Middle-income families; ³Upper-income families; ⁴City;

⁵Suburb; ⁶Employed homemaker; ⁷Non-employed homemaker.

When available, data showed a positive relationship between education and income and the type of service preferred and utilized. Younger homemakers and working wives were more likely to prefer packaged meats than any other groups.

Attitudes toward frozen meats. Most women interviewed expressed some general or specific aversion for frozen meats and poultry, despite the fact that the majority of them froze meat at home for a period of one or two weeks [25,65,84,131,210,218,237,260,264,294,310,312].

Many factors may be responsible for this negative attitude: (1) no experience with frozen meats; (2) bad "memories" about previous use; and (3) selection problems in terms of size, appearance, quality, etc. Attitudes have not improved and, in some cases, have worsened, between 1955 and 1970. In earlier studies [131,264,310], from 25 to 45 percent of homemakers said they bought frozen meats and poultry occasionally, depending on the prices and the choices available. Favorable comments were expressed by 68 percent of those who purchased frozen poultry in a study by Weidenhamer [310]. Findings about quantities purchased agree with those of Hybrotten [218] who reported that from the 83,591 pounds of poultry meats sold in a sample of food markets in 12 Northeastern states, only 1,561 pounds (less than 2 percent) were frozen (data for 1956).

Results from more recent surveys showed that consumers were still very reluctant to buying frozen meats and poultry.

Cook and Martin [65] investigated 600 families in Long Island and reported that less than half of them bought any kind of frozen meats. Chicken was not included in their study.

Weidenhamer et al. [312] interviewed 3,099 homemakers throughout the nation and they found that 79 percent of the respondents never purchased frozen meats and only thirteen percent bought them frequently. Of the remainder, 20 percent bought only frozen poultry. The Chicago Tribune survey [1] revealed that only one in ten homemakers would be willing to buy any frozen meat or poultry, 52 percent would purchase only some, and 37 percent would buy none.

Convenience was the chief reason for buying any frozen meats. Homemakers appreciated having them handy for unexpected guests and emergencies and they thought that buying frozen meats reduced the number of trips to the store. Freshness and quality were also frequently mentioned. In one study, 63 percent of the homemakers said that lack of standards available for judging quality was the main motive for not buying frozen meats. Thawing was no major problem, since most housewives froze some meats at home and were used to considering this factor in figuring the time necessary for meal preparation.

Storage facilities as a factor preventing the use of frozen meats and poultry was no problem for the majority of homemakers in all studies reviewed. Most had a freezer compartment in their refrigerator or a separate freezer.

A minority had also a locker compartment or subscribed to some sort of freezer plan.

Beef and poultry were bought frozen more often than any other meats [65,84,210,237,312]. Small cuts (chops, patties, cubed or chopped steaks) were more readily available and, for that reason, purchased more often than heavier cuts. Frozen meats were served at regular meals, to house guests and at informal barbecues; and more often in summer [65].

Relationships between selected socio-economic characteristics and attitudes toward frozen meats received practically no attention on the part of most investigators. Weidenhamer et al. [312] found no significant associations whatsoever. Younger homemakers and suburbanites in the Chicago Tribune survey [1] revealed a more positive attitude toward frozen meats than any other groups. Suburbanites, it must be remembered, differs from city-dwellers according to other characteristics as well (greater income, better education, etc.) and these may be more important than the place of residence regarding attitudes toward frozen meats.

Preferences for meats and poultry. Beef is the favorite meat for 50 to 90 percent of American families [71,75,118,150,177,178,179,203,246,312,323,326,329]. It is suggested as the "best meat" for all situations: regular family meals, "prestige meals" for guests, special occasions, informal dinners with friends, etc. Taste and versatility of beef are the main factors for consumers' preferences, but housewives

are also well aware of the nutritive value of beef. In some cases, they are even tempted to assign a higher value to beef than to any other meats. More often bought cuts are ground beef, hamburger meat, roasts and steaks.

Pork and chicken share the second place and homemakers are more likely to serve these meats for family or informal meals [25,30,203,295,310,329]. Pork is often associated with childhood memories and has a sentimental connotation. On the other hand, it may be related to souvenirs of "darker days" and families striving for higher status may tend to shift to other meats. Chicken, mostly fryers and broilers, will often be a second choice for prestige meals for white families with higher income. Non-white and low-income families consider it a highly desirable meat for guests. Whole chickens, cut up, are preferred for reason of convenience and versatility of preparation. Few families think of chicken in terms of its food value and nutritional advantages [30]. Turkey is a festive item but turkey parts, fresh or frozen, are gaining wider acceptance [31,175,235,310].

Veal, lamb and variety meats are not served by more than 10 to 15 percent of the homemakers, mostly because of taste preferences, price and lack of knowledge about their preparation.

Hammett reported [118] that half of the families in her study used meats at three cost levels, and the majority served moderate-cost meats. Choice grades were usually

preferred over prime grades in most of the studies reviewed.

Income, age and education were related to both consumption and preferences for meats. Families with higher income and education ate more of all kinds, grades and cuts of beef and more veal and lamb. Those with middle income and education ate mostly beef, pork and chicken. Older homemakers were more likely to eat less ground beef and pork. Negro families have a basic preference for chicken, apart from any influence family income may have.

Fish and Seafood

Almost no research has been done to study the consumption and preferences of consumers for fish and seafood. Findings reported here are based for the most part on four studies of canned and frozen fish products by government and industry [43,62,108,316].

Fish consumption and preferences.

Frozen vs fresh fish.--Cook and Martin [62] found that 85 percent of their sample of 1,000 families ate some kind of fish; 67 to 76 percent of them purchased fresh, canned and frozen fish products more or less regularly. Similar findings were reported in studies concerned with frozen meats [84,210,237]. Twenty-two percent ate fresh fish only as compared to 10 percent who ate only frozen. Frozen fillets were bought by 92.3 percent of those buying frozen fish; flounder was a favorite, twice as popular as cod which was second.

Forty-two percent ate fillets as often as once a week. Three-fourths of the fish users purchased fish sticks, 31 percent of them at least once weekly. Convenience and flavor were the primary reasons for a particular choice. Only four out of ten of the fish-user families bought fish portions. Flavor was the major reason for choice. All forms of frozen fish were served, mostly on Fridays, and adults ate them more frequently than teenagers and children.

A national study of 1,500 households [108] found 55 percent of them favoring frozen products and 40 percent, fresh. One out of every three persons was either very positive or very negative in his attitudes. Many of the negative reactions were not associated with seafood--shrimp, crab or lobster. Age was related to preferences. Homemakers under 45 years of age showed higher preferences for frozen fish and seafood. Family size was also an influential factor: as the family size increased, so did the preference for frozen fish products.

Canned fish.--Government studies conducted at the national level [43] and in specific cities [316] revealed that canned fish were bought by 69 to 95 percent of the homemakers. Tuna was most popular, followed by salmon and sardines. A small minority also bought canned shrimp and other seafood. Most people bought domestic products in a variety of styles. Appearance and flavor usually dictated the kind of canned fish bought. Canned fish was served mostly

at lunch and dinner and was sometimes used for picnics. In the national study, consumption of canned fish was correlated with socio-economic characteristics. Larger families, non-employed, middle-aged housewives and better-educated consumers with higher income ate more of all kinds and styles of canned fish.

Shopping for Fruits and Vegetables

Fruits and vegetables are bought on a more or less regular basis by all families. However, expenditures, preferences for specific products and forms purchased vary considerably among families. Generally, expenditures for fruits and vegetables increase with age, income and family size and composition.

Forms and Kinds of Fruits and Vegetables Bought [104,111,124,138,152,161,181,195,220]

Forms. The majority of homemakers, from 71 to 88 percent, generally preferred fresh fruits. The figures for fresh vegetables were 50 to 73 percent. Canned products were second choice; frozen products, third (Table XII). However, certain types of fruits and vegetables (peas, spinach, beans, pineapple, pears) were more often eaten canned or frozen than fresh [58,66,272]. Regarding the purchase of frozen fruits and vegetables, Marshall [193] reported that 65 percent of all expenditures for this food category were made

TABLE XII
FORMS OF FRUITS AND VEGETABLES PREFERRED

Study Number	Vegetable Preferences		Fruit Preferences		Juice Preferences	
	Fresh	Canned Frozen % Preferring	Fresh	Canned Frozen % Preferring	Fresh	Canned Frozen % Preferring
11	71	21	8	71	25	4
195	73	16	11	88	10	2
220	49.5			73.8		
					18	54
						44.8

by 25 percent of the families. The figures were similar for frozen juices.

Fruit and vegetable juices were purchased by most families: canned juices were generally more popular than frozen and fresh [64,272,280]. This pattern may be changing, however. Sales records and market research surveys from the frozen food industry show that consumption of frozen concentrate has increased significantly in recent years [64,280]. More people drink frozen concentrates the year round and serve them in many occasions. The development of new flavors and blends is also partly responsible for the change. Quality, price and convenience were reasons most often given for preferences for a particular form.

Kinds. Preferences for different kinds of fruits and vegetables varied among families but there were some favorites [251,258]. Bananas, peaches, strawberries and apples came first on the fruit list; potatoes, lettuce, corn, peas and tomatoes were the favorite vegetables of most families. Orange and tomato juice lead the list in their respective categories [138].

Stribling [272] indicated that 84 percent of the women in her sample served fruits and vegetables for snacks. Fruits were served three times as much as vegetables.

Preferences relative to socio-economic characteristics.
It is not clear if preferences for specific fruits and

vegetables are related to basic differences in socio-economic characteristics. There was some indication that older homemakers, large families and those with higher income and education bought more of almost all kinds of fresh, canned and frozen juices, fruits and vegetables [11,19,73,76,104,111,124,138,174,193,257,258,280]. However, correlation between per capita purchases and other family characteristics was very low. It appears that individual tastes were more important than income and other socio-economic characteristics in explaining large variations in consumption. On the other hand, Bailey and Mize [11] suggested that race was the only significant variable explaining differences in the uses made of fruits and vegetables by the women in their sample.

Buying Fresh Fruits and Vegetables

Source of purchase. As was the case for all grocery products, most purchases of fruits and vegetables were made in chain supermarkets--almost 60 percent in a study by Shaffer [259]. Independent stores accounted for about one-fourth of the purchases and farm or market got the rest of the share.

Factors influencing selection. As mentioned earlier, family likes and dislikes usually determined the kinds and, to a certain extent, the form of fresh fruits and vegetables purchased [195,220,272]. Price and nutritive value were also important factors considered (determining the degree of

knowledge concerning the nutritive value of specific fruits and vegetables is another matter). Convenience was rated lower than any other factor in a study by Ottenhouse [220]. In the Stribling study [272], nutritive value was rated second, next to family preferences and before price but the investigator did not include convenience or quality factors. The sample for the two studies just mentioned consisted of mothers of daughters enrolled in home economics classes and was probably not representative of the total population.

Criteria for judging quality. Research done in this area is relatively non-existent. Matthews and Ueland [195] found that appearance was the decisive factor in choosing fresh fruits and vegetables. Ottenhouse [220] revealed that criteria for judging quality varied according to the form purchased. Appearance was a decisive factor for fresh fruits and vegetables; label was more important for canned products and, for frozen items, brand name was a chief factor. A question about the importance of label reading confirmed the results for canned fruits and vegetables:

Form Bought	<u>% of homemakers reading labels</u>		
	Usually	Sometimes	Never
fresh	35.5	18.7	45.6
canned	65.4	29.9	4.7
frozen	37.4	49.5	13.1

Importance of brand names for frozen fruits and vegetables was also reported in the A & P study of 1970 [146].

Self-service (bulk) vs prepackaged. Findings from three studies at the local and national levels [49,220,272] showed that most women preferred loose displays (bulk, self-service) when purchasing their fruits and vegetables (Table XIII). The two most often mentioned reasons for such a preference were assurance of better quality and possibility of purchasing small or large quantities according to need. Convenience was the main reason given for preferring prepackaged produce. Women reported few problems in buying fruits and vegetables: quality was usually easy to judge, especially when buying loose produce. Price was sometimes a concern with the purchase of fresh fruits [34].

Summary of Fruits and Vegetables Purchasing

Most homemakers do not serve a wide variety of fruits and vegetables and prepare mostly familiar products for their families. Moreover, they do not seem to vary greatly the methods of preparation. Such behavior may be altered in the years to come: the technological developments in marketing and transportation have brought exotic and unfamiliar fruits and vegetables in the most remote places and familiarized the housewife with a greater variety of products. The frozen industry has also marketed fruits and vegetables in a wide variety of sizes, forms and presentations. Such innovations will eventually combine with the trend toward better education and higher income to change the consumption pattern for fruits and vegetables.

TABLE XIII
PREFERENCES FOR BULK VERSUS PREPACKAGED PRODUCE

Study Number	Loose Display % Preferring	Prepackaged % Preferring	Undecided	Loose Display % Preferring	Prepackaged % Preferring	Both
49	75	16	9	61	16	23
220	83					
272	72	25	3			apples
272	81	15	4			tomatoes
272	62	36	2			oranges
272	57	40	3			grape-fruit
272	30	67	3			potatoes

Shopping for Eggs and Dairy Products

Eggs and dairy products are necessary to everybody's diet and they represent an important share of the food dollar. Consumption of these products has changed somewhat in the last decades. Sales of cheese have soared while the consumption of whole milk and butter has been decreasing considerably. Eggs and ice cream consumption has also decreased but at a slower pace (80).

Producers and retailers have been increasingly concerned with the marketing of eggs and specific dairy products and several studies have been done to evaluate consumer's attitudes and opinions toward a variety of products in this category. Results of some of these studies are reported in the following section.

Eggs

Per capita consumption has decreased regularly in the last ten years (80). Results from a number of studies [13, 47, 121, 192, 193, 216, 241, 296, 301, 311] showed that egg consumption was somewhat affected by the season, but the majority of housewives served them the year round. Preferences, health problems, weight consciousness were various reasons for not eating eggs. Women ate ~~less~~ eggs than men and they tended to believe that males need more eggs than anybody else in the family. Eggs were mostly eaten for breakfast and less than 50 percent of the families sometimes had eggs as main dishes at noon or for the evening meal.

White, large urban families with older homemakers, higher income and higher per capita food expenditures consumed more eggs. Hammett and Blackstone reported [121] that if size of family and income were adjusted, race was not a significant factor in egg consumption.

Sources of supply. About 60 percent of the eggs were purchased from retail stores [121,170]. A national study by Weidenhamer [311] revealed that four purchasers in ten usually got eggs at places different from those where they bought most of their other groceries. Other sources mentioned were delivery at home, purchased from farmers, or other stores. The main reason given for the selection of a particular source of supply was quality (freshness). Lower prices, convenience and past experience were also important considerations.

Criteria for selecting eggs. Most studies showed that the key factors for egg selection were: size, grade, shell color and price. Large eggs of grade A or AA were preferred but consumers did not seem to understand the relation between size, weight and grade [192,311]. Brown shell were favored by 40 to 50 percent or more of the homemakers (more by non-white) but were not always available. Price was a less important factor and an increase of a few cents did not usually affect purchase [121,170,242].

Younger homemakers, those with more education, and those with higher family income were more likely to know about

grades and used them more as a criterion for egg selection. Findings from research done at the Alabama Polytechnic Institute [121,296] showed that 50 to 80 percent of the homemakers had no interest in brand name when selecting eggs; thirty-three to sixty percent were not concerned with or aware of grades.

Milk Products

Use of milk products seems to be limited to a few of the best known products. Milk, in a variety of forms, is consumed by more than 95 percent of the families almost every day or several times a week [37,55,68,80,120,132,160,180,205,299,324]. Evidence available suggests that white families, on the average, are getting the recommended amounts needed while more than half of the non-white families receive only 50 to 80 percent (sometimes less) of the recommended allowances [37,80,120,123,160,205].

Types of milk consumed

Kinds and forms consumed.--Fresh milk was the first choice of most people, especially for drinking. Canned milk--mostly evaporated--was used by a sizeable number of homemakers for drinking and cooking. Dry milk (NFDMS) was used mainly for cooking and for dieting purposes. Preferences for other types of milk--buttermilk, sweet milk, half and half, etc.--were less generalized and consumption of these milk products were often limited to particular groups (Table XIV).

TABLE XIV
USE OF SPECIFIC TYPES OF MILK

Study Number	Milk		% of families using			White families	Negro families
	Fresh	Evaporated	Dry	Butter- milk	Sweet milk	Skim milk	
120	97 ¹	62	26	55			
120	79 ¹	82	40	62			
132		57	25			20	
133		60	26.3	45			
134			26				
135					66.6		
183	40 ²	40	6.3				
205	73	74		76			
299	98 ¹	40	10				

¹ Includes whole, 2% and skim.

² Whole milk only.

Taste was very important in the selection of fresh and canned milk for drinking. Fresh milk is now available in three forms: whole, low-fat and skim. Whole milk was consumed mostly by children and teenagers, skim milk by a higher proportion of overweight persons and of those concerned with their diets. The introduction of low-fat milk on the market is relatively recent and investigations of its acceptance are practically non-existent. One study was done by Magleby [190] to assess awareness, trial and acceptance of 2 percent buttermilk fat (2% milk). Results showed that the 2% milk was purchased predominantly by older and smaller households. Awareness and use were greater with households having one or more persons overweight or watching weight, better-educated homemakers with middle to higher income. Females consumed 2% milk more often than males. Few homemakers were aware of the fortification of the milk.

A richer milk seemed to be preferred by most families. Research done at the University of Arizona [137] and Clemson University [68] showed that milk with higher fat contents was consistently preferred by the majority of the panel members.

Findings from the various studies mentioned above indicated that dry milk was used mostly because of its low cost.

Preferences relative to socio-economic characteristics.--Preferences for different kinds and forms of milk seemed to be related to socio-economic characteristics. Families with children under 12 years of age, urban white

families and those with higher income and education were more likely to consume fresh milk--(whole, 2 percent fat or skim) [12,37,55,68,120,123,132,160,183,205,299].

Sex and age were also significant: male of all age groups drank more of a variety of milk than female and milk consumption decreased with age. Rural families and families with less education were more likely to consume canned milk. Dry milk was used more extensively by women with middle income and education and by those living in rural areas [132,133,134,160,183]. Non-white showed a distinct preference for buttermilk while white and male preferred sweet milk.

Source of purchases.--Delivery of fresh milk at home used to be common for a majority of the families. But the pattern has changed in the last 10 or 15 years. According to a study by Wessel et al. [314], the percentage of families who had all their milk delivered at home dropped from 56 percent in 1960 to 38 percent in 1963. Recent figures may be even lower. Families who still preferred home delivery used it mostly for fresh fluid milk and were usually heavy milk users. Preference for delivery did not seem to be related to income [314]. More important factors were habit and convenience.

Package and size preferences.--Jones and Blackstone [160] investigated package and size preferences for milk. Ninety percent of the families in their sample had used milk

in bottles and cartons and 61 percent of them preferred bottles.

Most homemakers bought quart containers and about 30 percent bought half-gallons; 50 percent who used both sizes preferred the half-gallon container; 40 percent preferred the quart and the remainder had no preference. Mize et al. [205] revealed that the proportions of housewives showing a preference for glass or carton containers were similar. Preference for sizes varied according to place of residence: rural families tended to prefer bigger sizes but 70 percent had no particular preferences; urban homemakers preferred the half-gallon and the quart.

Attitudes toward different types of milk.--Most homemakers had a favorable attitude toward different types of milk, even if they admitted not drinking it as often as they should. Wightman [320] reported that 90 percent of the housewives in her study believed that "you never outgrow your need for milk." Milk was drunk mostly at home and less often at work or in the restaurants. Even if a sizeable number of homemakers thought it was appropriate to serve milk to guests, they usually offered tea and coffee and many of them said they would serve milk only if the guest asked for it or if they already knew their guests' preferences.

Most homemakers acknowledged the nutritive value of milk, especially for children, teenagers and "hard-workers." From 27 to 75 percent of the women believed that whole milk

was fattening and they said they would not include it in a reducing diet [80,120,132,133,134,160,277,321]. Skim or dry milk was usually suggested as a substitute by most homemakers.

Housewives (and other adults as a whole) have shown increasing concern for the possible connection between milk products and coronary diseases. The controversy has been made public in recent years and concerned people have relied on their family doctors and the printed media for information and advice. The decrease in consumption of whole milk and butter noted earlier may be related to such concern but the increase in sales and consumption of other milk products contradict such statement. It is also possible that the cost of butter, rather than its possible hazard to health, has been a factor in the switch to margarine.

Attitudes toward milk substitutes.--Milk substitutes ("imitation milk," "filled milk") have not been widely accepted by homemakers according to the results of three studies [148,306,336]. Unfamiliarity with the product seemed to be the most important reason for the small purchases of substitutes by most homemakers. Investigators also reported that most people could not define what a milk substitute was and were confused about its nutritive value. The majority thought it had a lower calorie content than regular milk. Users were mostly large families.

Cheese

Consumption of cheese has increased tremendously in recent years (80) but, as in the case of milk, a few varieties--cottage, American, cheddar--account for most of the expenditures for cheese [69,80,120,132,133,134,135,136, 277,321].

The American Dairy Association has published a series of studies from 1954 to 1961 investigating public attitudes and uses of dairy products [132,133,134,135]. Results showed that 90 to 95 percent of the families ate some kind of cheese: 75 to 95 percent had tried cottage, American, Swiss and Cheddar; 35 to 40 percent knew the blue varieties; and 15 to 20 percent, the soft or semi-soft cheeses. Percentages of homemakers having these varieties at home on survey week was lower but in line with the figures just mentioned. Reasons for not trying a particular variety were related to preferences for other kinds and lack of familiarity with the product. Income and education were positively related to quantities and varieties bought. Upper-income families used cheese more often for snacks and desserts, lower-income, as a meat substitute. Women ate more cheese sandwiches than men.

Almost six out of ten homemakers bought pre-sliced cheese and 47 percent preferred it this way. Thirty percent preferred "one-piece" cheese. A higher percentage of middle- and lower-income homemakers preferred pre-sliced cheese and the percentage buying it was higher in the upper-income group.

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Cheese was served at all meals or between meals, but it was preferred for lunch (snacks at home or away). It was sometimes given or received as a gift, more often by upper-income families.

Cottage Cheese. Cottage cheese is in a category of its own. Most studies on cheese reported more findings for cottage than for any other variety [69,80,120,132,133,134,135,321]. About 30 percent of the homemakers interviewed never purchased cottage cheese; taste was the main reason for not purchasing it. Frequent users liked it mostly for its low caloric content, its nutritive value and its low cost.

Attitude toward cottage cheese was related to concern for weight but the percentage of users did not vary considerably between dieters and non-dieters [69,135]. Consumption of cottage was positively related to income and education. White, upper-income families living in urban areas and homemakers with better education served more cottage cheese than any other groups.

Selecting Convenience Foods

Convenience foods have long been with us if we define them as any food that has undergone one or any number of processes to make it easier to use. Foods that are washed, trimmed, packaged, sifted, sliced, measured, frozen, cooked, dried, etc. are convenient. Many convenience foods, like TV dinners and frozen entrees, have only recently appeared on

the store shelves, but some we have known for many years: canned goods and instant coffee, for example.

Over \$36 billion of the \$69 billion grocery store food sales in 1970 had some degree of convenience built in by the processors (72). Convenience is clearly the dominant sector of the American food market and there seems to be a continued movement away from fresh unprepared toward the ready-to-serve foods.

Extensive research has been done to determine the extent to which homemakers use convenience foods, their attitudes toward these particular products and the effect, if any, of selected socio-economic characteristics. Results from some of these studies are reported in the following section.

For the purpose of this dissertation, convenience foods were classified into three categories:¹

- 1) Baked goods: fresh, canned or frozen; prepared mixes for baked products.
- 2) Frozen and canned fruits and vegetables.
- 3) Main-course dishes: packaged or frozen; frozen entrees, TV dinners, spaghetti, etc.

The percentage of homemakers using convenience foods varied according to the type of product and the group studied but all homemakers admitted purchasing some and most bought one or more items in each category [12,39,62,125,174,181,231, 260,282,289,324].

¹It was impossible to find relevant or detailed data for other products.

Reasons for purchasing convenience foods were many:

- 1) Convenience--save time, handy for emergency meal, easy for husband and children to prepare, etc.
- 2) Variety--seasonal products available the year round, selection of items hard to prepare from scratch at home, etc.
- 3) Quality and novelty--taste appeal, enjoy specialties not prepared at home, like to try new product, etc.

There was no such person as a "full-time convenience user." While a small minority used all types of convenience foods at almost every meal as a general practice, most used them occasionally, some more frequently than others.

Baked Goods and Desserts

Baked goods and desserts were served almost every day by more than 90 percent of the homemakers. Some were totally "home-produced," but most were prepared from mixes or bought ready-to-cook or ready-to-serve. Only about 10 percent of the homemakers never bought any mixes or commercially-baked goods. Pancakes, puddings and cakes were prepared from mixes by 73 to 96 percent of the housewives. About 50 percent used mixes to bake yeast rolls, muffins and pastry [33,112,125,174,270].

French [103] reported that 66 percent of the women in his sample bought commercially-prepared pies sometime during the year (1957). This was a 26 percent increase from 1953. In the Harris study [125], four out of five homemakers

purchased commercially-prepared pies once in a while (1963). Frozen pies seemed to be less popular. A survey by Cook and Martin in 1965 [62] revealed that only 26 percent of the families in their sample purchased frozen pies.

Use of baked goods and desserts relative to socio-economic characteristics. Few socio-economic characteristics were found to have a significant effect upon the use of prepared or semi-prepared baked goods and desserts. Urban families and younger homemakers were more likely to use mixes than any other groups. Employment of the wife and size of the family were not important factors, except for a few items in the category of baked goods. Commercially-baked products were purchased more often by families in the middle-income group and by older homemakers [103].

Fruits and Vegetables, Juices .

It has already been reported that fresh fruits and vegetables were generally preferred to canned and frozen, in that order. Nevertheless, a wide variety of produce were bought in all three forms and specific items were preferred in a "convenient" form, canned or frozen [60,181,290,304].

Levine study. One of the most extensive studies in this area was done by Levine [181] who interviewed 1,192 homemakers in three cities. He reported that canned fruits and vegetables were used by 80 to 90 percent of the women; frozen products by 60 to 70 percent; and frozen juices by

about 50 percent. Generally speaking, homemakers indicated preferences for frozen vegetables and canned fruits and juices. Convenience and ease of preparation were important factors in the preference for canned products. Taste and flavor were mentioned most often in connection with frozen items.

When asked about the factors considered in purchasing canned products, the homemakers answered as follows:

<u>Items considered</u>	<u>% of homemakers mentioning canned products</u>
brand name	80 to 90
size, weight	about 50
recipes, cooking instructions	about 33
number of servings	about 33
price	about 20

Brand name was considered the most important item on canned and frozen labels by 40 to 60 percent of the respondents. Other items--price, quantity, form, grade, ingredients, etc.--were not mentioned by more than 10 percent.

As a rule, canned fruits and vegetables were not stored for more than 2 to 3 weeks by most homemakers. Only 5 to 10 percent of the women removed the contents from the can before refrigerating it, but 50 to 75 percent thought it was safer to do so. Frozen products were stored for about a week and approximately 90 percent of the housewives cooked the entire package at one time (this was in 1958, before the introduction of 2-lb. bags at the frozen counter). Sixty percent of the homemakers believed taste was not affected by refreezing but 40 to 60 percent felt it unsafe.

In regard to storage of frozen products, Redstrom et al. [231] found that 50 percent of the homemakers in their sample stored frozen fruits and vegetables in the ice compartment; only fourteen to 23 percent kept their products in a separate freezer compartment at 0°F or below.

Levine found little variation in the use of canned and frozen fruits and vegetables between different socio-economic groups in the three cities included in the study.

Cook study. Prepared vegetables (with sauce, buttered, au gratin, etc.) have been introduced in the market in the last 6 or 7 years and there are new varieties coming up. Cook [60] investigated 600 families in Long Island to determine their attitudes toward prepared vegetables. Findings revealed that almost all of the people who bought frozen "regular" vegetables--69 percent of the sample--also bought "prepared" vegetables, but not as often. Pouches were preferred to boxes and aluminium trays, mostly because they were more convenient to use. Price of the prepared vegetables was considered "too high" by 42 percent of the respondents. Buttered peas, corn, spinach and broccoli were purchased more frequently than other vegetables (fifteen, in all). More than 90 percent thought the quality of the products was good to excellent. Prepared vegetables were consumed by the entire family in 73 percent of the cases.

Relationships between attitudes toward and use of prepared vegetables and socio-economic characteristics were not investigated by the author.

Entrees and Main-Course Dinners

Results from various studies indicated that canned, packaged and frozen entrees and main-course dinners were used more or less regularly by 80 to 90 percent of the homemakers [61,62,63,67,107,125,174,210,231,252,264,294,310].

Canned and luncheon meats, frozen meat pies (chicken, turkey) and pizzas were the most popular, with macaroni and cheese (packaged or frozen), meats in gravy and fried clams, next. Nationality dinners are relatively new but were generally well accepted by those who tried them. TV dinners were bought by 25 to 35 percent of the housewives, on a more or less regular basis. Most homemakers did not like the flavor of TV dinners but thought they were very convenient. Frozen entrees and meat pies were considered good by about half of the homemakers.

Younger housewives, urban families with higher income and education were more likely to serve frozen entrees than any other groups. Canned and luncheon meats were used by most homemakers and differences were not very significant among various groups.

General Attitude Toward Convenience Foods

The majority of homemakers thought that most convenience foods were more expensive than their prepared counterparts but they were increasingly willing to pay a premium for the saving in time and energy they afford. It is also possible that a sizeable number of housewives do not like cooking

enough or do not have the ability to prepare some of these items themselves. In these cases, the convenience foods enable the homemaker to serve varied and exotic meals without the risk of failure and with little expense of time and energy.

Quality varies for different categories of convenience foods and seems to be more of a problem for certain types of packaged and frozen dinners. Storage does not seem to be difficult for most homemakers.

Convenience Foods Relative to Socio-economic Characteristics

In 1969, Anderson [2] attempted to ascertain whether identifiable syndromes or typologies of convenience-orientation (toward food products) could be distinguished within and across socio-economic strata, stage in the family life cycle and different use of leisure time. His sample consisted of 1,000 families from the 90,000 United States families participating in the National Family Opinion survey of 1969.¹ Anderson reported the following findings:

- 1) There were significant differences in convenience-orientation according to family life cycle, family size, age, income, education and total grocery expenditures. Homemakers under 50 years of age, larger young families, those who spent more for

¹The sample was drawn from suburban metropolitan areas of 500,000 population and over. Data were collected through a mail questionnaire.

foods and had higher income and education were more likely to be convenience-oriented.

- 2) There were no significant relationships between convenience-orientation and the following characteristics: occupation of the head of the family, socio-economic status, employment of the wife and frequency of shopping.

Urban vs suburban, or urban vs rural were not contrasted in terms of convenience-orientation, but other studies mentioned earlier [264,270] revealed that suburban families bought more convenience foods than urban families. Rural families were the least convenience-oriented of all groups. In that case, availability and familiarity with convenience foods may be more important factors than place of residence.

If personality characteristics were researched extensively in connection with orientation toward convenience, they could be more revealing than socio-economic characteristics.

Attitudes Toward Selected Marketing and Merchandising Practices

Attitudes Toward Packaging

Food packaging was initially intended to protect products against all possible damages from handling and transportation. It still serves this purpose today but it has acquired a new

dimension, that of a silent salesman. Most manufacturers today compete for the attention of the homemaker by devoting considerable money to package design, shape and color, often at the expense of useful information. This manipulation has resulted in a proliferation of packages on the shelves, sometimes to the disadvantage of the housewife who may rely only on package appeal to make her selection rather than take the time to compare products for their intrinsic merits and qualities. In addition, manufacturers have used packaging for hiding increased costs of their products. In lieu of hiking the price, they have reduced the content of the package. This practice of "packaging to price" has resulted in more and more products with fractional and odd sizes-- $15\frac{1}{2}$ ounce, 4.08 ounces, etc.--that make cost-size comparisons impossible for the majority of the consumers.

Another packaging innovation has been the "cents off" deals offered on the package, a reduction from the regular price not always passed on to the consumer or, if so, not always ascertainable.

The consumer's confusion with packaging was brought to public attention 10 years ago when Senator Philip Hart introduced a bill for a Fair Packaging and Labeling Act. Five years of debate and hearings resulted in the passage of a law that required specific statements on every package and/or label. The legislation also recommended a reduction in the number of sizes of many food products, elimination of

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"cents off" deals, prohibition of deceptive names, and a few other specifics.

Studies to evaluate consumer's attitudes toward and confusion with packaging are relatively scarce and the data available have been collected either previous to or during these five years that it took to pass a legislation for better packaging.

In 1958, Levine [181] did an extensive study to appraise consumer attitudes toward canned and frozen foods, their packages and labels. He reported that 90 percent of the housewives were satisfied with canned foods size and approximately 60 percent, with frozen food sizes. One reason for some dissatisfaction with frozen was that there was not enough variety in sizes. Containers were usually liked for their convenience and ease of storage but about one-third of the homemakers suggested that they could be easier to open. Only 10 to 20 percent of the housewives offered suggestions for changes in the package labels: they wanted more recipes, an accurate statement of the number of servings, more realistic pictures of the products, larger print, calorie count and packing data. Approximately 60 percent of the respondents said they would not accept a label showing only brand name and content.

National Family Opinion conducted two national surveys of consumer opinion of food store packaging [92, 93, 94, 96, 97, 98], one in 1960 (1,089 homemakers) and one in 1965 (1,141 homemakers). Housewives were asked to agree or disagree with

a list of statements about packaging. Results of the two surveys reported in Sales Management magazine showed that consumers' attitudes did not change much in the five years between the two studies. The majority of women admitted being considerably influenced by packages and almost half sometimes changed brands if a competing company came out with a better package. Nearly two-thirds said they would pay more for a more convenient or more efficient package; conversely, only a little more than a third preferred the old-style packages at a lower cost. Answers to specific statements seemed to indicate that the debate over truth-in-packaging has sharpened the homemaker's critical sense. In 1965, 85 percent of the housewives said they made a habit of looking for information about weights and sizes on the package they intended to buy (not asked in 1960); thirty-four percent agreed with the statement that "economy size" packages often cost more per unit of weight than smaller packages (24 percent in 1960); four out of ten indicated that "cents off" labels did not necessarily mean a bargain (not asked in 1960).

Similarities between income and age groups were more striking than discrepancies; however, families with higher income and middle-aged homemakers were least determined to stick to familiar brands and most willing to pay for convenience. Inquiries about consumer preferences for different types of containers and closures revealed the importance of

convenience: the majority of homemakers liked sifter tops, portion packaging (individual servings), pull-tab openings, containers usable for other purposes, cans and throw-away bottles for soft drinks and beers. At the time of these surveys, there was not much public concern for the environment. The same questions asked today could reveal different attitudes toward disposable containers and bottles. But attitude does not always translate into behavior. A recent survey by Wrigley supermarkets [263] showed that even if 67 percent of the consumers wanted returnable bottles as a means of reducing pollution, only 40 percent purchased them.

Brooks [32] studied consumer preferences for different types of food packaging. He reported that convenience and economy were important factors in package selection. Younger homemakers and those with larger families were more likely to emphasize convenience; economy-mindedness was closely associated with a lower than average grocery expenditure per person. Place of residence and employment of the wife did not affect packaging preferences.

In the Sales Management surveys [92,93,94,96,97,98], housewives rated package characteristics in the following order of importance: keeps content fresh until used up, leakproof, can be tightly reclosed after opening, moisture-proof, convenient size and shape for storing, easy to open, easy to move about and pour, and easy to carry. Such results showed that packages that keep food quality and freshness

longer are more important than convenience for the majority of homemakers.

Most frequent complaints about packaging centered on deceptive package performance and a lack of adequate information about the product [16,32,92,93,94,96,97,98,105,171,218,315] rather than any misleading practice. The majority of homemakers thought that deceptive packaging was not deliberately intended by most manufacturers. Corrective measures taken to deal with deception consisted in switching to another brand and telling friends about it. Sometimes, products were returned to the store. Notification to the manufacturer or a governmental agency was a very rare occurrence.

Trading Stamps

In 1956, one year after they entered the supermarket, about half of the families in the United States were saving one or more of the different kinds of stamps distributed by retail food stores [286]. Since then, consumer acceptance of trading stamps has endured and a review of studies done in the last 15 years suggest that many consumers show a great enthusiasm for trading stamps even though 35 to 65 percent of stamp savers believe this practice generally increases the price paid for food [243,285]. This belief in price increase is supported by studies done to measure the impact of the use of trading stamps on food prices [145,173,286,302,327].

Results of research indicated that the majority of homemakers--from 66 to 96 percent--saved trading stamps when they were given in the store; but when probed about their attitudes toward the practice, the percentage of homemakers who confessed liking and wanting them dropped to around 50 percent and only about one-third were directly influenced by stamps in the selection of a store [1,3,46,59,87,179,188, 243,248,253,255,285]. In the studies done in the last decade, a trend shows toward a reduction of interest for trading stamps [243]. The annual surveys by Burgoyne Index Incorporated [285] also reveal that while 55 percent of homemakers declared a preference for stamps as opposed to a 2 percent reduction in prices in 1962, four years later, 7 out of 10 women said they would select a store with prices lower and only about 28 percent acknowledged that they would favor the store giving stamps. In all studies, less than 20 percent of the respondents were prepared to switch to another store if the store they patronized was to cease the practice of giving stamps.

The homemakers' propensity to save stamps, not necessarily because they like them but because they are "free" and "you do not throw them away when you know you can get something for them," was evidenced in the number of different stamps women saved: 60 to 90 percent of homemakers participated in one or two plans [87,255,285] and 15 percent, in three. Burgoyne Index Incorporated [285] calculated that

respondents of their 13th annual survey averaged participation in 1.5 to 2.2 plans, depending on the city.

Shaffer is one of the very few who studied the redemption of trading stamps [253,255]. He reported that the number of different kinds of stamps redeemed during one year was markedly different from the number saved: in all cases, only a fraction of those saving a particular stamp redeemed it some time during the year. Reasons for the behavior was not investigated by the author but it is safe to assume that they are varied: amount of stamps insufficient for the redemption of a particular item; redemption center not available in place of residence; indecision about the gift desired; time pressures, etc.

Results of a study done during the same period by Ellsworth et al. [87] were somewhat different and the proportion of redeemers was much smaller--only 24 percent. But their sample was small and consisted of customers of grocery stores interviewed after they completed their shopping. They may not be as representative as the almost 4,000 families investigated by Shaffer in two surveys. In one of these studies [255], Shaffer asked the homemakers to agree or disagree with some statements about trading stamps. A small minority--22 percent--thought stamps should be illegal and 43 percent said they benefited from them. More than 50 percent believed stores giving trading stamps had higher prices and that the general practice increased the cost of food.

To summarize, there is some evidence that the popularity of trading stamps has decreased somewhat since their introduction in the supermarkets in 1955, but they still represent an important factor in food buying decisions for about half of the homemakers and one-third of the customers will consider this form of promotion in their selection of a store. Recently, many supermarkets have introduced "double-stamp" day (usually Wednesday) and this practice may induce the consumers to buy more on this particular day. However, no research was available on that aspect of the stamps business.

Fifty percent of the homemakers believed stamps contribute to higher food prices, but only a minority declared having switched to another food store to protest against the giving of stamps.

Relationships between selected socio-economic characteristics and attitudes toward trading stamps showed that although a higher proportion of better-educated homemakers and of those higher in the income scale exhibited a negative attitude toward the practice, they were more likely to save them than women with lower income or education. A sizeable percentage of the homemakers with higher education and income were even prepared to patronize another food store if the giving of stamps was discontinued in the store of their choice [1,3,122,255,275]. Least influenced by stamps were smaller-size families and those with older homemakers [122, 255). There was no mention of other types of relationships in the studies reviewed.

Coupons and Deals

Homemakers are exposed every day to some kind of deal-offers from manufacturers and/or retailers: cents-off labels on the packages garnishing the store shelves, coupons in newspapers or magazines, coupons sent through the mail, retailers' specials, etc. The reaction of consumers to this form of promotion has received practically no attention in the academic field and little more in business circles.

The report of a study published in Printer's Ink in 1965 [317] revealed that about 58 percent of all consumers bought some kind of a deal. Deal-buyers were classified by the investigator as to their "deal-proneness": 22 percent were considered heavy deal-buyers; 61 percent, light deal-buyers; and the remainder were in the medium group. It was found that three-fifths of all deal volume was accounted for by the heavy deal-buyers, while only 14 percent of the total volume was purchased by light deal-buyers.

Smith [265] asked the homemakers in her sample if their food plans were influenced by various kinds of coupons. She found that it was not the case for the majority of the respondents--approximately 73 percent of the sample.

Attitudes toward mail-out coupons were assessed by a few researchers. Hammett and Blackstone [123] reported that although 63 percent of her respondents remembered receiving mail-out coupons at one time or another, one-fourth of them never cared to use them. An earlier study by the same investigator [122] revealed that, of those receiving

coupons, 54 percent never used them, 38 used them for some products, and the others used them all the time. Fourteen percent of the sample never received mail-out coupons, mainly non-white and residents of the rural areas. In the series of studies by National Family Opinion [290], less than half of the homemakers used coupons frequently.

Reasons for not using coupons were not always specified by the respondents. When stated, the most frequently mentioned were: time-consuming, troublesome, lost or forgotten, given away, products not available in the area or in the store usually patronized.

Clipping of newspaper coupons was investigated by The Chicago Tribune [1]. Results indicated that 63 percent of the homemakers did use newspaper coupons in order to save money or try new food products coming on the market. Approximately one-fourth of the student wives interviewed by Lustberg [188] thought newspaper coupons were discriminatory, but this result cannot be applied to the population at large, since a significant number of the respondents in the sample did not receive the local newspaper. Nevertheless, this comment indicates that the consumers less likely to receive or read a newspaper--non-white, low-income, less-educated--may be at a disadvantage, although they are the ones in most need.

Evidence found in these studies indicated that income, education and family size were positively related to use of coupons and cents-off deals. Suburban residence seemed also

to be a factor. Age showed no consistent pattern [1,271, 308,317]. A study mentioned earlier [317] showed that the heavy deal-buyer was less loyal to a store and made 55 percent more trips to the supermarkets in a given period than the light deal-buyer. Richardson [236] and Webster [308] reported that deal-proneness decreased as brand loyalty and number of units purchased increased.

Contests and Games

Contests and games emerged in 1965-1966 in food retailing. According to a recent report by the Federal Trade Commission [284], 52 different types of games and contests were used in 55 major grocery markets in 1966. These promotional devices are relatively newer than coupons and stamps and investigations of their influence on food shopping behavior are very scarce. Most of the available studies were done by business and industries and, when not kept secret, do not reveal a great deal of information.

Two studies done by Burgoyne Index Incorporated in 1965 and 1966 [284,285] showed that games and contests increased in popularity in that one year between the two surveys. In 1965, 45 percent of the homemakers indicated no interest in games of chance while the percentage decreased to 35 percent in 1966. The customer group that liked this type of promotion went from 11 percent in 1965 to 19 percent in 1966. The remainder, 44 percent, expressed no preference.

Results from a Progressive Grocer survey of consumers across the nation [284] revealed that a little over 90 percent of the sample indicated that they favored the elimination of games of chance if it would result in lower prices. In a pool conducted all over the United States by Harris and Associates Incorporated [284], as many as 70 percent of the respondents had a similar attitude toward the discontinuance of contest and games.

A more recent study by The Chicago Tribune [1] assessed the participation of homemakers in store contests. Results showed that 50 percent of the women acknowledged their participation. The suburban, white, better-educated, higher-income women with a larger family were more likely to participate in this form of promotion.

A recent investigation by the Federal Trade Commission on the use of games of chance in the food retailing industry [284] examined over 350 letters from consumers commenting about the practice. This sample cannot be representative, since we can reasonably assume that customers favorable or indifferent to such a promotion do not usually take the time to write and let people know about their feelings. Letters are most likely to pour in from dissatisfied consumers.

Complaints of alleged fraud represented 39.3 percent of the sample. Blaming high prices on games was next, with 29.9 percent of the respondents believing that the increased food prices were due to such promotions. General dislike of

the practice was expressed by 12 percent of the sample but 22 percent of this particular group said it was because they preferred stamps, which is another controversial form of promotion. Five percent of the writers had favorable comments, one-third of them for the reason that they had been winners at one time.

Meal Preparation and Service

Meal Management

Food shopping behavior is affected by meal preparation behavior and reciprocally. Housewives who enjoy cooking are usually willing to take more time to prepare and serve family meals; they like to try new products and new recipes; they are proud of their baked goods and their "home-made" jams and preserves and they consider the meal management activities an occasion for creation rather than a chore. On the other hand, women who resent preparing meals one or more times a day, seven days a week, will use any means at their disposal to reduce work; they will probably purchase more convenience foods; they will cut on home production and preservation; they will enlist help from the family members or from outside.

Unfortunately, no research has been done to determine relationships between attitude toward cooking and food preparation and a variety of meal management practices.

Most researchers have concentrated their investigations in this area on time management, amount of home preservation and adequacy of meals in relation to selected socio-economic variables, particularly income, age, education and employment of the wife. Findings from these studies are reported in the following section.

Meals prepared at home [7,35,40,77,78,128,140,141,142,179,189,201,211,305,322]. Approximately 75 percent of the homemakers prepared three meals a day. However, about 65 percent reported that one or more member of the family took at least one meal a day away from home, usually the noon meal. In such cases, lunches were packed or meals were eaten in restaurants or cafeterias (at work or at school).

The number of meals eaten away was somewhat greater for families with working wives, but this is due to a large number of all-adult households in this group. That is, the employed-wife families did not necessarily make a habit of eating out because of the homemaker's job. Rather, the absence of young children made it easier for the homemakers to seek outside employment and, as a result, family members did not have to come home for lunch. More than half of the homemakers reported taking their family to the restaurant once in a while. Young families with higher education and income were more likely to do so than older or low-income households.

Assistance from family members or paid workers [21, 77, 78, 125, 128, 140, 141, 142]. The chore of preparing meals was often lightened by help from other family members or paid workers. Working wives received more help than non-employed; and employed wives in the city had more assistance than those in the country.

In families with children old enough to help, husbands were less likely to assist their wives with meal preparation and cleaning up, and more so in rural areas. Generally speaking, white homemakers received more assistance from their husbands but less from their children than non-white. This may not be due to race, but to the fact that more non-white families had school children old enough to help. Some assistance was given at all stages of meal management, from grocery shopping to putting dishes away after cleaning. Husbands and sons were more likely to help with grocery shopping and setting the table while daughters did the dishwashing more often than anybody else.

Time spent in meal preparation and cleaning up [125, 128, 150, 211, 322, 324]. Time spent to prepare meals and clean up afterwards varied according to the meal and the help received. As pointed out earlier (page 93), breakfast was a routine meal and 95 percent of the homemakers spent less than 30 minutes to prepare and serve it. Very often in the case of breakfast, cleaning up was done later during the day, sometimes postponed until after the evening meal.

When lunch was served, preparation did not take much time. In one study [125], 92 percent of the homemakers spent less than 30 minutes in preparing the meal, the time necessary to reheat leftovers or prepare soup and sandwiches.

Dinner has become the main meal of the day for most families and it is usually more elaborate. From 80 to 90 percent of the homemakers spent more than 40 minutes in preparing the family evening meal, the majority spending about one hour. Cleaning up afterwards took also more time than for the other two meals, except when family members cooperated to do the task.

One investigator [125] compared the time spent in meal preparation between employed and non-employed homemakers. She reported that non-employed women spent much more time than employed women for the preparation of all three meals. This may be explained in a number of ways: (1) non-employed homemakers may have young children requiring more variation in their diets; (2) it is possible that women who do not work outside the home do so because they enjoy housework in general and, consequently, they willingly spend more time in food preparation; and (3) Parkinson's Law may be at work in such instances: non-working women have more time at their disposal and they use it more lavishly. As was reported earlier (page 187), differences in use of convenience between employed and non-employed homemakers are not statistically significant; they cannot explain the variation in time management.

From the data available, it seems reasonable to conclude that homemakers spend between two and three hours daily on meal preparation on the average. This includes such activities as preparing and cooking meals, packing lunches for meals eaten away and preparing foods in advance for later usage. This time may be expanded considerably if homemakers cook for large families, bake and preserve foods extensively, use less short-cuts and time-saving devices (i.e., doubling recipes and freezing half), indulge in exotic and fancy "cuisine," entertain guests and friends frequently, etc.

Food production and preservation at home [8,9,10,33,78, 86,89,128,140,141,142,198,199,204,322]. Food production and preservation considered here are baking, canning and freezing. More than 90 percent of the homemakers did some baking at home, mostly pies, cakes and cookies. Employment of the wives seemed to reduce, to some extent, the amount of baking done at home but the difference was not significant. Both working and non-working wives used packaged mixes extensively and, in some cases, non-employed women prepared more baked goods from mixes than the employed wives.

Proportion of homemakers doing any kind of food preservation at home--canning, freezing, pickling--varied according to socio-economic characteristics. On the whole, freezing was more popular than any other method of preservation. Place of residence, race and employment were important

variables: white homemakers, women living in rural areas and non-working wives did more food preservation at home than non-white, city and working wives. However, the employed-wives and city families who did any preservation compared favorably with the others in average quantity of food frozen or canned. Homemakers with elementary school children tended to preserve more foods than did the ones with preschoolers (9).

Using recipes--trying new recipes [39,78,81,82,118,122,134,135,136,169,214,232,312,321]. The majority of homemakers used recipes, at least once in a while, but the proportion using them regularly was much lower. Cookbooks, magazines, friends and relatives were the best sources of recipes. Food packages, newspapers, radio and television followed in that order. Recipes were used mostly for baked goods and desserts. Education and income were positively related to the use of recipes.

Willingness to try new recipes varied considerably according to the type of recipes. If the ingredients used for the recipes were known, from 70 to 82 percent of the homemakers said they would go ahead and try them; the number of those ready to experiment dropped to about 45 percent when the recipe was using unfamiliar ingredients. Liking innovations and variety were the main reasons for trying a new recipe; fear of failure, for hesitating to try it. In some cases, the time and money involvements combined with

this fear of failure prevented the homemaker from trying anything "new."

Income and education were positively associated to willingness to experiment with new recipes. Age was significant only for homemakers under 50 years of age who were more receptive to new recipes than those 50 or over.

Knowledge About Food and Nutrition

Inasmuch as level of knowledge affects behavior, it is reasonable to assume that homemakers who possess a good knowledge of food marketing, food products and nutrition are better equipped to fulfill their task as food provider for the family than housewives who have not or could not acquire some basic facts about foods.

Consumer education and information are precisely aimed at increasing knowledge about all aspects of food management; and in order to develop meaningful programs, those in charge of education must know the needs of their audience. With this purpose in mind, researchers have attempted to assess consumer's knowledge about the two main aspects of food: buying or marketing and nutrition. Marketing or buying knowledge refers to knowledge of marketing terms, relationships of supply and prices, grades and inspection for a variety of food products, etc. Nutrition knowledge implies knowledge about the nutritive value of specific products, the relationships between food intake and health, etc.

Research in these areas has been quite extensive; however, for the most part, it has remained very general and the methods used to evaluate consumer's knowledge were not always adequate, to say the least. In many instances, consumer knowledge about nutrition was measured and analyzed with no more than 5 or 6 answers to vague or simplistic statements; in other cases, questions were formulated in such a way that they led to expected answers.

Nevertheless, results are generally consistent and they are worth studying to further clarify our image of the consumer. Findings about the level of consumer knowledge about nutrition and specific areas of food buying are reported in the following section.

Level of Marketing Knowledge

The general level of marketing knowledge was fairly low in all areas of information.

Inspection and grades. Most respondents, from 43 to 97 percent, remembered seeing inspection and grade symbols used for meats and eggs, but only a small minority could explain their respective meaning and the proportion of homemakers who could differentiate between the two was indeed very small [18, 29, 51, 71, 75, 85, 113, 118, 144, 153, 172, 174, 226, 246, 269, 281, 294, 298, 310, 311, 312]. Consumers were not only confused between grade and inspection; they also assigned specific grades to ungraded products (at the retail level);

they were misinformed about or unaware of what characteristics are considered in determining grades and they were wrong in interpreting the grade names. Homemakers seemed to be more familiar with the grades of eggs and beef but less than half could give correct responses to specific statements concerning these grades. These findings suggest that there is a general lack of awareness about government grades and inspection. Even correct answers cannot be taken to indicate knowledge but rather they were often dictated by the belief that all foods were graded. It has been reported earlier that few consumers used grades as a criterion for selection. It is possible that a better understanding of their meaning would change the selection pattern of a significant number of homemakers.

Hutchinson [153] investigated sources of grade knowledge and preferences for grade designation. He reported that one-third of those who correctly identified grades learned them in shopping; 19 percent had learned about them in school or college and 31 percent took their information from newspapers and magazines. Most easily understood designations for grades were letters (preferred by 43.6 percent of the respondents), words (31.6 percent), and numbers (18.2 percent). Six percent of the homemakers did not have any opinion. These results differed from those obtained by Knotts [153]: in his study, words were preferred to letters as designations for grades.

Younger homemakers (20 to 30 years of age), those with more education and higher income were more likely to give correct answers to statements and questions about grades and inspection. There was no significant relationship between evaluation (grades very useful, useful, not useful) and the knowledge about grades. Place of residence was not a significant variable.

Food selection and preparation [51,144,179,244]. A few studies in this area revealed that consumers relied on trial and error to learn about food selection and preparation. Hoobler [144] found that homemakers knew very little about comparative value of different forms of fruits, size-price evaluation of eggs and criteria for selecting beef cuts. Holmes [143] asked the 1,000 homemakers in her study to agree or disagree with 40 statements concerning food buying information. She reported that only 24 percent of the homemakers could give a clear definition of "marbling"; many housewives did not understand the descriptive labels on partially-cooked hams and the names of specific cuts of meat (included in a statement). Homemakers had more knowledge on buying meats for certain uses and on cooking methods appropriate for selected cuts. Lawyer [179] investigated knowledge of cooking temperatures for nine cuts of meats and she found that one-half of the respondents lacked basic meat cookery knowledge. She also indicated that avoidance of specific meats--lamb, veal, variety meats--was partly due

to a lack of knowledge about how to prepare them properly. Clow [51] reported that home-economics-trained homemakers had better knowledge and practices in regard to meat as compared with those without training. Schmalder [244] found that most women could not indicate accurately the cooking time required for four vegetables commonly used.

Marketing information. Holmes [143] included statements about the economic aspects of food costs in her investigation and she found that 83 percent of the homemakers failed to answer more than one question correctly in this area. Most housewives had false conceptions of the relative cost of food in relation to wages, marketing and transportation costs. Few homemakers were aware of the seasonal variations in the price of selected products. Porter et al. [226] indicated that 18 to 30 percent of the women in their study knew about the relation between supply and price, and price and seasonability. Hoobler [144] and Swank [281] reported similar findings. Swank found that homemakers did not have a good understanding of the meaning of some commonly used marketing terms, but the level of knowledge was significantly higher for those homemakers who had been exposed to consumer information. Hoobler reported that the improvement in the level of marketing knowledge ranged from 1 to 8 percent after an intensive marketing program in Raleigh, North Carolina.

Level of Nutrition Knowledge

Results from most studies that attempted to probe the nutritional information of consumers revealed that the majority of women had some knowledge of the "Basic 4" and recognized that specific foods (milk, meats, fruits and vegetables) should be included in the daily diet. However, only about one-fifth to one-third of the housewives could provide any nutritional reason for their statements [71, 118, 120, 161, 210, 274, 276, 330, 331, 332, 333].

Knowledge seemed to be concentrated to a few specifics such as: "milk is a good source of protein and calcium," "orange juice is a good source of vitamin C," "yellow cheese is a good substitute for milk," "enriched bread is good for you," etc. (Table XV). However, the high percentage of correct answers in some studies should be taken with some reservations. In most cases, homemakers had only to agree or disagree with such statements and they probably associated the "reputation" of these foods with good nutritional value. Results may have been somewhat different if women had been left to their own choice of good sources for specific nutrients or if they had to list the main nutrients provided by a specific food.

Evidence of erroneous information or low level of knowledge about foods was found by several investigators. Courtenay and Branson [71] revealed that 30 percent of the respondents in their study could not rate chicken as a good

TABLE XV
HOMEMAKER'S KNOWLEDGE OF NUTRITION

Study Number	Milk good source of: Protein Ca	Vit. B	Yellow cheese good substitute for milk	Butter more value than oleo	Orange juice good source of vit. C	
	- - - - - % giving correct answers- - - - -					
80	86 ¹	99	60	86	18	91
80	86 ²	95	75	81	3	87
120	91 ¹	99	56	83	24	
120	78 ²	96	54	67	15	
138						79
321	90	97	57	78	30	95

¹White homemakers

²Negro homemakers

source of protein; 66 percent said chicken was not lower in calorie than other meats or did not know; and 70 percent could not rate it for vitamin B. Only about 25 percent of the homemakers in Rochester and Syracuse, New York, could define adequately what the term "balanced diet" meant to them [330,331,332]. Ottenhouse [220] and Stribling [272] reported that 35 to 80 percent of the homemakers had misconceptions about the caloric and/or vitamin content of bananas, potatoes, cantaloupes and strawberries. Forty to 60 percent gave wrong answers to statements about cooking. Hammett [118], Young et al. [332] and Smith [265] indicated that knowledge about substitutions was higher for meats than for milk and citrus but, in all cases, 30 to 85 percent of the women could not name any substitute products. A national survey conducted in 1969 [206] revealed that, while 71 percent of the homemakers said they bought fortified foods, only about half of them knew what the term "fortified" meant.

The general lack of information about nutrition was translated into poor or inadequate diets for a large number of families at all income levels and supplementation of food intake by a great quantity of nutritional supplements, vitamins and minerals for the most part. This low level of knowledge also resulted in erroneous food beliefs and practices in a large sector of the population [72,156,157,207,309,325].

Jalso et al. [156,157] and Weems [309] reported that close to 30 percent of the population had some tendency toward

food faddism. Food faddists had a higher concern for nutrition, consumed more health foods, avoided more types of foods and bought more nutritional supplements than non-faddists. They also relied less on professional people for their information about nutrition. Jalso [156,157] and Schulte [245] indicated that faddists were distributed throughout the educational range while non-faddists were concentrated in the higher education category. Low-income and older homemakers were more likely to succumb to faddism than upper-income and younger women.

Consumers have been increasingly exposed to nutrition information in recent years, particularly concerning dieting, food fortification and enrichment and possible relationships between specific food products and coronary diseases. Yet, few studies have been done to evaluate consumer awareness in these areas. Investigations at the national and local level [134,135,136] revealed that about one-third of the homemakers were dieting to lose or maintain their weight; half of them obtained diets from their doctor while the remainder relied on popular sources of information, friends and relatives.

Awareness of possible relationships between diet and coronary disease almost doubled between 1956 and 1961 [136], from 26 percent who had heard about it in 1956 to 50 percent in 1961. Recent figures were not available but it is safe to assume that the proportion of homemakers being aware of the controversy is greater today than it has ever been. Magazines and newspapers were used most as sources of information about the

subject. Awareness did not necessarily affect change in diet. In the 1961 study by the American Dairy Association, only 27 percent of the respondents thought they had changed their diet in line with the new information acquired.

Investigations of consumer opinions and attitudes toward fortification are practically non-existent. Opinion Research Corporation conducted a national survey for Hoffman-Laroche Inc. in 1970 [230] to provide current data on public attitudes toward vitamins added to foods. The following points summarize the most important results of the study:

- 1) One out of five consumers said they considered the list of ingredients when comparing two or more brands of a similar food product.
- 2) Seventy percent of the nation population said there was a definite need for some vitamins to be added to food products.
- 3) The majority of people (75 percent) believed that the addition of vitamins would result in little or no increase in prices.
- 4) People did not easily recognize those foods that were sometimes or always enriched or fortified.
- 5) Consumers had specific views about which vitamins were most important and these views tended to mirror the promotion efforts of the specific food industries.

A nationwide survey of the food and nutrition knowledge of American homemakers has just been undertaken by the USDA.

In the one-year study, 2,500 homemakers will be interviewed about their knowledge of the nutritive values of foods; their ideas on handling foods to preserve nutritive value, appearance and flavor; their storage practices; etc. The study should be completed by the end of 1971.

Nutrition knowledge relative to socio-economic characteristics. Results from most studies indicated that education and home economics training were positively related to nutrition knowledge [23,118,156,157,185,210,217,260,265,272,292,330,331,332]. Negative associations were reported with age [23,71,156,157,210,330,331,332]. Hodgson [139] compared nutrition knowledge of both overweight and normal weight subjects and she reported no significant difference between the two groups in all areas of nutrition measured by the test. Income and race did not seem to be very significant factors. Differences between white and non-white were found in many studies but investigators pointed out that education rather than race was believed to be the intervening variable.

Summary of Research Reviewed

The classification and evaluation of consumer behavior research in the area of food undertaken in this chapter suggest that, while women vary considerably in their attitude and behavior toward food management, the similarities among them are often greater than the differences. Findings from

the research reviewed are summarized according to their implications for improved consumer protection, education and research.

Findings Which Suggest Areas to Be Improved
by Better Legislation

1) The majority of homemakers are concerned with providing nutritious meals the family will like [56,150,219, 272,335]. Quality is viewed as a very important factor to consider in the procurement of food for the family but so are price and economy. Convenience is often rated first when it comes to specific choices, such as the selection of a store or the purchase of convenience foods [7,20,27,28,34, 51,113,144,159,201,292,319].

2) When shopping for food, women do not take much time to compare prices between sizes and brands [106,221]. Most prefer nationally-advertised products but about 50 percent buy both manufacturers' and private brands [1,38,41,100,109, 117,130,212,217,285]. The majority of homemakers say they read labels but it is not clear if they do so to compare products or only as a guide for serving the food [53,54,85, 153,181,208,220,222,315].

3) More than half of the homemakers do not seem to be very confident of their ability to judge meat quality and this may be the reason why they purchase more prepackaged meats even if they voice a preference for a butcher's service. Frozen meats are not very popular and only specific items

are bought, mostly because they are convenient. Homemakers complain that frozen meats do not provide them with any standards to judge adequately the freshness and overall quality of the product [42,52,84,144,176,179,203,210,215,234,267,269,312,328].

4) Appearance is the main factor considered when selecting fresh produce; label is important for canned goods; and brand name, for frozen products [146,181,195,220].

5) Attitudes toward selected merchandising techniques--packaging, advertising, trading stamps, deals, contests and games--are not very critical and generally favorable. Reaction to deception consists mainly in switching to another store or brand and telling friends about it. Complaints are sometimes voiced to the store manager but notification to the manufacturer or a governmental agency is a very rare occurrence [16,32,87,92,93,94,96,97,98,123,181,218,284,285,286,302,327].

6) The general level of nutrition and marketing knowledge is fairly low. Most women have some knowledge of the value of a few specific food items but only a minority can give nutritional reasons for their statements [71,118,120,161,210,274,276,330,331,332,333]. The majority have wrong or no information concerning the nutritive value and caloric content of most foods, food substitutes, health foods, dieting, etc. [206,220,265,272,309,325,333]. Food faddism has been observed in about 30 percent of the population [156,157,309].

There seems to be an awareness of the relation of specific foods to certain diseases, but knowledge is often incomplete or inaccurate.

Marketing knowledge varies with level of education but is not very extensive, even for women with some training in food and related areas. Most consumers confuse symbols for grade and inspection and they cannot explain their meaning. This lack of knowledge is evidenced by the small proportion of homemakers who mentioned grades as criteria for selecting specific food products [18,29,51,71,75,85,118,144,153,172,226,269,294,310,311,312]. The majority of homemakers have false conceptions of the cost of food in relation to production, transportation and marketing; only a few know the meaning of simple marketing terms [143,144,226,281].

Findings Which Suggest Areas to Be Improved by Better Consumer Education

1) Women, in general, assume major responsibility for food purchase decisions. They use a variety of approaches to food management and the majority of them express satisfaction with the way they handle their task [56,150,163,219,272,335].

2) Only 30 to 40 percent of the homemakers follow a more or less rigid budget on a somewhat regular basis. Nevertheless, most women have a general idea of the maximum amount to be spent within a given period [84,89,125,174,201,210,220,244,260,265,300,324,335].

3) Meal planning is not a common practice and less than 40 percent of the housewives do some planning, usually on a day-to-day basis. Dinner is planned more often than any other meal [8,89,125,211,265,324,333,335]. Family preferences are the most important factor in planning meals and selecting foods [22,89,128,202,219,272,292,333]. Problems with meal planning range from getting more variety into meals and motivating family members to eat various foods to suiting the family nutritional needs and keeping food expenditures within certain limits [70,113,125,144,201,244,292,333].

4) Besides influences from family members, housewives rely mostly on newspaper advertisements, magazines and cookbooks to gather their information and suggestions about food, food products, recipes, prices, etc. Radio and television are less popular sources of information and are more important for Negro than for white families [8,22,25,27,34,35,84,89,122,144,179,183,201,210,295].

5) The majority of homemakers plan their shopping trip by preparing a list and reading the newspaper ads. Their list is usually non-restrictive and leaves room for some unplanned purchases [1,26,53,72,112,121,125,144,210,220,244,272,279,335]. Those concerned with prices generally read more newspapers for advertisements and specials [1,14,59,179,184,249,285].

6) Women shop usually alone and generally once a week, during the last part of the week. There seems to be a trend

toward more shopping trips to the grocery store and toward more shopping done early in the week. On the average, women spend around 30 to 40 minutes in the store on a major shopping trip [8,26,35,59,77,89,125,144,174,188,205,220,226,253,272,333].

7) Supermarkets, nationally or regionally owned, are favored by the majority of homemakers. Prices, quality and convenience are the main reasons for the selection of a particular store. More than half of the women regularly shop two or three stores, but they usually do most of their shopping in one place [8,33,35,40,72,84,125,144,210,244,273,310].

8) The amount of unplanned purchases varies widely among the different foods, ranging from produce in the low-impulse category to baked goods and snacks in the high-impulse category [154,201,254,260,261,279]. Unplanned purchases tend to increase when women are shopping with their husband or children.

9) More than half of the homemakers plan their meat purchases before going shopping but they allow for enough flexibility to alter their plans, if necessary, for such reasons as prices, appearance, quality and availability. Income and family composition are most important in affecting quantities purchased and amount spent for meats (52,84,144,176,179,203,210,215,312,328].

Fresh fruits and vegetables are preferred by the majority of homemakers but some items are usually bought canned

or frozen for reasons of convenience and availability [104, 111, 124, 138, 152, 181, 195, 220].

10) Eggs and dairy products are consumed by most families but, in the case of dairy products, use seems to be limited to a few of the best known products. Women have many misconceptions about eggs and dairy products concerning their nutritive value and their effect on health [121, 193, 216, 301, 311].

11) Convenience foods are used by most homemakers but the percentage using them and the frequency of use vary according to the type of products. Income and place of residence are more important than age, race and employment of the wife in differentiating between heavy and light users of convenience foods [12, 39, 62, 125, 174, 181, 260, 282, 289, 324].

12) Approximately three-fourths of the housewives serve three meals a day. Time spent for meal preparation, service and cleaning up amounts to 2 to 3 hours daily, on the average [7, 35, 40, 77, 78, 140, 141, 142, 179, 189, 201, 305, 322]. Non-employed wives spend more time preparing meals than employed homemakers and they usually get less help from other members of the family [125, 128, 150, 211, 322, 324]. Home preservation consists mainly of freezing foods and varies according to place of residence, age and employment of the wife [8, 9, 10, 33, 78, 86, 128, 140, 141, 142, 204, 322]. Women use recipes from cookbooks, magazines, friends and relatives to prepare a variety of dishes, mostly baked goods and desserts.

The majority of them are willing to try new recipes if the ingredients used are familiar to them [39,78,81,82,118,134,135,169,312,321].

13) In spite of their lack of knowledge about nutrition and marketing, women for the most part are less concerned with improving their knowledge in these areas than they are with learning more about ways to prepare more varied, quick and inexpensive meals [70,125,144,201,292].

14) Associations between food management practices and selected socio-economic characteristics have been investigated in the majority of the studies reviewed and it appears that income and education are the two characteristics responsible for most of the differences found among homemakers in respect to their food management and food shopping practices. Women with higher income buy more of most products, are more concerned with convenience and quality, rely on more sources of information and are influenced to a greater extent by the likes and dislikes of family members. Better-educated homemakers are more innovative and more active in their search for information, they exhibit greater interest in the psychological aspects of food, they show greater concern for nutrition and they have more knowledge about foods. Age and place of residence are also significant, especially for management practices related to shopping practices and meal management. Employment of the wife is not a very significant factor.

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The review of research consistently pointed out the positive value of education in the procurement of food for the family. The observable trend toward more education should increase substantially the number of better-informed consumers in the near future.

Findings Which Suggest Areas to Be Investigated by Further Research

1) There are a number of areas in consumer behavior as it relates to food that need to be investigated more extensively to provide a basis for improving consumer welfare. Research is needed to assess the value of new innovations in food marketing such as unit-pricing, open-dating, enrichment and fortification of food products, etc.; to determine more adequately the level of consumer knowledge and attitudes concerning food preparation, nutrition and marketing; to survey the reasons for apathy and lack of feedback from consumers to industry and the government; and to study the process of change in tastes and preferences.

2) Associations between various food management practices and a number of socio-economic characteristics--age, race, income, education, occupation of head, family composition, employment of the wife, place of residence--have been studied by many investigators but research to measure associations between personality variables and knowledge, attitudes and behavior is practically non-existent.

3) Consumer motivations have been studied from the standpoint of the industry rather than in the interest of the consumer.

4) Instruments used to measure consumer level of information were usually not very sophisticated and they may have altered the results obtained in some instances.

CHAPTER V

IMPLICATIONS FOR IMPROVED CONSUMER PROTECTION, EDUCATION AND RESEARCH

Determining the actual state of our knowledge concerning consumer behavior in the area of food was one objective of this dissertation. Two other purposes were defined: (1) to utilize the findings of the research to draw implications for consumer protection and consumer education, and (2) to formulate guidelines for future research in this particular area of consumption.

In this chapter, research reviewed will be evaluated in relation to the recent literature on consumer protection and education in order to suggest improvements in our consumer protection and consumer education programs and recommend study areas that could be investigated by researchers interested in improving consumer welfare in the area of food and nutrition.

Implications for Consumer Protection

Consumer protection can be defined as any federal, state or local agencies, laws, legislative proposals or programs aimed at insuring that the consumer gets sanitary and wholesome foods to his best economic advantage and in fair and honest dealing with the producer and the retailer.

Consumer laws and regulations in the area of food were primarily intended to protect the consumer against physical injury resulting from adulterated or unsanitary foods. But in recent years, a new dimension has been added to consumer protection and significant steps have been taken to protect the consumer against economic losses resulting from faulty market structures, deceptive business practices and lack of information about food products.

In response to an increased awareness of the problems faced by the consumer in the market place, new or revised legislation has been adopted concerning wholesomeness of meats and poultry, additives in foods, product standardization, packaging and labeling, promotional techniques and advertising, among others. Moreover, numerous proposals for more legislation are presently being studied and new items are added periodically. At present, some of the most important governmental programs are: a reevaluation of the safety of specific ingredients added to food products and generally recognized as safe (GRAS list), the labeling of convenience foods and a project to assess the feasibility of nutritional labeling on specific products.

The governmental efforts for better consumer protection have been valuable but more needs to be done if we want to further consumer interests. As things now stand, it is almost impossible for the consumer to make rational food choices; information about products is often lacking; new materials,

processes and products are introduced without much nutritional data and often with deceptive or exaggerated claims, and informed assistance to consumers is increasingly scarce relative to the needs.

The consumer movement that developed in recent years has given impetus to a number of voluntary innovations by industry. Grocers and store managers, particularly, have shown an increased concern for the consumer: chain stores have created their own department of Consumer Affairs or appointed a director in charge of consumer problems; some nationally or regionally-owned supermarkets are experimenting with such innovations as open-dating and unit-pricing; others are doing their share to reduce waste, pollution, etc. On the other hand, producers have done very little to facilitate consumer decision-making. It appears that this situation will prevail if producers are not compelled by legislation to share responsibility with the retailers for providing the means through which the consumers can improve their market choices.

Findings from the research reviewed suggest particular areas that appear to be most relevant and to most urgently need improved legislation. The proposals offered hereafter are not necessarily new and some have been the concern of consumer-oriented groups or government representatives in recent years. A few are already studied in government circles.

Labeling

Research indicates that the majority of women do read labels [53,54,85,153,181,208,220,222,315] but it is not ascertained whether it is for factual information about food preparation or whether it is to make cost-size and cost-quality comparisons between food products.

Label information concerning the appropriate ways to serve a food is usually adequate; the same cannot be said regarding the information about the quality and the quantity of a variety of food products. In many instances, the consumer cannot assess the nutritive value of a food product; he must often rely solely on a brand name to judge its quality; he has no means to determine the net and drained weight of a wide selection of canned goods; he can seldom evaluate how much he is paying for water or inert ingredients; he must find for himself the proper methods for storing the product; etc.

These shortcomings could be partially alleviated with a consumer protection program aimed at improving food labeling. A meaningful labeling program would serve two purposes: (1) it would provide a basis for a sound nutrition program, and (2) it would facilitate comparisons between food products.

Providing a basis for a sound nutrition program. Findings from the analysis of consumer behavior research showed that homemakers are generally concerned with providing nutritious meals for their family [56,150,219,272,335] but

they also recognize the difficulty of the task. Providing the nutritional needs of the family is one of the problems faced by homemakers [70,144,201,244,333] because it requires a knowledge of nutrition that most do not possess [71,118,120,161,210,330,331]. Furthermore, as was pointed out above, information about the nutritive value of many foods is non-existent.

Educational effort designed to improve the nutritional knowledge of the American people would be more effective if supplemented by a meaningful labeling program. In order to select a proper diet, the consumer needs labels that will help him estimate if he is getting what he needs in the food he consumes. This disclosure of information about ingredients and their nutritional value is particularly important in view of the trend for more and more production of convenience foods, synthetic foods, analogs, etc. and the increase use of such products by most families.

It was mentioned earlier in this chapter that the government is presently involved with the food industry on a project to assess the value and potential of different methods of nutritional labeling on specific products. Three alternatives are under study:

- 1) Listing of the absolute amount of each nutrient as the total quantity per container, per ounce of the food, or per serving with the size of the serving given.

- 2) Percentage of a standard based on amount of the nutrient needed each day in the meals and expressed in terms of weight or serving.
- 3) Qualitative rating using words or symbols indicating whether the food is an excellent, good, fair or poor source of some nutrients.

The results from the study should be out by the middle of 1972 and should help determine the most effective and efficient method of labeling food products in terms of their nutritional contribution to the consumer's diet. Depending on the method used to rate food products according to their nutritional value, the list and proportion of ingredients used to prepare a specific product may or may not be included in the label. Nevertheless, it seems that both are necessary to evaluate the quality of many food products.

Facilitating comparisons between food products. Cost-size and cost-quality comparisons are important elements in the selection of alternatives in food management. In fact, research findings indicate that quality and cost are the two main factors considered by homemakers in the decision-making process relative to what is bought and where the purchases are made [7,20,27,28,34,51,113,144,159,201,292,319].

As things now stand, it is often very difficult for the consumer to compare specific food products in terms of quantity and quality. Regarding the information about quantity, the only indication available is the weight of the package,

a weight often expressed in fractional numbers, which makes computations difficult for the majority of homemakers [18, 25, 41, 106]. Moreover, it is not always clear if the weight refers to volume or to avoir-du-poids weight, which makes a difference for many foods; there is seldom any mention of net and drained weight; and it is impossible to determine the weight of added ingredients such as water in ham, stuffing in poultry, breading in fried foods, cereals in luncheon meats, etc., which may change considerably the real cost of these foods.

Repetitively but to no avail, processors have been urged to improve their labeling regarding quantitative information. It appears that only when they are compelled to do so by legislation will the consumer get the information he needs to make useful cost-size comparisons between specific food products.

Cost-quality comparisons are even more difficult to make than cost-size comparisons. In most instances, consumers must rely on advertised brand name and/or trial-and-error to judge the quality of a food [34, 146, 177, 181, 203, 220, 312]. Such a procedure leads to economic waste: unadvertised or ~~less~~ known brands of equal quality and lower price are left on the store shelves; unsatisfactory products for which the consumer does not take the trouble to get his money refunded are discarded; and prices paid are too high relative to the nutritional quality of the food bought. Labeling to improve

the disclosure of qualitative information on food products may include the following: (1) listing of kinds and proportions of ingredients in a specific food, (2) "freshness codes" for a variety of perishable products, and (3) grade designation or product specifications.

(1) Listing of kind and proportion of ingredients.

Listing of ingredients is already required for all food products for which there are no standards of identity. For non-standardized products, ingredients are listed in decreasing order of importance but the producer is not required to include the proportion of each ingredient used to prepare the food. If this listing by percentages were made mandatory, the consumer would be in a better position for evaluating the quality of food products. Such a detailed list may not be necessary for all foods, but it should be included on the label of products likely to deceive the consumer or to vary considerably from processors to processors. Drinks, punches and ades are examples of the first case; pork and beans and frozen dinners illustrate the second possibility.

(2) Freshness codes for perishable products.

In the analysis of research, homemakers most frequent complaint concerning meats, frozen foods, eggs and specific dairy products was that it was impossible to judge their freshness adequately [108,179,311,312]. Dating these perishable products is a possible solution to the consumer problem. Opponents to the insertion of a pull-date (or any other date)

on packages argue that time is only one factor affecting the freshness of a product, and they rightly point out that handling and storage are also major factors. It is true that an expiration date on a perishable food will not be of much help if handling of the product is careless, or storage inadequate. But there are solutions to these problems: a simple device has been developed to determine whether frozen foods have been kept at 0° during handling and storage in the store; information on storage at home can be incorporated in the label; instruction for cooking particularly sensitive products could be more precise and more readily available, etc.

Another major argument against dating of perishable products refers to the extra cost that the consumers will have to pay if the measure is legalized. It is argued that retailers will incur extra waste of products (and money) since the consumers will always chose the freshest package, leaving perfectly satisfactory products to age on the shelf or in the cabinet. This is certainly a possibility to consider and research should be promptly done to determine the extent of such a practice. Studies done recently by two major supermarkets which have been using open-dating for a few months¹ have shown that the practice was not as general as expected and the loss to the retailer was no greater than it was before the introduction of open-dating in the store.

¹Frank Soltan, "Publish Rules on Open-Dating, FTC is Urged," Supermarket News, July 5, 1971, pp. 2,10.

Such a result does not prove the case in favor of required freshness codes but it points out that the measure cannot be rejected before a careful cost-benefit evaluation is made, keeping in mind the interest of the consumer.

Many retailers have already broken their code dating system or introduced a new simplified "freshness code" in the interest of the consumers. But if the open-dating concept is adopted, legislation should be promptly enacted so that open-dating is made easy to understand and uniform for all food categories throughout the nation. The adoption of open-dating has also important implications for consumer education. Consumers will have to be informed of the exact meaning and usefulness of freshness codes; they will have to learn that differences in shelf-life vary for different categories and kinds of perishables; and that if they consistently choose the freshest product, they will have to pay a price for the service.

(3) Grade designation.

Adequate grade designation would be an effective way to cut through the product differentiation that makes cost-quality comparisons difficult. Opponents of unit-pricing have argued that quality is overlooked in cost-size comparisons; a good grading system would facilitate cost-quality comparisons.

Results of most surveys on consumer's use of grades in the selection of foods show that grades are seldom used as

a criteria for decision-making in respect to food products [18,42,121,149,179,203,296]. Consumer apathy is certainly one reason for this state of affairs. Despite their willingness to improve their food management behavior, as evidenced by the analysis of research, consumers do not seem to realize the importance of learning about the fundamentals of marketing as a help to decision-making and they tend to rely more on "rules-of-thumb" and "hints" to select the best foods at the best price.

Consumer educators have spent much time and effort trying to improve consumer's knowledge of grades. Unfortunately, results from several studies concerned with determining the level of knowledge in this area suggest that, for all practical purposes, they have failed. The majority of consumers cannot differentiate between inspection and grade symbols; they assign specific grades to ungraded foods; they are misinformed about or unaware of what characteristics are considered in determining grades; and they are wrong in interpreting the grade names [18,51,85,118,153,226,294,310,311,312].

Programs to inform consumers about grades have failed for the reason that most retail grades, as they exist now, were primarily designed to help wholesalers, processors and manufacturers in their internal transactions. They are non-uniform, ambiguous and confined to a few products.

At present, it is impossible for the average consumer to learn and remember that grade A is the best for one product

while it is second best (after AA) for another; that grade 1 might indicate a superior quality for one food while it means a lower grade in other cases (below 0 or 00); that no first grade is assigned in some instances; etc. Grades for a few foods are adequate and intelligible, such as the grades used for beef, poultry and eggs; but in general, the present system of grade designations is not intended to help the consumer. And as long as it remains unchanged, programs aimed at improving consumer's knowledge in this area will continue to show little success.

Legislation seems to be the most effective way to alter grade designations. Selection on the basis of quality, one of the most important factors considered by homemakers when making decisions about foods, could be facilitated considerably by a uniform system of retail quality grade designations for specific categories of products (explained to the consumer through mass communication). Better grading could also facilitate comparisons between nationally-advertised and private brands, well-known and new products in the same category, etc. Such a use of grades for food selection could replace or complement decisions based mainly on advertising and hearsay by decisions related to the inherent qualities of a product. For many years now, Canada has used uniform grades on most canned products and on a variety of perishable foods to the great advantage of the consumers and to no detrimental effects for the producer. In fact, all

canned products imported from the United States and sold on the American market are graded to satisfy Canadian legislation and they are offered at comparative prices.

The methods of adopting a new grading system are varied and should be studied carefully with the objective of promoting consumer interest. For economic reasons, it might be necessary to confine the use of grades to food products most commonly used by homemaker: canned and frozen fruits and vegetables, canned soups, frozen fish, beef and poultry, eggs, butter and specific dairy products. In cases where grades are not used, the listing of ingredients on the labels could serve as a criterion for selection.

As for the implementation of a simplified grading system, attention should be given to selecting appropriate criteria for determining the grades to be used. Attitudes and beliefs of both specialists and consumers should be sought in order to establish meaningful criteria. In some cases, testing may be necessary to determine actual preferences for a food product; in other cases, objective standards may be developed for the grading of food products according to uniformity in size, color, maturity, general appearance, etc.

Opinions of consumers should also be sought as to the most effective symbols to use for grade designations. The limited research in this area [153] suggests that letters or words are preferred to numbers by the majority of homemakers. Whatever symbols are used, they should be easy to understand and uniform for all graded products.

Product Standardization

At present, about 200 food products have been standardized (not including special diet foods) which means that standards of identity are still lacking for many products. Besides, standards of identity are hard to interpret even for educators: some are mandatory while others are voluntary; information about standards is piecemeal; language is difficult to interpret; and changes in status are so frequent that it is almost impossible to keep up-to-date.

Educators involved in the business of consumer education and consumer information are making considerable effort to interpret food standards to the public. But, because of the confusion existing in product standardization, the task takes time and even for those well-read on food standards, it is practically impossible to keep the details in mind.

There is a substantial need for revision of the currently effective standards of identity. However, such a process is costly and it might be necessary to reevaluate criteria for establishing standards of identity in order to maximize benefits relative to the costs involved. Possible criteria could be: (1) How important is the product in the consumer's food basket? (2) What is the frequency of use? (3) How important is the product in the diet, from a nutritional standpoint? (4) Is the standard necessary to maintain the integrity of the product, to help develop a better product or to prevent the marketing of a food of inferior quality?

Revision of the current standards of identity should go along with the establishment of standards for the new classes of foods coming to the market. Among these classes should be: formulated main dishes, snack foods, new foods (i.e., meat analogs, nondairy dairy substitutes, and similar products) and staples that are important in the diet of particular ^{/for} ethnic groups. Government legislation concerning enrichment and fortification of food is urgent. Unless there are effective regulations at this level, there may be wide-scale addition of nutrients to food (what FDA Commissioner Grant termed the "nutritive horsepower race") with accompanying rise in food costs without real consumer benefits. The potential for expanded marketing of convenience, snack and fabricated foods appears to be increasing tremendously. The new standards, therefore, are needed to set up orderly guidelines for manufacturers to follow in the marketing process.

New labeling legislation would require that present labeling laws for standardized products be reconsidered. The present legislation does not require the listing of ingredients on the label of a standardized product. Should standardized products be labeled like any other product? Would a simple statement or seal that the product meets Federal standards of identity be the only labeling required? Should the label include both the statement on Federal standards and a listing of ingredients? Could the methods

of labeling vary according to the kind of product to be standardized and its contribution to the diet?

Finding the answers to these problems is important and urgent if we want the labeling of standardized products to be relevant for the consumer and in line with the improvement in the labeling of other food products.

Packaging

In spite of the Fair Packaging and Labeling Act of 1966, there is still much to be done to improve consumer protection in this area. Mandatory provisions of the legislation have generally been enforced but recommendations for changes to be effected on a voluntary basis have not been followed. Proliferation of packages has been somewhat checked for a few products, but even in these cases, the gain for the consumer has been minimal. Packaging-to-price still prevails as evidenced by the large number of packages with fractional sizes; packages designed to exaggerate contents and "slack-filling" packages are still to be found on the shelves of most grocery stores. Legislation concerning cents-off deals and coupon-offers has been passed but only recently. Better enforcement of the law is necessary but enforcement cannot be done without adequate funds. Money is lacking to administer the truth-in-packaging legislation and the personnel in charge of enforcement is much too restricted for the task at hand (26).

Most research on packaging has been done by the industry people, who were mainly interested in knowing the kinds of packages consumers liked most [82,93,94,96,97,98,181]. Unfortunately, no research has been conducted yet to study the degree to which consumers are suffering economic losses from packages with fractional sizes, "slack-filled" packages, deceptive packages, etc. The only evidence we have that relates to packaging suggests that such packaging practices result in making it difficult for consumers at all educational levels to make meaningful cost-size comparisons between packages [153].

Alerted to this fact by consumer advocates and consumer groups, retailers in many areas have voluntarily tried to improve consumer shopping by instituting "dual-pricing," or the practice of stating both the price for the package and the price per unit (ounce, pound, etc. depending on the product). The relative merits of this consumer aid have been discussed elsewhere and such a system offers possibilities for improving consumer decision-making provided that consumers are informed of its value and educated on how to use it in their decision-making.

Legislation concerning unit-pricing should not be left to chance. A uniform set of rules should determine, nationwide, whether a package should be priced by the pound or the ounce, by the quart, the pint, or the gallon, by the 10-count, the 50-count, or the 100-count, etc. And a standard

should be laid down for the size, the conspicuousness, and the location of the price tag. All that calls for something more dependable than "consumerism-encouraged" promotional sales campaigns, welcome though they are. What it calls for is a Federal law.

Dual-pricing at its best is an effective tool for the consumer but it may be only a stopgap solution to the problem. As was pointed out by Padberg and McCullough [221:23]; "The burden of keeping unit pricing labels readable, accurate, and in the proper location is not trivial." In addition, costs, while lower than previous estimates and not particularly large compared to other things offered (stamps and games), are still large in relation to the aggregate consumer savings and discriminatory against small stores.

As an alternative, if manufacturers would make it a standard practice (or would be compelled by legislation) to pack their products in units of simple divisions or multiples of a pound, the more costly system of dual-pricing would not be needed.

Additional efforts should be devoted to assessing the advantages of the metric system for the consumer. A special committee of the American Home Economics Association has done extensive investigations in this area¹ and the data available provide a basis for designing improved weights and measures legislation.

¹"Report of the National Metric Study Conference--Consumers Affairs," Journal of Home Economics 63(5), May 1971, pp. 345-349.

Advertising

Consumer sovereignty, or the expression of consumer wants in the marketplace, is supposed to guide producer's activities. But in many cases, people in the food industry (this holds true for other categories of products as well) engage in all sorts of sales promotion, advertising and other devices to get the consumer to buy what they have to sell.

The research reviewed suggests that advertisers succeed in influencing what and where homemakers buy. The majority of homemakers rely heavily on newspaper advertising to plan their food shopping [8,22,25,27,89,122,125,144, 179,210,295]; they usually shop around quite extensively and buy advertised specials [75,84,210,215]; most are considerably influenced by nationally-advertised brand names [1,38,41,100,109,117,130, 212,217,285]; a sizeable proportion like and collect trading stamps and participate in contests and games [1,3,46,59,87, 179,188,243,253,284,285].

This situation has both desirable and undesirable aspects. The consumer generally appreciates better shopping conditions and is willing to pay a price for them. He certainly gains from information about the foods available and their prices. But nowadays, more and more advertising is substituting imagery and mood for product information and claims. Much of it is merely expensive attention-getting, and false impressions of value are often implanted in the

consumer's mind. Such use of advertising leads to superficial product proliferation and economic waste.

Conscious of this fact, the Federal Trade Commission recently announced a program to require firms in all major industries (the food industry included) to substantiate their advertising claims. Such public disclosure with respect to safety, performance, efficacy or quality of the product advertised will serve many purposes: (1) it will assist consumers in making rational choice among competing claims which purport to be based on objective evidence; (2) it will enhance competition by encouraging competitors to challenge advertising claims which have no basis in fact; and (3) it will encourage advertisers to have on hand adequate substantiation before claims are made.

This development in consumer protection is certainly a step in the right direction, but the consumer is left with the responsibility of reviewing and scrutinizing the data made available to him and of alerting the Commission to possible violations of the law. The average consumer has a long history of apathy and indifference and he is not likely to fulfill adequately his task of watchdog if education in consumership does not convince him of the necessity to increase his participation in the marketplace. Preclearance requirement for advertising would seem to be a better type of legislation for insuring that consumers are exposed to honest and informative claims about food products offered in

the market place, especially for those products advertised as superior from a nutritional standpoint.

Another area of concern ought to be the control of advertising geared to an audience comprised of children. According to recent figures, the moderate TV watching child sees at least 5,000 food ads per year, an average of 10 per hour. Most advertisements directed to youth audiences stress vitamins, desserts, snacks and cereals. A high percentage stress sugar and sweetness content of product. As a result parents are influenced by their children to buy those products publicized through commercials [72,83,158,261] and their continuing struggle to persuade their children to eat a balanced diet is impeded from the start. We also know that habits formed in early childhood are very difficult to eradicate. It becomes thus a major responsibility of the government to apply better control of advertising designed for the young population, if we want our nutrition education programs to bear fruit in due time.

Consumer Representation at the Government Level

The governmental effort in the behalf of the consumers has been real and significant. But in too many instances, there is a gap between the passage of a law and solid and visible results. A new office or agency turns out to be all talk and no action; regulatory efforts bog down in politics or bureaucracy; a well-intentioned law proves unworkable; a workable law is laxly enforced. It has also been

argued that many of the regulatory agencies supposedly serving consumer interests were primarily designed for other purposes and their consumer-oriented activity is only a by-product of their major functions. Others have changed their orientation over time to servicing processors and handlers rather than protecting consumers.

Some of the shortcomings of consumer protection as it now exists could be alleviated if consumers were effectively represented at the governmental level and were in a position to indicate what they want, voice their complaints and lobby for a better enforcement of current laws.

At present, there is no existing device in the United States government which assures that the consumer view will be registered expertly where it needs to be heard. The advisor selected by the President to be his counsel on consumer affairs cannot as a member of the White House team operate as a counsel for the consumer cause without embarrassing the administration. He cannot speak publicly against specific omissions of the government even though they are often the cause of consumer distress. What it amounts to is that in the policy-making at the White House, the consumer cause generally finds very few defenders. Whether a centralized consumer agency in the executive branch is the solution or whether existing agencies are given full recognition of their duties and opportunities, the need for adequate representation of consumer's interests in government activities seems clear.

Implications for Consumer Education

There is a distinction between consumer education and consumer information. Consumer information refers to the content of different programs designed by government, industry, and consumer groups to convey information about specific products. Consumer education can be broadly defined as any systematic program designed to develop competencies in one or more areas of consumership, from the clarification of values and goals to the selection and use of any specific product.

Consumer education aims at developing intelligent consumers who are aware of the many choices that confront them in the market place; consumers who want to improve, not only their level of consumption by wiser purchases, but also their level of living by improving the quality of their environment; consumers who are not only concerned with private decisions but also with public ones.

The ultimate purpose of consumer education is the production of changes in an individual's behavior in his role as a consumer. Minden (86) defined the following changes: (1) changes in knowledge, or things known; (2) changes in skills, or things done; and (3) changes in attitudes, or things felt and values held.

The need for consumer education is not new. Margaret Reid (35:109) was writing in 1942:

Much of the interest in this (consumer) education arises from the belief that consumers might be trained to get more for their money. Again and again studies have been quoted revealing choices and practices which are the direct outcome of ignorance. Small scale unspecialized buying will always interfere with achieving a high level of competence. Nevertheless, a well-planned and executed educational program should achieve much.... In many cases consumers need to be aware of their shortcomings; they need to be shaken out of a rut, to have their eyes opened to possible benefits from increased knowledge as well as different methods of selling.

That the consumer is still in need of more information on which to base his buying decisions is even more true today, in an era characterized by affluence, impersonal markets, daily technological innovations and mass communication.

Our research in one particular aspect of consumption--the procurement of food for the family--showed that the general level of marketing and nutrition knowledge was fairly low in all areas of information and at all educational levels [71,118,120,161,210,220,265,272,274,276,325,333]. Improved knowledge in these two areas would result in a better level of living for all consumers because: (1) better-informed consumers could, through improved choices, direct production toward less waste and more welfare, and (2) improved diets would contribute to the general well-being of the population, reduce the number of disabled citizens, increase the quantity and improve the quality of the human resources available.

Educators, government agencies and businessmen are well aware of the need for more and better consumer education for

all citizens. Their conviction that the consumer cannot participate effectively in the democratic processes of the country if he is a slave of ignorance or misinformation has been translated into a great variety of programs for special target audiences including young families, senior citizens, low-income families, etc.

Programs aimed at helping consumers improve their eating and shopping habits and get the most for their food dollar are conducted regularly by the Cooperative Extension Service and the Consumer and Marketing Information (CMI) across the nation. A few examples will give an idea of the various programs designed to educate the consumer.¹

- Food production and food preservation project for low-income families in Georgia.
- Metropolitan Extension Consumer Committee in Maryland and the District of Columbia. Various resources of the area (FDA, AHEA, USDA, Federal Extension Service, etc.) are coordinated to help families of four counties become better-informed consumers.
- Consumer Forums in Wilmington and Georgetown, Delaware. Speakers from all sectors of the food industry meet with consumers to exchange suggestions and ideas.
- Self-improvement workshops for supermarket managers, food wholesalers and retailers, at Michigan State

¹Reports on such programs are published regularly in the following USDA publications: Agricultural Marketing and Extension Review.

University, East Lansing. Such programs for wholesalers and retailers have been conducted as far back as 1948.

- Money management series for military families in Hawaii.
- "Food for Young Families," program taught by the Minnesota Extension Service in ten counties.
- Family Living Program at Michigan State University. The emphasis of the program is on improving diets of low-income families.
- Consumer information TV programs in Duluth, Minnesota. The series, four 30-minute programs, dealt with the different aspects of food management, the FDA, etc. Consumers could call for information during the program.
- Expanded Nutrition Programs in all the states.
- Marketing releases on radio, television and newspapers are regular features of the CMI program along with classes and programs on food marketing to Extension members, club and church members, low-income families, etc.

Business organizations, manufacturers, retailers, finance companies and consumer groups have also developed materials and programs designed to improve consumer knowledge and understanding of the complex food industry. Leaflets and booklets about general principles of food management,

nutrition, food products, etc.; workshops; consumer dialogues; demonstrations; etc., are some of the activities sponsored by these organizations.

Consumer programs, whether operated by the government or sponsored by business organizations, professional or consumer groups, make an important contribution to the national consumer education effort but their impact varies according to the objectives of the organization. In a recent survey and evaluation of consumer education programs in the United States, Joseph Uhl (100) reported that many of the commercial programs are still allied with the public relations and advertising departments of sponsors. He found that where the consumer education program is highly differentiated within the organization, the quality of the educational effort appears somewhat higher. Uhl also indicated that most of the programs studied were aimed at a general audience with little differentiation of materials or teaching techniques for different age groups, income strata, or sex.

Findings from the review of research suggest that the following are very important problems in consumer education:

- 1) Motivating the consumer to improve knowledge of nutrition and management and decision-making relative to food.
- 2) Revising the content and updating existing information.
- 3) Finding the appropriate channels to reach the consumer and utilizing their full potential.

- 4) Adapting the information to the audience and translating the material into laymen's language.

Motivating the Consumer

The biggest problem ahead in our education effort is to convince homemakers of the need to improve their knowledge of food management and nutrition. This is not as easy a task as it seems, for two main reasons.

The first reason is that food is one big item that is not automatically built into the budget. Many families commit themselves first to various monthly payments for rent, car, insurance, appliances, etc. and they use what money is left to buy food. If the cash residue is not sufficient to include favorite family foods, homemakers are more likely to blame the price of food rather than their own management. As we have observed, women may have a good idea of the general pricing policy of a particular store but their knowledge of prices for individual items is very limited and is often better for non-food items [56,150,163,201,219,335].

Secondly, we have found that homemakers are generally satisfied with their food shopping and they feel they are successful in providing nutritious food to their family [201,272,335]. How could it be otherwise when they see their children grow, an abundance of food being eaten and no apparent signs of nutritional deficiencies? Moreover, they feel they can always count on vitamin and mineral supplements to compensate for possible insufficiencies in the diet! In most cases,

however, the lack of nutritional knowledge makes it impossible for the majority of homemakers to develop an awareness of the possible dangers of over consumption of some nutrients and to evaluate the economic losses resulting from inadequate eating patterns.

The concern for nutrition, if important, is by no means the sole priority in feeding the family. Food plays a major role in the desire to show love and warmth to the family members and homemakers utilize foods with low or no nutritional values as reward or treat to prove their loving care. Women also respond to family preferences. They prefer not to serve a food or a particular brand that is not liked, even if it is more nutritious or better priced [22,89,128,202,219,272,292,333]. Other objectives such as convenience, ease of preparation, time, play an important part in the decision vis-a-vis food selection [7,20,27,28,34,51,113,144,159,201,292,319]. To meet these objectives, a compromise is often made and it is fully acceptable to the housewife since she is convinced that on an overall basis her family is consuming healthful and nutritious foods.

From these observations, it is evident that the task of motivating the homemaker to improve her knowledge and change some of the food habits of the family is a difficult endeavor. Consumer educators will have to convince the housewife of the rewards attached to better knowledge and information. They will have to sell the advantages of education in food

management and nutrition. This is easier said than done. The process of change is long-term and unspectacular. Gains to be realized are not dramatic, reward is not always immediate and, consequently, educators cannot expect to win instant acceptance.

How will it be possible for the educator to provide information about management and decision-making relative to food and nutrition through more meaningful programs? Two objectives must be set forth:

1. An interest in eating balanced meals should become a part of daily life of the family. Women should be convinced that they have a vital role to play, not only in providing nourishing meals for their family (this is already one of their main concerns), but in developing good eating habits from the start. No matter how well we teach nutrition education in the classroom and outside, no matter how convincing our plea for better diets is, it is indeed a challenge to try to alter habits formed in early childhood. The review of research revealed that family preferences, more than any other factors, dictate the types of foods purchased by the homemaker. This is fine. But if mothers knew more about their role in developing those preferences and were more conscious about it, they would see to it that their children develop proper eating habits and they could later indulge in buying what foods the family prefers, knowing that nutrition will not have to suffer at the expense of "taste demands."

Government and industry have a great responsibility in developing programs and campaigns to foster sound nutrition. But homemakers should know that neither of these organizations can completely package good family nutrition and deliver it to the home. That is a choice the consumer must make on each trip to the market.

At present, a large number of Americans are "nutritional illiterates" who do not know what constitutes a healthful diet, the vitamins and minerals they need or the foods that contain them or understand the function of specific nutrients in maintaining good health. Moreover, a significant number do not show a great concern for good nutrition [70,125,144,201,292].

The educator's responsibility will be (1) to develop an awareness of the problem and a desire to bring about some changes in the food habits, and (2) to provide the means to make improvements possible.

Developing awareness can probably be best done on a large scale and by utilizing the mass media of information. Methods used in recent years to attract the attention of the public to the dangers of smoking or to the importance of early diagnosis in the fight against cancer have certainly been effective in "opening the eyes" of a wide sector of the population. Similar campaigns will have to be developed if we want the consumer to know that a nutritional problem exists.

Once the public is aware, it is hoped that they will seek to improve their knowledge of nutrition. We cannot

count on a general reversal of the situation, however. Just as the knowledge of the dangers of smoking has not stopped people from buying tobacco products, awareness of their nutritional illiteracy will not automatically lead consumers to enroll in a nutrition class or seek information on the subject. But for those who will, educational programs should be readily available.

Consumers will have to be informed about their nutritional needs and about the types of foods at their disposal to satisfy those needs. Besides they will need enough nutritional knowledge to properly evaluate the information available. Nutrition as practiced by the consumer relates to the selection of a diet composed of readily available foods. Too often, consumers are unaware of the food ingredients incorporated into some mixtures or unable to ascertain whether these foods do supply the necessary selection to insure an adequate nutrient intake. Nutrition education in relation to new foods and new eating habits is left by default to the manufacturer. For reasons justifiable to him, he may convince housewives that his product deserves a larger place than can be warranted from a nutritional standpoint. We should remember that, in most cases, any new food added to the diet will replace some other food product. This shows the importance of knowledge and accurate information.

2. Motivating homemakers to improve their food management behavior should be the second objective of consumer educators. In the studies reviewed in the preceding chapter,

women showed great interest in learning more about food preparation, cooking, new recipes, budgeting and economizing, etc.; and even if interest in marketing and nutrition was mentioned less often, it was important for a substantial proportion of the housewives. Women are aware that better knowledge of food preparation and cooking influences the meals served at home; they know that if they learn new recipes and hear about new products, they are more apt to vary their menus (a goal very important to most homemakers); the majority of them show a concern for price and cost of food and they want to learn about different ways to stay within certain budget limits. These are general concerns for most homemakers [70,113,125,144,201,244,292,333].

What seems to be lacking is the consumer's conviction that improvement in decision-making is the base for improvement in all aspects of food buying and meal preparation. Programs intended to describe the desirable outcomes obtained from a sound management have been numerous and varied but, for the most part, they have failed to deliver an important message. That is, food management should be seen in a much longer perspective than the weekly trips to the supermarkets.

The homemakers should realize that saving pennies is only one aspect of their food management. Money saved is valuable only because it offers so many possibilities. With it consumers can buy more and better meats, or a greater variety of fruits and vegetables, or more convenience, etc. If the money allocated to food is sufficient for the present

needs, savings derived from better planning and careful shopping can be used for other purposes.

Concentration on buymanship is only one approach to consumer education. Education for family living is much more important. The problem faced by the homemaker is one of making choices in the light of long-term goals for the family unit. Her concern should be more with the quality of family life than with immediate consumer choices. And it is only by conscious management and decision-making that homemakers will be able to define their goals in line with the values held by the family and take the appropriate steps to fulfill them.

If consumers were motivated enough toward this objective, consumer education will be considerably facilitated. Furthermore, consumers would probably be more eager to encourage mandatory or voluntary programs beneficial to them.

But to repeat what was said earlier in this chapter, the task is not easy. Homemakers feel they are already doing a good job and it will take persuasion and stamina to convince them that they can do much better. Moreover, this can only be done by changing consumer attitudes and philosophical outlook. Educators need not be reminded the complexity of such an endeavor.

Revising the Content and Updating Existing Information

Continuous reassessment of informative materials should be done for two purposes: (1) to find better ways to

disseminate valuable information long taught but not used by the consumer, and (2) to adapt information to research findings, marketing trends and innovations.

There is evidence in the research reviewed that many concepts that have been taught for years and are very sound guidelines for buying a variety of foods are seldom or never used by homemakers [18,29,75,85,144,172,226,281,310,311,312]. Such concepts as "Basic 4," price per serving for buying meats, cost-size comparisons between eggs, grades as a criterion for selection are examples of relevant information that have not been assimilated by most consumers. Who is to blame? It is the responsibility of consumer specialists to know where and why the communication system breaks down. In what respect is the breakdown due to the communicator's omissions and commissions; and in what respect is the breakdown due to the actions or inactions of the consumer?

Consumer educators are also responsible for keeping up-to-date with current consumer behavior research in order to adapt their teaching and information to the needs of their audience. Some of the actual practices and dictum should be revised or altered in line with the acquisition of new knowledge about the consumer and new knowledge about the market and the alternatives available to consumers.

For example, we tell the homemaker to read labels and compare prices and brands in the store. Could we reasonably expect her to do so when we learn from research that most

women do not spend more than 30 minutes (including check-out) for their major weekly trip to the supermarket? For many years, we have exhorted homemakers to look for grades for meats and other products. But research shows that they do not do it. Why is it so? Have we always made it clear to them that grade designations differ from product to product? That Grade A does not always mean the highest quality? Or that Grade one is not top-notch but next to Grades 00 or 0 for some commodities? We advise the consumer to plan menus around the "Basic 4," but research tells us that menu planning is not very systematic and that the trend is toward more meals eaten away from home. Did we ever attempt to suggest menus or plans that will fit with this new pattern of eating? We exhort the housewife to read the ads and shop for "specials." This is fine. However, research shows that women can compare general price levels of various grocery stores, but most are unable to quote prices of specific food items [201]. Price comparison becomes a guess; and more so since the practice of food advertisers is to fill the whole newspaper page with suggestions, with most of the items marked at their regular prices and only a few offered at a real discount. One more item. We advise the homemaker to return faulty food products to the store. That is a very wise suggestion. But what if the homemaker shops once a week at a supermarket five miles away? Is it worth the trip back? Can she conveniently wait until the next trip? Where is she to keep the defective produce or meat in the meantime?

These examples show that the valuable suggestions that we have to offer (and all the above are) must be reformulated, adapted or altered at times, if we want them to be relevant and useful to the ever-changing consumer and the ever-changing market.

Informing consumers about the current developments in food and nutrition, legislation and consumer protection, etc., is a major responsibility of consumer education. The educator should translate scientific information into laymen's language and should supply unbiased and as complete information as possible about laws and regulations, technological innovations and business practices to provide a basis for wise consumer decision-making.

The following areas of education have not been covered extensively by consumer educators. Discussion of additives in foods, weights and measures, product standardization, grade specification, food analogs, real or imaginary value and economics of organic and health foods, evaluation of advertising claims, food in relation to ecology, etc. should be part of any educative programs, provided the technical jargon is reduced to laymen's level and the subject is treated objectively (the reservation regarding conflicts of interest still holds here).

Assuming that they have adequate nutritional knowledge, consumers will be in a position to choose the "right combination of foods" only if they have access to accurate, easy-to-understand and unbiased information. When this kind of

information exists, the educator should convince the consumer to use it and show him how. If the information is not available, or if it is incomplete or inappropriate as a basis for sound decisions, the educator should consider the value of filling the gap by insisting on disclosure of pertinent research findings if available from government, producer or retailer and/or initiating needed research.

Finally, consumers should be taught how to communicate their needs and wants to producers (besides by not buying their products), how to register a complaint, how to change a law. They need to know how to support or deny support to proposed legislation. They need to be aware of what legal resources they have and how to use them. It is only when consumers take their destiny into their own hands that they will become fully educated and conscious of their rights and responsibilities.

Utilizing the Appropriate Channels of Communication to Their Full Potential

Consumers rely on a variety of sources to acquire information about food and nutrition, but some media are more important than others. Research indicates that friends and relatives are often consulted for advice about meal planning, food preparation, cooking tips, etc. Newspapers and magazines are the favorite mass media of information, while television and radio are used more often by specific groups of people. As viewed by the homemakers, cookbooks are considered a "good" source of information about nutrition [8,22,

25,27,34,35,84,89,122,144,179,183,201,210,295].

Consumer educators have used the mass media extensively to inform the consumer but it is doubtful if they have utilized all the potentialities they afford. Newspapers are a primary source of information for the average homemaker. She uses one or more newspapers extensively to plan her weekly shopping trip. But reading the advertisements does not necessarily mean reading articles about food. While homemakers seem to be interested in collecting recipes and menus, research done to assess newspaper readership of marketing information revealed that only about 50 percent of the homemakers were ever reached by the regular feature in the newspaper and of those reading the article, a minority used the information on a regular basis [27,28,34,159,196,197,226,227]. Such results do not mean that newspapers are ineffective in educating the consumer but they point out the necessity to reevaluate the content and presentation of such information. In some instances, the information given is complete and accurate and it is up to the consumer to make use of it. In other cases, the information is reliable but some important facts that would help decision-making are omitted because they conflict with the interests of the organization responsible for the article or the advertisers who foot the bill.

The same reservations can be made for some magazine articles. In such publications, a wide range of topics are discussed and most are useful to the consumers. Nevertheless,

an investigation to study the nature of nutritional claims made in food advertisements revealed ten major types of errors often made by food advertisers, from statements playing on the credulity, ignorance or fears of the public to exaggeration and over-simplification of food values or function (88).

Television has seldom been considered for educating the consumer about food management. It is used by Consumer and Marketing agents in many states but the scheduling of the program is not always good (i.e., six o'clock in the morning) and the feature is often incorporated in a show for farmers, which is enough to prevent a sizeable number of homemakers from tuning in. There are also human problems involved and it may be difficult to find a specialist who combines competency with a "presence" that will attract consumers' attention week after week.

Television can also be an effective medium for teaching nutrition to a wide audience, providing suitable programs are developed. Medved (67) studied the homemaker's response to a series of TV programs on basic nutrition and she found that nutrition information televised on a regular basis was effective in increasing consumer knowledge. Furthermore, she revealed that the gain in knowledge was reflected in improved meal planning scores which indicated an increased ability to apply principles.

New sources of information should be investigated. Computer-base facilities may be developed that will receive

questions about food and nutrition and consumer problems and then provide on-the-spot answers. The information can be made available to all residents of a specific area through computer terminals located in strategic places. Such a program is being presently developed by home economists at Michigan State University.

Computers have also been used to develop 30-day menus personalized for each family. The consumer needs only to give information as to the size of her food budget, the number of people to be fed and their ages in order to receive a menu adapted to the family needs. Such computerized menus could be further improved by incorporating special dietary needs and family preferences--a prime factor in food selection--into the information fed to the computer.

Another idea that can be pursued is the setting up of nutrition "stations" and "consumer booths" in supermarket and chain stores. Such stations and booths could be manned by college students majoring in consumer economics, food and nutrition, agricultural economics, marketing, etc., working under the supervision of specialists. The time spent at the station could provide a valuable field experience for the student. At the same time, the program could be of real benefit to consumers.

Pressing for funds to conduct a really effective mass-audience educational program and putting the information in the form and in the place where consumers can easily make use of it should be two main concerns of consumer educators.

One of the best places to disseminate information about food and nutrition is where the housewife buys the food for her family. The present shopping pattern of most homemakers makes the task easier. Most women shop in supermarkets or chain stores and the scale of these operations is a factor facilitating the development of meaningful programs. Furthermore, retailers have proved their willingness to participate in the consumer movement and they rightfully see consumer education as part of the process of selling.

There is an important point to consider, however, Since research findings show that the usual trip to the supermarket averages from 20 to 30 minutes in duration [72,126,147,220, 279,283,290], any programs developed to inform and/or educate the consumer should be designed in such a way that they motivate the homemaker to alter her shopping habits and allocate sufficient time to utilize educational facilities at the point of sale or to devote time acquiring basic knowledge of food and nutrition prior to shopping trips.

Adapting the Information to the Audience

Johnson (60) stated that most changes in food habits within the United States are brought about by advertising and promotion, and not by persuasive statements of physicians, nutritionists and educators. Why is it so? Certainly not because of a lack of information available. Rather, the problem seems to be that the conventional methods of teaching nutrition in the schools and elsewhere are simply not

"taking." The same can be said for education about food management.

Individual consumers and consumer groups vary according to training, experience, ethnic or cultural background and their informational needs range from the most elementary to the most sophisticated. It is not always easy to determine the needs of a particular group and it is one of the reasons why certain groups within the population (low- or upper-income, elderly, married students) have received less attention than the average middle-class housewife, who represents the majority of most consumer studies and to whom most of the consumer information is directed.

Educators are concerned about not reaching the audience which is in most need--the disadvantaged family. Various attempts have been made to reach such families but most efforts have been local and fragmentary. Moreover, educational materials and concepts are often not suited for the socioeconomic group being served and sources of information are limited for these particular groups. For example, Negro homemakers receive fewer magazines and newspapers, have less cookbooks, and are more inclined to rely on television and radio for their information, two sources that have been used very little to educate the consumer about food. A significant number of elderly people cannot use the printed media to the same extent as younger homemakers, but it is often the only vehicle available to them to acquire any kind of information [8,144,159,239,289,295].

Why is it that professional people offering demonstrations and classes are consistently less popular than other sources of information? [8,22,25,27,84,122,183,210,295]. Is it for reasons of convenience (not available in place of residence, time-consuming) or is it because the presentations are not adapted to the audience for whom they are intended? Maybe there is an invisible language barrier that needs to be broken in order to establish communication.

Language used to address particular audiences is important. Specialists engaged in consumer education often use words or expressions which are not understood or are confusing to many homemakers. Marbling, buying food in seasons, nutrition per dollar spent, and substitutes are examples of such terms. Even simple words may be too complicated to women with little education or a different background if they are not part of their usual vocabulary.

Educators in the field are already aware of the shortcomings inherent to all forms of communication. What they need to do is to continuously reassess their informative materials in terms of content and style and to more critically appraise the literature they use as their own sources of information.

Implications for Future Research

One of the objectives of this study was to offer recommendations and suggestions for future research designed to assist the consumer.

Research is needed to improve knowledge about the consumer, to improve knowledge about business practices which affect consumer welfare, to develop more efficient consumer legislation and to raise the quality of educational programs. Marketing and agricultural specialists, advertising agencies, retailers and producers have long known the benefits of studying the consumer and most of the research reports available were published by such organizations. Results from those studies were beneficial to the consumer but, understandably, the investigators were primarily concerned with their own interests, such as finding better ways to advertise or promote a product or package specific goods, establish store policies, increase the use of a commodity, influence consumer to purchase a particular brand, and so on.

Research done primarily for the sake of the consumer has been very limited and it will be the responsibility of researchers in the academic community to fill the gap. There is a wealth of information available to them and they should use their scarce resources, not in duplicating studies already done by the business community, but in exploring new avenues left untouched by previous investigators or in exploring similar areas but analyzing the data with a view to providing service to the consumer.

Findings from the research reviewed suggest many areas that have received little or no attention in the past. Recommendations for future studies are presented under the following categories:

- 1) Research needed to promote improved interaction of the consumers with the market place.
- 2) Research needed to improve our knowledge of the homemakers' food management practices.
- 3) Research needed to develop better systems of communication between educators and consumers.

Research Needed to Promote Improved Interaction of the Consumers with the Market Place

Research to study the market serving the consumer should be a priority in future consumer behavior research. Producers have extensive information about buyers but consumers know very little about the market. It is a truism to say that consumers need to be informed in order to improve their consumership. A better knowledge of the market is one way to meet this objective. Results of consumer research should be passed on to the consumer so that he can make use of it according to his own needs. Investigations to determine the best channels to disseminate that type of information are a necessary complement to market research designed to assist the consumer and are discussed earlier in this chapter.

Government representatives concerned with promoting consumer interest have proposed amendments to existing legislation as well as new laws and regulations to improve consumer protection in the area of food. These actions in favor of the consumer can only be pursued if they are substantiated by facts. Research by the academic community can

provide such data. We need more thorough investigations of the enforcement of existing legislation concerning food and food products; studies to determine the best ways to gather product information and disseminate it to the general public; surveys of consumer needs and preferences concerning promotional devices, labeling, open-dating, standards and grades, etc. Research is necessary to assess the level of consumer knowledge and attitudes concerning additives, imitation foods, enrichment and fortification of foods, and other innovations recently developed by the food industry and/or the government and for which there exists little information on which to base decisions for their adoption or rejection. The paucity of information in these and similar areas calls for immediate action and the increased concern of many government representatives should be an aid in securing the funds necessary for investigations of this type.

Reasons for the lack of feedback from consumers to the industry and the government have not been investigated, despite the fact that producers, government educators and consumer groups increasingly point out the importance of informed, responsible public and private consumer decision-making. What are the reasons for apathy? Have consumers been given a chance to determine their expectations, translate their concerns and voice their complaints? Do consumers know the appropriate channels to communicate with the government and the industry? What results can they expect,

judging from past experiences of the sort? Are the costs (in terms of money, time and energy) too high relative to the benefits? Answers to these questions must be sought in order to develop programs that will help consumers understand their responsibility and improve their participation in market transactions.

Evaluation of various promotional devices used by business such as contests, games, mail-out coupons, etc. is needed to provide a basis for recommending legislation to control practices which are excessively misleading and expensive.

It is also important to develop research designed to improve assessment of probable costs and benefits of proposed programs for enhanced consumer welfare.

Research Needed to Improve Our Knowledge of the Homemakers' Food Management Practices

The pattern of family eating is changing: more meals are eaten away from home, purchases of convenience foods are increasing, snacks have replaced the more formal meals, interest in exotic foods and gourmet cooking is developing, etc. These trends will combine with a shift in the age of the population (more young families by 1980) and an increase in income and education to affect food consumption considerably in the near future. Is our research geared to economic and social changes? To be relevant, research must anticipate problems and show directions that should be taken in order to increase family and individual welfare. Too often,

in the past, research has ignored the dynamics of change and scientists are still baffled by the process of change in tastes and preferences. How do changes come about in respect to food preferences and food consumption? What are the characteristics of the people most prone to acquire new preferences, develop new attitudes and alter their behavior? The relationship between values and change has not been explored in spite of the fact that values are believed to play an essential role in the process. Home economists, with their concern for values as the reason behind individual and family behaviors, should direct their attention to such study. This is one area where they can make a unique contribution to consumer behavior research.

Up to now, most investigators have been concerned mostly with measuring relationships between selected socioeconomic characteristics and specific behavior and attitudes relative to food management. A wide range of tools from psychology could be adapted to investigate associations between personality variables and knowledge, attitudes and behavior in the area of food. Such research would certainly add a new dimension to our consumer behavior research and would provide background information with which to study values, motivation and needs relative to food management.

Research done to know more about consumer motivations and find reasons behind consumer actions has not been used in the interest of the consumer. Motivation research has

been developed by investigators from business and industry to probe consumers about the "whys" of their consumption behavior in order to find the best possible ways to persuade them to buy a specific product or a particular brand or package. Some of the techniques used by these investigators might be borrowed and refined to find more about the needs and wants of the consumer. Results of such studies could then be used to develop new and better ways to help consumers clarify their values and understand some of the hidden or unknown motives behind their actions. Improved understanding of motivation and values could contribute toward the improvement of decision-making.

Research reviewed suggests other areas that have received little or no attention in the past. More specifically, investigations in the following areas would contribute significantly toward increasing our knowledge of the consumer and thus help us design programs suited to his needs:

- 1) Investigations of relationships between attitudes toward cooking and food preparation and management practices. We have extensive data on various aspects of food management but practically no information about the importance of attitudes toward cooking and food preparation and such practices as use of convenience foods, time spent in shopping and meal preparation, use of recipes, search for information about food and nutrition, etc.

2) Research to study the consumer's consistency in applying knowledge to choices. This involves accurate measurement of consumers' level of knowledge and precise assessment of the factors considered in food selection. In relation to such investigations, there is a great need for the development and testing of better instruments to measure the level of knowledge of consumers.

3) Investigations regarding the barriers to food consumption in terms of perceived product attributes and level of consumer knowledge.

4) Surveys of actual practices of families concerning various aspects of food preparation and service: substitutions made among alternative forms of foods; storage practices at home; management practices used to achieve variety with minimum costs and minimum homemaker skills (particularly important for low-income families).

5) Research to measure the relative importance of various aspects of convenience in the selection of a store. In many studies the term "convenience" usually refers to the location of the store, but it is not always clearly defined: is it location in relation to home, to other stores, to access roads and highways? Most studies do not make these distinctions. Furthermore, other aspects of convenience--parking facilities, layout of the store, availability of credit, convenient hours, etc.--have not been studied, particularly in relation to other food management practices.

6) Investigations of effects of different types of advertising, especially of nutritional claims and advertising directed toward children. Consumer's response to various forms of advertising is the only type of research done in an area that is very influential in the decision-making process.

7) Further investigations of factors affecting consumer choice such as packaging, labeling, promotional devices (stamps, games, contests), etc.

Investigations in these areas will not only provide much needed information about the consumer but will also help improve our educational programs and support our plea for better consumer protection.

Research Needed to Develop Better Systems
of Communication Between Educators and
Consumers

Past investigations show that a sizeable proportion of decisions concerning the selection of foods are made in the store but no research has been done to determine the best ways to help the consumer make wise store decisions. There is a whole range of possibilities in this area. Future investigators could study the relative merits of different in-store communications to inform the consumer "on the spot": closed-circuit television, "consumer booths," recipes and menu suggestions featuring sales items or best buys, booths to acquaint the consumer with the nutritional value of new

foods entering the market, etc. These and similar suggestions may not be economically feasible or practical at the moment but research is necessary to evaluate their potential. This is an area where the consumer educators and the academic community can work hand in hand with the industry, provided the interest of the consumer is not sacrificed to the interest of the retailer.

Research to assess consumer understanding of terms and concepts used by consumer educators--best buys, nutrition per dollar spent, quality, convenience, nutrients, price per serving, etc.--is necessary to determine whether it is more desirable to drop terminology which has a confusing meaning or attempt to educate the public as to its correct interpretation. When there is lack of consumer understanding, research may help differentiate between problems of semantics and problems of communication. Research reviewed points to a definite need for investigators who can use communications research methods and adapt techniques to consumer education needs.

It should be a matter of concern for all educators that such a popular medium as television has never been used extensively for a systematic consumer education program. Research to investigate the feasibility of teaching nutrition and food management (as a package) through television, games and computers could open the door to a new concept in consumer education.

Conclusion

A symbiotic relationship exists between consumer protection, consumer education and consumer research. Families involved in the procurement of food must have the assurance that they get sanitary and wholesome foods to their best economic advantage and in fair and honest dealing with the producer and the retailer. This role of protecting the consumer should be a major responsibility of government agencies at the federal, state and local levels. Unfortunately, this function is not always performed adequately and the suggestions offered in a previous section of this chapter are necessary steps if we want to improve consumer protection.

Laws and regulations are necessary but they will be of little value if the consumer does not know or does not care about them. Consumer concern is indispensable to an efficient enforcement of the law. On the other hand, the consumer cannot function if he is not provided with the means to make intelligent choices in the market place and assume his responsibilities for contributing to a healthy competitive economy. The government, in cooperation with the industry and the academic community, must then provide the consumer with the information and the facts he needs to improve his decision-making.

There is much debate as to whether we should concentrate our energy and money to increase consumer protection or

develop more and better educational programs. It appears that both are equally necessary, especially with food, our area of concern. At times, however, they can be substituted for one another for solving particular consumer problems. Too often, in the past, consumer protection and consumer education have been seen in isolation. It is time that they be regarded as interdependent and interrelated.

Consumer research might prove to be the most valuable means to determine if we need more consumer protection, more consumer education or a better mix of the two for solving the numerous problems inherent to food production and food distribution. This calls for better planning at the national level of the research needed in the years ahead; increased cooperation between scientists interested in all aspects of food (food technology, nutrition, human ecology, marketing and advertising, etc.); objective evaluation of the situation; and a common belief that research done for consumer's sake will result in benefits for all.

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APPENDIX

APPENDIX

INFORMATION CONCERNING TABULATED STUDIES

Study Number	Date of Study	Area Studied	Nature of Sample	Techniques used to Collect Data	Major Commodity or Subject Studied	Source
1	Fall 1959- Winter 1960	nationwide survey	random sample 500 homemakers	personal interviews	food shopping behavior	Chicago Tribune
8	Fall 1958 Fall 1960	Waycross Augusta	random sample 428 families	personal interviews	food management practices of employed and nonemployed homemakers	Georgia Agr. Exp. Station
11	Fall 1958 Fall 1960	Waycross Augusta	random sample 428 families	personal interviews	fruits and vegetables used by families	Georgia Agr. Exp. Station
22	1961	Roanoke, Va.	random sample 1320 homemakers	personal interviews	effectiveness of television programs on consumer knowledge	Virginia Polyt. Inst. Agr. Exp. Station
25	Fall 1957 Winter and Fall 1958	4 cities-- Georgia	random sample 797 families	personal interviews	food management practices	Georgia Agr. Exp. Station
26	Spring 1966	East Tennessee	140 selected families using food stamps	personal interviews	food buying habits	Master's thesis Univ. of Tennessee
27	1956	Muskegon and 12 Michigan cities	311 homemakers and 12,000 households	personal interviews and telephone survey	use of mass media	Master's thesis Michigan State University
33	1964	Madison County Florida	100 selected families	personal interviews	meal management practices of rural and urban families	Master's thesis Auburn University
34	1956	10 counties South Calif.	693 selected homemakers	mailed questionnaire	use of marketing information	Univ. of Calif. Agr. Ext. service

APPENDIX--continued

Study Number	Date of Study	Area Studied	Nature of Sample	Techniques Used to Collect Data	Major Commodity or Subject Studied	Source
25	1965	Minneapolis St. Paul	random sample 152 families	personal interviews	food expenditures and shopping practices of upper-income families	Univ. of Minne- sota Agr. Exp. Station
40	1957	Rochester, New York	random sample 283 households	personal interviews	food marketing practices--older house- holds	Cornell Univer- sity Agr. Exp. Station and USDA
49	Nov. 1963 to Jan. 1964	nationwide survey	random sample 2454 households	personal interviews	fruits and fruit products	USDA, Agric. Marketing Serv.
53	Summer 1958	Greenbelt, Md.	random sample 117 families	mailed questionnaire	food buying practices	Master's thesis Howard Univ.
72	1963	Lubbock, Texas	175 selected homemakers	mailed questionnaire	food shopping practices	Master's thesis Texas Tech. College
75	1959	one city Alabama	55 selected families	personal interviews	beef preferences	Alabama Polyt. Inst. Agr. Exp. Station
77	Fall 1958 to Spring 1960 (exclud- ing Summers)	7 counties in Mississippi	random sample 540 families	personal interviews	food management prac- tices of employed homemakers	Miss. Agr. Exp. Station
84	1966	Dallas, Texas	125 selected urban homemakers	mailed questionnaire	meat buying	Master's thesis Texas Woman's Univ.
89	1967	Fairbury, Illinois	100 selected homemakers	mailed questionnaire	food buying practices	Master's thesis Illinois State University

APPENDIX--Continued

Study Number	Date of Study	Area Studied	Nature of Sample	Techniques Used to Collect Data	Major Commodity or Subject Studied	Source
112	1965	Fort Collins, Colorado	26 selected disabled homemakers	personal interviews	meal management practices	Master's thesis Colorado State University
120	1957-1958	all cities Alabama	random sample 1654 urban homemakers	personal interviews	milk products	Alabama Agr. Exp. Station
121	Fall 1955	Gadsden, Alabama	random sample 629 homemakers	personal interviews	eggs	Alabama Agr. Exp. Station
122	1957-1958	all cities Alabama	random sample 1654 urban homemakers	personal interviews	food shopping practices	Alabama Agr. Exp. Station
125	1963	Greensboro, North Carolina	random sample 67 families	personal interviews	food management practices	Master's thesis Univ. of North Carolina
128	1962	Blacksburg, Virginia	80 selected families	mailed questionnaire	food management practices of married students	Master's thesis Virginia Polytechnic Institute
132	Spring 1954	nationwide survey	random sample 3906 households	personal interviews	uses and attitudes dairy products	Amer. Dairy Association
133	Fall 1954	nationwide survey	random sample 3813 households	personal interviews	uses and attitudes dairy products	Amer. Dairy Association
134	Fall 1955	nationwide survey	random sample 3997 households	personal interviews	uses and attitudes dairy products	Amer. Dairy Association
135	Spring 1957	nationwide survey	random sample 4162 households	personal interviews	uses and attitudes dairy products	Amer. Dairy Association

APPENDIX--continued

Study Number	Date of Study	Area Studied	Nature of Sample	Techniques Used to Collect Data	Major Commodity or Subject Studied	Source
144	Fall 1957	Raleigh	random sample 432 homemakers	personal interviews	food buying	USDA--Federal Ext. Service
146	1970	Detroit area	random sample 2067 customers	interviews in the store	food shopping practices	A & P study by Progressive Grocer
150	1959	Alabama	random sample 529 homemakers	personal interviews	meat buying	Alabama Agr. Exp. Station
159	1962	Little Rock (metrop. area)	random samples 581 households	two-phase telephone survey	use of mass media	Ext. Service Univ. of Arkansas
160	Fall 1954	Anniston, Alabama	random sample 502 households	personal interviews	use of dairy products	Alabama Agr. Exp. Station
174	1966	Champaign County, Ill.	stratified sample 283 fami- lies	personal interviews	food shopping practices of young families	Univ. of Illinois
179	1963	Royal Oak, Michigan	random sample 321 homemakers	personal interviews	meat buying	Master's thesis Michigan State University
183	1961	Virginia	random sample 404 families	personal interviews	dairy products	Master's thesis Virginia Polyt. Institute
188	1958	East Lansing, Michigan	40 selected families	personal interviews	food shopping habits of married students	Master's thesis Michigan State University
195	1954-1955	Louisville	random sample 517 households	personal interviews	sources of information for food buying	USDA--Federal Ext. Service

APPENDIX--continued

Study Number	Date of Study	Area Studied	Nature of Sample	Techniques Used to Collect Data	Major Commodity or Subject Studied	Source
200	1957	Lafayette, Indiana	15 selected homemakers	store interviews store audit	store selection	Master's thesis Purdue Univ.
203	1957-1958	4 cities in Georgia	random sample 973 households	personal interviews	meat buying	Georgia Agr. Exp. Station
204	Fall 1958	Athens, Georgia	179 selected married students	personal interviews	food management practices	Georgia Agr. Exp. Station
205	1954 to 1956	Walton County and Albany, Georgia	random sample 802 families	personal interviews	dairy products	Georgia Agr. Exp. Station
210	1966	Arlington, Texas	160 selected homemakers	mailed questionnaire	meat buying	Master's thesis Texas Woman's University
219	Spring 1957	Lansing, Michigan	random sample 150 homemakers	personal interviews	food management practices	Michigan Agr. Exp. Station
220	1966	Denton, Texas	155 selected homemakers	mailed questionnaire	fruits and vegetables	Master's thesis Texas Woman's University
222	1963	Madison, North Carolina	100 selected homemakers	personal interviews	money management practices	Master's thesis North Carolina College
226	1958	1 county in Ohio; 2 counties in West Virginia	random sample 2594 households	personal interviews	food management practices	West Virginia Agr. Exp. Station
237	1951 and 1955	Flint and Grand Rapids, Michigan	random sample 6345 families	mailed questionnaire	attitudes toward fresh and frozen meats	Michigan Agr. Exp. Station

APPENDIX--continued

Study Number	Date of Study	Area Studied	Nature of Sample	Techniques Used to Collect Data	Major Commodity or Subject Studied	Source
244	1966	Garland, Texas	160 selected homemakers	mailed questionnaire	fruits and vegetables	Master's thesis Texas Woman's University
246	1955	Tucson, Arizona	random sample 491 homemakers	personal interviews	meat preferences	Arizona Agr. Exp. Station
253	Spring 1956	Lansing, Michigan	random sample 2103 households	consumer panel	food shopping practices	Michigan Agr. Exp. Station
260	1967	Heaston, Newton and Wichita Kansas	183 selected homemakers	mailed questionnaire	meat preferences	Master's thesis Texas Woman's University
261	1963	nationwide survey	random sample 1486 shoppers	store interviews and telephone interviews	supermarket shopping	Look magazine
264	1959	Newark, Delaware	random sample 576 homemakers	telephone interviews	chicken preferences	Delaware Agr. Exp. Station
265	1965	Tippecanoe County, Ind.	random sample 200 homemakers	personal interviews	food management	Ph. D. dissertation, Purdue University
272	1967	McKinney, Texas	134 selected homemakers	mailed questionnaire	fruits and vegetables preferences	Master's thesis Texas Woman's University
273	Spring 1958	23 urban and 12 rural communities--Texas	random sample 1314 families	personal interviews	food management practices	Texas Agr. Exp. Station
279	1965	nationwide survey	random sample 7147 shoppers	store interviews	supermarket shopping	DuPont de Nemours Chicago, Illinois

APPENDIX--continued

Study Number	Date of Study	Area Studied	Nature of Sample	Techniques Used to Collect Data	Major Commodity or Subject Studied	Source
285	1966	9 cities	random sample 3520 shoppers	store interviews	supermarket shopping	Burgoyne Index Inc., New York and Chicago
290	May 1961 to Dec. 1962	nationwide survey	random sample 8879 households	consumer panel	food management practices	National Family Opinion
292	1964	Birmingham, Alabama	random sample 933 families	store interviews	response to poultry promotion	Alabama Agr. Exp. Station
295	1958	11 cities in Alabama and 2 cities in Georgia	stratified sample 817 families	personal interviews	meat buying	Agr. Exp. Sta. of 8 southern states
298	Fall 1953	Everett, Washington	random sample 226 households	personal interviews	meat buying	State College of Washington
299	1953	Everett, Washington	random sample 226 households	personal interviews	milk consumption	State College of Washington
300	1953	Everett, Washington	random sample 226 households	personal interviews	food management practices	State College of Washington
310	1956	nationwide survey	random sample 3134 homemakers	personal interviews	poultry products	USDA--Marketing Research Div.
312	1969	nationwide survey	random sample 3099 homemakers	personal interviews	meats	USDA--Marketing Research Div.
319	1956	nationwide survey	random sample 4342 homemakers	consumer panel	store selection	BBDO National Panel of Consumer Opinion

APPENDIX--continued

Study Number	Date of Study	Area Studied	Nature of Sample	Techniques Used to Collect Data	Major Commodity or Subject Studied	Source
322	1961	Louisville	random sample 572 families	personal interviews	food management practices of working and nonworking wives	Kentucky Agr. Exp. Station
324	Summer 1965	Auburn, Alabama	random sample 125 households	mailed questionnaire	food management practices of student wives	Master's thesis Auburn University
333	Fall 1953	Rochester and Syracuse, New York	random sample 646 households	personal interviews	nutrition knowledge and food management practices	New York State University
335	1961	Lansing, Michigan	random sample 257 homemakers	personal interviews	food buying decisions	Master's thesis Michigan State University

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