ADOLESCENTS' PERCEPTIONS OF FOOD AND FOOD BEHAVIORS: AN INTERPRETIVE STUDY

by

MARY JUDITH LYNAM

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Abstract

This study reports an investigation of teenagers' perceptions of food and their food behaviors. The study was qualitative in design. Data were collected on eleven teenagers in their homes through interviews and observations. Data were analysed using the method of constant comparative analysis.

The adolescents' rationales for their food behaviors reflected both their perceptions of what was important regarding foods and food behaviors and how these perceptions or actual behaviors might change over time or as situations changed. The data were interpreted to show that teenagers have frameworks which guide their decision making about food. Processes which contributed to the development of the adolescents' frameworks were their interpretation of cues and knowledge, the comparison of themselves with others and the desire to resolve issues of personal concern. The adolescents were also described as having food behaviors directed by issues related to either "convictions" or "convenience."

The knowledge guiding the teenagers' decision making was based on their interpretations of information and personal experiences. Adolescents assessed the usefulness of information presented to them by examining its relevancy to their own situation, its compatibility with personal beliefs and its consistency with sources identified as credible. Such credible sources might include parents, nurses or teachers.

As well as presenting the view that their food behaviors were good, the boys and girls held beliefs about particular foods and the effects of certain foods on physical development or sense of well being. They discussed food in relation to general concerns such as body image, athletic ability or the desire to have friends.

Two food behavior patterns were described. Behavior patterns associated with "convictions" were characterized by decision making about food which was guided by stated beliefs or rationales. Associated food behaviors were consistent across situations. The second food behavior pattern was related to "convenience." Decision making about food was guided by issues of convenience such as availability and food behaviors were more situationally dependent.

The study's findings are discussed in relation to other studies about nutrition. As well as providing new explanations for behavior patterns described in reviewed literature the reported study provides new interpretations of teenagers' food behaviors. The decription of the processes involved as adolescents develop the frameworks on which they base their food decisions and the two behavioral patterns described conceptualize the adolescents' perspectives differently from what has been proposed in the literature reviewed. Implications for health care are addressed, and questions for further research are raised.

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Chapter I

INTRODUCTION

Background of the Problem

As a result of the health policy established by Lalonde (1974), Canadian health care workers in general and nurses in particular have involved themselves in intervention programmes and research aimed at the modification of lifestyles (Saucier & Gauthier, Note 2). The topic of health behaviors has become a matter of concern to health professionals. A goal of nurses involved in prevention oriented programmes is to see that behavior patterns supportive of health are established or maintained. One category of health behavior clearly linked to both long and short term health status is diet (Caliendo, 1981; Valadian, Berkey & Reed, 1981). The study described here was designed to explore one category of health behaviors, specifically, the nutritional behavior of teenagers.

From observations of teenagers in a variety of settings (i.e., schools, hospitals and residential treatment facilities), it appears the meaning diet holds for adolescents is influenced by a variety of factors and may vary from situation to situation. Moreover, teenagers appeared to lack receptivity to teaching programmes and have their own set of values and beliefs about dietary habits. While some writers mention the need to explore the meaning of foods for individuals as well as their attitudes towards foods (Mead, 1964), this has not been done for the adolescent age group.

A majority of studies addressing teenagers' nutrition have

explored elements and consequences of the food behaviors of this age group. These studies include descriptions of meal patterns (Hinton, Eppright, Chadderdon, & Wolins, 1963; Huenemann, Shapiro, Hampton, & Mitchell, 1966), biochemical deficiencies (Faigle, 1973; Nutrition, 1973; Nutrition Canada, 1975), and changing nutritional needs as a result of growth (Cohen, 1979; Marino & King, 1980; Stare & McWilliams, 1973). In order to understand why some teenagers choose healthy diets and others do not, some researchers have examined the relationship between attitudes towards foods and food practices (Thompson & Schwartz, 1977) as well as knowledge of nutrition and food practices (Saucier & Gauthier, Note 2).

What is most striking about the literature is the lack of studies seeking the teenagers' perspectives on food. It is clear from prior studies that teenagers' eating patterns and nutritional needs are different from those of both younger and older groups. Nonetheless, there is a lack of understanding of how teenagers interpret or make sense of facts, how teenagers develop their attitudes and in turn, how they make decisions about their food behaviors.

Literature from the social science perspective supports the view that food is an element of culture. Diet and dietary behaviors are seen to be learned as a result of socialization practices and everyday experience (Cussler & De Give, 1952; Mead, 1964). Nonetheless, few studies have sought to describe adolescent nutritional behaviors by viewing adolescents as a cultural group or by examining their everyday experiences. Some authors suggest that lifestyle (Schorr, Sanjur & Erikson, 1972) or social situations (Huenemann et al, 1966; Roth, 1960) act to mold or modify behavior patterns. However, little research has

been done which describes teenagers' beliefs about nutrition or their nutritional behavior in differing social situations.

Moreover, there are no descriptions of how food fits into the teenager's lifestyle. There is also evidence that professionals' assumptions about teenagers' food preferences are inaccurate or exaggerated (Crawford, 1977). There are few studies which describe the factors that are important to teenagers as they make decisions regarding food. Recognizing the need to understand teenagers' points of view, some studies have examined broader categories of health behaviors (Saucier, Note 1) and beliefs (Gochman, 1972; Saucier, Note 1) as well as eliciting adolescents' perspectives on illness (Radius, Dillman, Becker, Rosenstock, & Horvath, 1980).

In the present study, adolescents are considered to be a cultural group. Adolescence is a period of accelerated physical growth as well as a time of learning and developing social roles. Teenagers' everyday experiences, such as those with families and in high schools, contribute to the development of lifestyles and interests which differ from those of other social groups.

While there are a few studies examining food behaviors in their social developmental context, and other researchers have studied health related issues from a social cultural perspective, there are no studies examining teenagers' behaviors in this context. Several reasons for seeking to understand the perspective of a group or individual on a particular issue may be cited. Kleinman (1978) and Leininger (1978) have examined cultural influences on individual's health behaviors. Both researchers were motivated by the felt need for practitioners to provide health care in a manner which would be culturally acceptable to the

clients. Both document that taking into account the client's culture in the provision of health care increases the client's satisfaction with care. Considering cultural background is also seen as increasing the likelihood that individuals will comply with prescribed regimens. Cassel (1957), for example, documents that awareness of a cultural group's food beliefs, values and historical evolution allowed health care workers to successfully design and implement nutrition intervention programmes.

More recently, in discussing the state of nursing knowledge concerning the effectiveness of nursing interventions and teaching programmes, Hogue (1979) includes as a concern of nursing the initiation and maintenance of healthy behaviors in clients. Awareness of the client's point of view is seen to facilitate the provision of information which is relevant to the client, thereby enhancing compliance.

In summary, the value of the individual perspective is twofold. First, it gives the researcher a clearer picture of the cues or events which have acted to shape the individual's perception of the situation. Additionally, in attempting to describe the individual's beliefs, the importance of the beliefs to him or her and the origin of the beliefs, the researcher may come both to understand how observed patterns have evolved and to postulate how they might be sustained, changed or modified. In the present study, information gained will contribute to our understanding of teenagers' perceptions of their situations, aid in designing teaching programmes aimed at the adolescent population and guide the provision of nursing care to individual teenagers.

Statement of the Problem and Purposes

Some studies have explored adolescents' nutritional patterns by examining what it is that teenagers eat. There are no studies which have sought to explore teenagers' reasons for eating as they do. There is a lack of understanding of how adolescents interpret or make sense of knowledge or facts, how they develop their attitudes and in turn how they make decisions about their food behaviors. There is a general lack of knowledge of what teenagers consider to be important or what they perceive to influence their food beliefs or behaviors. Based on the described lack of information, observations in clinical settings, and a review of literature addressing problems of teenage nutrition, the proposed study was designed for the following purposes:

- to describe adolescents' perceptions of their food related behaviors.

- to develop an understanding of the position food and food related behaviors have within the values of the adolescent group.

- to describe variations or changes in food related activities as adolescents are observed in selected situations at selected times.

Definition of Terms

Adolescent or teenager - a youth, male or female, aged 12-17 years inclusive.

Attitudes - expressions of personal sentiment, which may range from positive to negative, about an object or event.

Food - any oral intake.

Food beliefs - may include attitudes towards food but as well include notions of effects of consuming or avoiding certain foods or food combinations.

Food related behaviors - activities associated with the planning, preparation, or consumption of any oral intake.

Health behavior - any activity undertaken by a person for the purpose of preventing disease or detecting disease in an asymptomatic stage (Rosenstock, 1974) or the promotion of well being.

Perceptions - thoughts, feelings and attitudes of individuals about objects or events as related verbally.

Introduction to the Theoretical Perspective

This study was guided by the perspective derived from the interpretive school. This school takes direction from the philosophical works of Husserl (1964) and Schutz (1973, 1970). It was developed by researchers who were concerned about studying the everyday world, life and rationality. Researchers who have used this perspective in their work include Anderson (1981), Becker (1973), Lindemann (1974), Shaw (1966), and Spradley (1970). This perspective seeks to understand the individual's point of view:

> Theory is developed from an understanding of the experiences of the participant and the observer. The investigator begins with first hand knowledge of events (Rist, 1979, p.19).

The appropriateness of the method in clinical nursing is stressed by Davis (1978). She argues that a major concern of nursing is the ability to understand and take direction from the client.

Other aspects of this research process are the following: intersubjectivity, selection of participants, theory development, and validity. While research methods based on the tenets of natural science support the view that there is an objective, measurable social reality (Rist, 1979), the interpretive school considers all knowledge to be socially constructed. Individuals produce information within their social and cultural context (Rist, 1979). As such, the research process

is intersubjective. The researcher is incorporated into the study process and constructs accounts of events with individual participants.

In a study of this nature individual participants are selected for their ability to address issues of concern:

> On the assumption that all members of a culture are carriers of that culture, any person who belongs to the group under study is a possible informant (Brink & Wood, 1978, p. 123).

How might one formulate constructs from data collected for the purposes described? Direction in responding to this question may be taken from the works of Glaser and Strauss (1967) as they discuss the formulation of a theory. Glaser and Strauss take the approach that it is through the collection of qualitative data, via participant observation, that one may generate a theory. Theory is developed based on observations grounded in the data. A theory or conceptualization of the process under study is developed as the researcher makes sense of the data. The technique is based on observations of the way people are seen to question and make sense of their world:

> What the field worker does is to make this normal strategy of reflective persons into a successful research strategy (Glaser & Strauss, 1965a, p.9).

In this research approach the process of data collection and analysis are intertwined and occur simultaneously. Based on initial observations and recorded data, the researcher begins to develop categories. These categories are then refined and validated by seeking out new information in the field setting (Glaser & Strauss, 1965a). Having explored conditions in one group or setting, the researcher may choose to examine developing categories and constructs, or postulations

concerning the relationships between their dimensions in a new setting or with a comparison group. The purpose of this activity is to understand better under what sets of structural conditions these categories are minimized and maximized (Glaser & Strauss, 1965a).

The theories and conceptualizations are grounded in the data. The reader is given insight into how categories were constructed. Theory developed in this way has demonstrated usefulness in application to clinical settings (Glaser & Strauss, 1965b; Lindemann, 1974; Quint 1966) and has been used to provide interpretations of statistical data (Lindemann, 1974).

In discussing the theoretical foundation of this study four points have been addressed. First, in research of this nature the client's perspective is valued. Second, conceptual categories concerning the nature of health related interactions are developed from the data. Third, the researcher and client are involved in the process of constructing accounts of events. Fourth, the processes of data collection and analysis are intertwined and study findings are based on observations grounded in the data.

Assumptions

It is assumed that individuals act purposefully and that patterns of action are influenced by the individual's interpretation of the setting or behavior of individuals in the setting. It is further assumed that as a result of their daily experiences and growth needs, teenagers' perceptions, attitudes and values may differ from those of adults and younger children. It has been noted that a principle guiding the selection of participants is the assumption that all members of a culture

are carriers of that culture, and any member is a possible informant. It is also assumed the selection of informants is dependent upon their ability and willingness to communicate perceptions verbally.

Limitations

While the researcher seeks common themes in constructed accounts, there are limitations to the generalizability of accounts to other groups. This study was limited to a group of middle class teenagers. Without further study one may not know the differences or similarities between this group and teenagers of other socio-economic or cultural groups. Furthermore, despite the knowledge shared by members of a community or cultural group, there is a unique aspect of an individual's knowledge which may preclude complete understanding of an individual's situation.

Summary

Several theorists have presented the view that an understanding of the client's perspective is critical to the effective provision of care. Provision of care in the context of this study would mean communicating nutrition information in a manner that would be acceptable to teenagers and result in their adoption of the recommended eating patterns.

This study has been designed to contribute to the development by nurses of an understanding of teenagers' notions of their food behaviors. By doing so it will contribute to another goal: the provision of effective care.

Chapter II

REVIEW OF RELATED LITERATURE

The topic of concern in this study is a particular category of health behaviors, the dietary habits of adolescents. As health professionals interact with teenagers in health care settings or design intervention programmes they question how they might increase the effectiveness of their interventions. As has been suggested, this study is designed to contribute to understanding the problem of teenagers' nutrition by studying their perceptions and points of view. The lack of literature which bears directly on this problem necessitates the inclusion in this review not only of literature related to the topic of teenagers' nutrition, but also of studies related to health behavior and nutrition in general. In the review, both the methodologies used in the study of health behaviors and nutrition and the findings of previous studies of health behaviors, nutrition in general and adolescent nutrition in particular are discussed.

The literature review is organized into three major sections: first, studies of the initiation and maintenance of change in health behaviors; second, general studies of nutrition; and third, studies of adolescent nutrition and food patterns.

Studies of the Initiation and Maintenance of Change in Health Behaviors

Assuming food behaviors are a category of health behaviors and that the adoption of healthy eating habits is seen to contribute to long

term health, studies which have examined issues related to the institution and maintenance of change in health and lifestyle behaviors are explored below. Research which has examined lifestyle issues in general is important to an understanding of food behaviors in particular because of four factors they are seen to have in common. One factor is that prescribed behaviors are associated with, but do not necessarily result in good health. A second is that the reasons for initiating the recommended behavioral pattern may be varied. The non-healthy pattern may, or may not, be creating a problem for the individual. The unhealthy behavior may not create a problem, but may increase the risk of problems. Third, the lifestyle change is usually dependent upon the modification of a range of behaviors, not simply one behavior. Fourth, the nature of the recommended lifestyle change, like changes in food behaviors, usually requires long term or lifetime maintenance (Hulka, 1979).

Several themes emerge from this category of literature. A conclusion of Powers and Ford (1976) as they reviewed nursing literature relates to the type of knowledge needed to guide successful interventions; "...truly effective interventions must be based not only upon knowledge per se but also knowledge of the way the patient defines his situation" (p. 59). Compliance is often a measure accociated with effective interventions. As researchers have examined compliance with prescribed regimens requiring long term modification of healthy behaviors, they have generally concluded, like Powers and Ford, that the individual's knowledge and perceptions of the situation are factors associated with compliance. Taylor (1979), for example, as he studied

patients on regimens to control their blood pressure, suggested that knowledge of hypertension alone was not a good predictor of compliance. Rather, patients' perceptions of safety of the drugs, as well as perceived seriousness of the illness were better predictors.

Further evidence that perceptions of the situation contribute to behaviors may be cited. The mother's perceptions of how obesity affects her child's health and social activities, for example, have been described as influencing compliance with a weight reduction programme for her children (Becker, Maiman, Kirscht, Haefner, & Drachman, 1979). One might assume similar factors may influence individuals as they make decisions about their food behaviors.

Working with the individual's situation also increases the successfulness of interventions. This might be done by addressing individual needs (Sellers, Cappell & Marshman, 1979) or communicating effectively to decrease the effects of socio-cultural differences (Hogue, 1979). Strategies useful in initiating change relate to appealing to perceived needs (Becker, Maiman, Kirscht, Haefner, & Drachman, 1979), attitudes or enhancing accessibility of services (Green, 1979). The maintenance of change is more likely if one is aware of and seeks to involve the individual's support system (Hogue, 1979). However, the most effective predictor of long term compliance is the individual's commitment to sustain the behaviors (Becker, Maiman, Kirscht, Haefner, & Drachman, 1979; Taylor, 1979).

The findings of the above cited studies both emphasize the value of understanding the individual's perception of his situation and direct

the exploration of particular aspects of individuals' perceptions. These findings suggest the researcher should examine and clarify individuals' perceptions of their situations. The interpretive method is appropriate to explore questions of this nature.

Rosenstock (1966, 1974) has written about the Health Belief Model which was developed by behavior scientists in the 1960's to provide an explanation for patterns of health behavior. The Model is considered here because it deals with the individual's point of view and postulates how point of view or beliefs act to influence health behavior. The Model is also considered because it has been useful in the study of health, lifestyle and compliance issues since its inception (Becker, Maiman, Kirscht, Haefner, & Drachman, 1979; Best, & Bloch, 1979; Kirscht, 1974; Kirscht, Haefner, Kegeles & Rosenstock, 1966; Taylor, 1979; Saucier & Steinberg, Note 3).

Rosenstock's initial formulation of the Model to explain preventive health behavior suggested that there were three major sources of influence on health behaviors and emphasized the individual's point of view. The first influence implies a subjective state of readiness to take action. Elements of this influence are the extent to which the individual perceives he is susceptible to a disease and how serious the occurrence of that disease would be. The second influence is how effective people believe certain actions would be and the difficulties involved in carrying out such action. The third influence relates to cues which would inspire one to act (Rosenstock, 1966). The author provides a behavioral interpretation of the interrelationship of these

variables. An individual would carry out preventive behaviors if it were perceived the risks were greater than any personal inconvenience (Rosenstock, 1966). Haefner and Kirscht (1970) confirm that this is more likely to happen when the behaviors are not long established habits or patterns.

While Rosenstock (1966, 1974) initially suggested motivation arose out of fear of consequences, the Model has since been revised to suggest that one might also be motivated by the desire to maintain health (Becker, Maiman, Kirscht, Haefner, Drachman, & Taylor, 1979). This revision would make the Model appropriate for the study of nutrition as an element of lifestyle, viewing food behaviors as one category of health behaviors. While several studies support the usefulness of the Model in predicting behavior, others have identified limitations. The most important limitation for our purpose relates to the existence of beliefs.

The Health Belief Model was developed employing Lewin's principles of field theory (Rosenstock, 1966). An assumption of this theory is that an individual must have an initial awareness or concern before material or stimuli will be perceived as relevant (Rosenstock, 1966). This phenomenon may explain study results which suggest that the beliefs being measured as model parameters do not seem to be present in all individuals (Rosenstock, 1974; Kirscht et al., 1966). The importance of this was discussed by Gochman (1972). He suggested that if health was not meaningful or salient to an individual the Model did not provide direction for the interpretation of observed behaviors. Therefore this

writer questions the value of employing the Model to study teenagers.

Radius et al., (1980) studied health related beliefs and practices of 112 teenagers. Their findings were consistent with Gochman's observations as described above. In addition, they found that health was not a concern for more than 50 per cent of the boys and girls they studied. Saucier and Steinberg (Note 3) indicate that teenagers tend to feel serious illness will not happen to them and as their age increases they tend to decrease the number of health oriented activities they pursue.

Subsequent work on the Health Belief Model suggests that there is a "cue to action" phenomenon which activates or makes salient pertinent beliefs (Kirscht, 1974). Such a phenomenon would explain changes in the presence of beliefs (e.g., an individual might experience an event which might change the perceptions of vulnerability or susceptibility). This suggests that the identification of cues which stimulate awareness would be valuable and the resulting behaviors would likely be testable within the context of the Model.

Although the Health Belief Model focuses on the perspective of the individual, it seems to require that individuals view their behaviors in relation to health (or illness). Observations such as those of Gochman (1972), Radius et al. (1980), Saucier and Steinberg (Note 3) suggest two things. One, health is not a universal value of the adolescent group. Second, while dietary beliefs or practices may be linked to health by professionals, for the layman this may not always be so. Considering this and the observations of Hinton et al. (1963) and

Huenemann et al. (1966, 1968) that teenagers have a range of reasons (which appear to be conceptually unrelated to health) for eating as they do, it seems it would be more instructive to adopt a different focus for the study of teenagers' food practices. One may suggest it would be valuable to describe not only teenagers' food beliefs, but also the nature of the conceptual links teenagers make between their food behaviors and personal goals or consequences.

The literature reviewed thus far has examined health behaviors and identified factors influencing the initiation and maintenance of change in health behaviors. The literature review that follows will discuss whether similar factors have been identified as influencing compliance with nutrition intervention programmes. The decision to include nutrition literature (non adolescent) was made because early studies of nutrition seemed to address issues similar to the concerns of the present study.

Studies of Nutrition

Studies of nutrition generally have as their focus one of two major purposes. The first of these is to understand the nutritional needs of individuals and how they might best be met. The second is how to best address the "human element" in the problem of encouraging individuals, often of differing cultures, to modify their eating patterns to support health or to accommodate the availability of resources (Cussler & De Give, 1952; Mead, 1964). This latter problem, which is more pertinent to this study, has been addressed differently over time. Early studies

examined diet as an element of culture and tended to employ qualitative methods. One might say researchers were attempting a rational approach to the study of what has been referred to as "irrational" behavior (Cussler & De Give, 1952). Later studies tended to employ quantitative methods and examined both nutritional status and behaviors. Studies of nutrition which identified social factors as influences on behavior have considered and studied food patterns as an element of culture.

Food Patterns as an Element of Culture

Cussler and De Give (1952) identify numerous examples throughout history which support the view that human behavior in general, and food behavior in particular, is irrational. The idea that individuals do not always pursue a healthy diet even if they are knowledgeable is supported by Bruch (1973):

> There is no human society that deals rationally with food in it's (sic) environment, that eats according to the availability, edibility, and nutritional value alone (p.3).

Studies from the social science perspective have examined the social environment of families and communities both to assess the nature of family influence on individuals and to understand their apparently illogical behavior. Anthropological studies have described food patterns of primitive and different cultures (Graubard, 1943; Chang, 1977). Mead (1964) was one of the first researchers to provide direction in the application of anthropology to the question of dietary compliance. The determination of the socio-cultural aspects of food and how they are

affected by change was her goal. She found that diet and dietary behaviors were learned as a result of socialization practices.

With knowledge of the perceived importance of foods, Cassel (1953) reports that visiting health care workers were able to successfully introduce change in diets. The type of knowledge gained from both the studies of Cassel and Cussler and De Give has increased health care workers' understanding of the cultural group's perspective of its food behaviors. These studies exemplify how knowledge of cultural perspectives may be applied in practice to promote compliance in situations related to nutrition.

Cussler and De Give (1952) carried out the first comprehensive study of the socio-cultural factors affecting food patterns, especially in the rural south of the United States. The purpose of the study, which was qualitative in design was to study the "food habits" and "foodways" of a rural area composed of several communities. They both interviewed and acted as participant observers in a range of community meeting places and families' homes and inter-community comparisons were made. "Food habits" were defined as:

> ...the specific elements connected with the individual's food activities...including in that term not only the diet itself but also individual habits of producing, purchasing and preparing food, and attitudes, tastes, and habits of eating (p.50).

"Foodways," on the other hand are more general, including "...all those parallel elements of the food pattern which have considerably more than individual application" (p.49). The application referred to may vary by

degrees; examples are social class, community or a region. These definitions continue to be accepted and employed (Lowenberg, Todhunter, Wilson, Savage, & Labawski, 1974).

In addition to observations of the impact of values on "foodways," the authors indicate that informants' main concerns as they were interviewed were with thoughts and feelings about both the food and the socio-cultural patterns. This suggests that interviews might elicit descriptions of what individuals in a cultural group perceive as important or of value. The researchers comment that information about practices was more likely to be derived from their observations than from their interviews, while interviews produced insight into the mechanisms of transmission of "foodways." Food beliefs were explored as were practices within and between social groups. What might be inferred from the discussion by Cussler and De Give is that, while knowledge and practice may be related, individuals in a community such as the one they studied have a particular way of formulating knowledge or viewing their own situation.

An important element identified in the above study was the role of individuals in passing on "foodways." Women's position in the family unit and their responsibilities for child socialization practices was one kind of role influence. That foods could be allocated to classes of members (e.g., White landowner versus Black labourer) as well as being ascribed special status (e.g., special occasion foods and daily foods) was also identified. Prior to the Cussler and De Give study, lack of

knowledge of these types of cultural values made it difficult to introduce change or modify food behaviors in this community. Their study provided information which contributed to the effective introduction of change in dietary patterns, identified clearly a range of beliefs about food (that may stand in contrast to beliefs of other groups or scientific findings) and contributed to the interpretation of quantitative, frequency data (Cussler & De Give, 1952).

The study discussed above did not focus on teenagers, but it does support the questions raised in the studies cited which addressed issues related to the modification of health behaviors. The authors sought both to describe the meaning of food within the culture and to explain how personal and community values, individual food beliefs and family and community members contributed to the maintenance and change of food patterns.

Cussler and De Give's (1952) work could act as a model for the design of a study focusing on teenagers as a social group. Their methodology would direct one to examine the food behaviors of adolescents in the context of their surroundings. The format would seek the teenagers' rationales for their actions in their own terms. One may not assume that observations of a particular group will be useful for all other cultural groups, but it does clearly indicate that there are patterns which, when interpreted from the perspective of the individuals in the community, are consistent.

The literature in the 1960's and 1970's documents a shift in the

methodologies employed to study food behaviors, in particular teenagers' food behaviors. As a result, there is also a difference in the type of findings. The next section of the literature review examines studies of teenagers and their food behaviors and patterns.

Studies of Adolescent Nutrition and Food Patterns

Studies of adolescent nutrition were reviewed with the factors found to influence the initiation and maintenance of health behaviors in mind. The review of literature related to adolescent nutrition also describes the state of knowledge of adolescent nutrition and is organized as follows. First, theoretical and methodological issues in five selected studies are addressed. Then, the findings of these five studies are combined with those of other studies of teenage nutrition and are presented in four content areas. These are: patterns of food consumption during adolescence, influences on teenagers' food behaviors, teenagers' knowledge of nutrition, and influences of social status and family.

Theoretical perspectives and methodologies. While teenagers have often been included in nutritional surveys of all age groups (Nutrition, 1973; Nutrition Canada, 1975), five studies in particular have had the adolescent age group as their focus. These five studies, three carried out in the United States and two in Canada, have been chosen for special discussion for two reasons. First, they explored a range of issues related to adolescent nutrition; and second, they adopted differing perspectives and methodologies. While specific findings of the

studies are discussed later in this chapter, it is useful to examine in more detail the theoretical perspectives adopted by the researchers and the similarities and differences in their findings.

The study most extensively cited was carried out by Huenemann et al. (1966,1968). The same group of 1000 teenagers was followed for a period of four years. Each year the Berkeley high school students were assessed for physical growth changes as well as being weighed and measured anthropometrically and circumferentially to determine gross body composition, conformation, and body weight. Some were given a clinical exam. These practices fit with recommendations for measurement of body size except that they lack documentation of maturity (McKigney & Munro, 1973). Also, once yearly (grades 9-12) the teenagers answered questions on food and meal preferences, reasoning, activity level, and opinions and knowledge of food practices. The total study group included 10 per cent Oriental and 30 per cent Black teenagers.

Hinton et al. (1963) studied 12 and 14 year old middle class girls purposefully chosen to be pre- and post-puberty. They employed food records for two periods in high school. They also measured height, weight and bone age by X-ray. Tools were employed to measure knowledge of nutrition, food enjoyment, food values, and psychologic adjustment of the group. The bases for tool development were not described.

In a third U.S. study, 404 students aged 12 to 15 years from three high schools in Syracuse were studied. The major data sources were biochemical assays of blood and urine samples. As well, measurements were

recorded of age, height, weight, and tricep skinfolds. A second data base was interviews which provided researchers with a profile of the frequency and types of breakfasts consumed by the teenagers studied. The data also included socio-economic status. The sample had approximately equal distribution of males and females and the racial distribution was 2/3 White and 1/3 Black (Dibble, Brin, McMullen, Peel, & Chen, 1965).

Au Coin, Haley, Ray, and Cole (1972) studied Nova Scotia teenagers aged 10 to 12 years. They re-tested a dietary assessment tool which had been developed from the Canada Food Guide. Intake was assessed as adequate when teenagers consumed 70 per cent or more of the Canada Food Guide's recommended daily allowances. Measurements were carried out on one occasion and teenagers recorded what they had eaten that day. Data were analysed for variations across age and sex.

The nutritional component of the study by Saucier and Steinberg (Note 3) was only one element in a more complex design examining a range of health and lifestyle behaviors. They surveyed 5000 Quebec students in five high school grades and two junior college levels. All information was gathered by questionnaire. The theoretical foundation was based on the Health Belief Model (Rosenstock, 1966), value theory, and developmental theories of adolescence. In addition to assessing teenagers' health beliefs and attitudes towards prevention, food patterns were also assessed. To do this, a checklist of foods consumed in the previous twenty-four hours was employed. The purpose was to identify patterns and frequencies of consumption of key food groups. Unlike Dibble et al., and Au Coin et al., Saucier and Steinberg were not

assessing nutritional status.

Although different methods were employed in these studies, trends may be identified from the findings. Four particular content areas have been addressed.

Patterns of food consumption during adolescence. The five studies cited and others reviewed assessed teenagers' nutritional status and patterns of food intake and document that there is a wide range in practices. They also support the findings of studies cited in Chapter I suggesting that many teenagers do have deficiencies in their diets. While some factors such as age, sex, and regional differences emerge to describe which teenagers have nutritional problems, the authors report difficulties in accounting for differences within groups.

One pattern described is in the differences between boys and girls. Most studies support the view that males have a more nutritious diet than females (Nutrition, 1973; Nutrition Canada, 1975; Saucier & Steinberg, Note 3). In a study which included a description of adolescent meal patterns, Huenemann et al. (1968) found that boys generally ate more than girls, an observation supported by Saucier and Steinberg (Note 3). It would seem there are influences other than those that can be attributed to sex differences. In contrast to the findings of the Quebec and U.S. studies, the Nova Scotia study of 10 to 15 year olds did not reveal differences between the sexes. Rather, it indicated that few teenagers consumed even 70 per cent of the amounts recommended by the Canada Food Guide (Au Coin et al., 1972).

Comparison of food intakes between age groups showed a progressive decline in the adequacy of intake as growth needs increased. One interpretation for the observed decline is that teenagers do not increase consumption of specific food groups to match recommended needs (Au Coin et al., 1972). Saucier and Steinberg (Note 3) also describe a lack of change in amount of food intake with increasing age.

Other examples of ranges of practices may be cited. Huenemann et al., (1966, 1968) describe five categories of meal patterns ranging from three regular meals with snacks to no regular meals and several snacks. It is documented that teenagers consume "junk foods" two to three times a day on the average (Huenemann et al., 1966, 1968; Saucier & Steinberg, Note 3). Crawford (1977) demonstrated, however, that, although teenagers did buy junk food from vending machines placed in high schools, when given the choice of more nutritional food such as apples and milk, "junk food" purchases not only decreased but vending machine revenue increased. When made available, a larger number of nutritious snacks were bought by teenagers. The data were employed to challenge assumptions of school administrators that teenagers will not eat healthy foods.

This latter study indicates the value of exploring the availability of nutritional foods to the teenager. Lack of availability was reported to influence nutritional patterns (Huenemann et al., 1966; 1968). It was also postulated to contribute to the poor health of native teenagers on isolated reserves (Stepien, 1978).

While the cited studies document clearly that teenagers do have a range of food behaviors, only one of the studies even tries to explore

their reasons for choosing specific foods. Some factors influencing teenagers' decision making will be discussed in the next category of literature.

Described influences on teenagers' food behaviors. Besides having different needs than boys, teenage girls are described as having different concerns about their body shapes and rates of growth (Dwyer, Feldman & Mayer, 1967; Huenemann et al., 1966). These concerns are seen to influence their diet and activity. Teenage boys and girls are described as choosing different foods to provide calories (i.e., boys eat larger amounts generally, girls eat more raw fruits and vegetables, Huenemann et al., 1968). More teenage girls choose to purposefully restrict their intake to minimize growth while boys wish to maximize it. If weight control is desired, boys tend to exercise (Huenemann et al., 1966).

In their study of 5000 French Canadian teenagers, Saucier and Steinberg (Note 3) reported that 33 per cent of the females had dieted for weight loss as compared to only 10 per cent of the males. Huenemann et al. (1966; 1968) report similar findings. They assessed approximately 25 per cent of the teenage girls to be overweight; however, more than 50 per cent of the girls perceived themselves to be fat. The boys, however, seemed to hold views of themselves which were consistent with the researchers' measurements of fatness. Hinton et al., (1963) indicated that early maturing girls had a tendency to be overweight. In another study, Kaufman, Poznanski and Guggenheim (1975) found that 480 grade 8

boys' and girls' perceptions about foods (i.e. the fattening value of certain foods) contributed to choices about consumption.

What begins to emerge from a review of these studies is the impression that teenagers' perceptions of themselves as they pass through this period of accelerated growth influence in some way the choice of diet. Several reports indicated that, besides influencing choice, the social aspects of food consumption increase in importance to the teenager (Huenemann et al., 1966, 1968). The observation that teenagers who value the social aspects of eating tend to have eating patterns which are less healthy is also reported (Hinton et al., 1963). On the other hand, teenagers who value health are also seen to have more healthy diets (Hinton et al., 1963). This view differs from comments made by Saucier (Note 1), who indicates that while some teenagers reported that they valued health and indicated readiness to pursue a healthy lifestyle, in actuality they did not do so.

The literature reviewed to this point indicates that teenage eating patterns may vary by sex, age, perceptions of self, and perceptions of the social situations related to food activities. Other factors have been examined for their relation to dietary patterns. Attitudes, knowledge and beliefs about diet, socio-economic status and family structure are examples which will be addressed in the following sections.

Teenagers' knowledge of nutrition. Teenagers' nutritional knowledge has been assessed in a variety of ways. Two studies of

grade 8 students assessed knowledge and found it to be satisfactory (Kaufman et al., 1975; Thompson & Schwartz, 1977). Knowledge was not always found to correlate significantly with practice; however, it was noted that knowledge and attitudes were significantly related as, to a lesser extent, were attitudes and practice (Thompson & Schwartz, 1977). While Saucier and Gauthier (Note 2) found a positive relationship between knowledge of healthy practices and positive attitudes and health behaviors, this correlation was described as surprisingly weak.

In the study by Huenemann et al. (1966), assessment of knowledge of 14 to 15 year old boys and girls led to the conclusion that knowledge was limited. The teenagers were asked to describe foods that should be eaten daily. Fifty per cent of the students did not mention any of the four food groups. These teenagers, as well as having limited knowledge, also were described as holding numerous misconceptions about foods. Examples include beliefs about effects of foods on their bodies, the lack of inclusion of milk as a daily desired food, and the tendency for all but Caucasian boys to view obesity only in relation to diet and not to exercise.

Finally, the study by Hinton et al. (1963) did not measure knowledge per se, but did measure teenagers' ability to choose healthy diets. The teenagers in their study who were able to choose healthy diets also were described as having healthy diets. In their study, ability to select correlated with daily practices.

In general, adolescents' choices of foods are not seen to be clearly related to knowledge. These observations, as well as those which

mention that knowledge differed from group to group, suggest that it would be valuable to explore with teenagers their processes of defining or using knowledge. A difficulty in making comparisons between these studies is that the techniques of measuring knowledge were quite different. A similar problem occurred in attempting to compare studies examining the influence of socio-economic status on teenagers' dietary practices.

Influence of social status and family. As knowledge and social status were compared, one study demonstrated that knowledge increased with social status, but the influence was described to be less than the influences of culture (Huenemann et al. 1968). The observations of Dibble et al. (1965) stand in contrast to those of other investigators which did not find that the behavior of the groups studied varied with their socio-economic status (Thompson & Schwartz, 1977; Kaufman et al., 1975). Au Coin et al. (1972) noticed a variation in the healthiness of intake which corresponded to level of parents' education. While they postulated this may parallel findings for socio-economic status, this was not tested.

Dibble et al. (1965) document that the quality of breakfasts consumed varies with socio-economic status. They also comment on the family structure of their study group; 30 per cent of the low socio-economic school group were from single parent families, compared to 3 per cent single parent families in the school groups where fathers were ranked professional/managerial. They indicate that many of their

observations correlate with socio-economic status and imply correlations with family structure. A third characteristic of the group which was not addressed was that 90 per cent of the low socio-economic group was Black while only one per cent of the group in the school of highest socio-economic status was Black. These cultural and family structure differences were not explored. Such a study, though documenting frequencies and trends, also suggests the need to examine how different groups account for their behaviors. Although Huenemann et al. (1966) postulated an impact of culture on food behaviors of teenagers in their study, they also suggested the influence of culture required further exploration.

Family influence on dietary practices is implied, but none of the research cited studied teenagers within the context of their families. Further references to the nature of family influence may be noted. Two studies indicate eating patterns were unrelated to family size (Au Coin et al., 1972; Thompson & Schwartz , 1977). When asked who they considered to be food authorities, teenagers named their parents (Huenemann et al., 1966).

Factors such as age, sex, cultural background and availability of foods have been found to influence the teenager's behavior. The effects of teenage eating practices are confirmed by biochemical analyses. The literature reviewed also indicates points needing clarification. One is the inconsistency between teenagers' knowledge and practice. There is, however, apparent consistency between the teenagers' perceptions and their behaviors. For example; Huenemann et al. (1966) described the

tendency of females who perceived themselves as fat to pursue a self styled weight reduction programme, even when objective measures did not confirm obesity in a majority of the girls. While teenagers' perceptions of the adequacy of their diet were not always confirmed by the researchers, they suggest that the diet was more likely consistent with the criteria the adolescent defined to be acceptable. The teenagers' criteria included acceptance of parental guidance, comparison of their own behaviors with observed adult eating behaviors and awareness of ideal standards (Huenemann et al., 1966).

Three additional observations may be made from the literature. First, in the nutritional studies, like the studies of compliance, the perception of the effect on other aspects of the individual's lifestyle was seen to influence the adoption or maintenance of a behavior pattern. A second observation suggesting further exploration is the difference between the attitudes of male and female teenagers. Finally, further exploration of the nature of family influence is warranted. The patterns observed suggest that motivations to act may be greatly influenced by values, socialization, culture, perceptions, and situations.

Summary

The problem which is the focus of this study is the lack of understanding of how teenagers interpret or make sense of knowledge or facts, how they develop their attitudes, and, in turn, how they make decisions about their food behaviors. There is also a general lack of

knowledge about what adolescents consider to be important regarding foods and food behaviors or what they perceive to influence their food beliefs or behaviors.

This chapter has reviewed studies representative of the current state of knowledge regarding teenagers' nutritional behaviors and attitudes. It has been argued that addressing the problem of teenage nutrition from the ethnographic perspective will contribute information needed to remedy the described lack of knowledge. A review of compliance literature and clinical studies from the ethnographic perspective documents that clinicians' understanding of how individuals view a particular problem or situation may contribute to the provision of care which is perceived satisfactory to the client.

Nutritional studies demonstrate that the use of ethnographic methods provides information useful in the design of nutrition intervention programmes. Other researchers observe that the way people classify nutrition information and define knowledge is influenced by culture. They also indicate that by acting as a participant observer a researcher might identify how cultural orientations and values influence food behaviors. However, ethnographic studies of teenage nutrition were not found. Findings of other kinds of studies of teenage nutrition did not provide answers to questions of how teenagers view their food behaviors, what is important to them, or how they arrive at their food decisions.

Although it is often assumed that practice will correspond to knowledge, both the compliance literature reviewed and studies relating

adolescents' nutritional knowledge to behavior suggest two things. Individuals are more able to comply with prescribed regimens when they have information which will help them cope with the consequences of the regimen on lifestyle activities or interpersonal relations. It is less likely clients will comply if they only have information on, or knowledge of, their disease.

Recent studies of teenage nutrition imply that family, culture and perceptions of self influence food behaviors. They also suggest that teenagers interpret knowledge differently than is indicated by researchers' objective measures. It would seem, then, that there is a need to describe the factors influencing teenagers' use of knowledge as they develop the notions which guide their particular food behaviors. Although food behaviors ranging in degrees of healthiness have been documented, there are no satisfactory explanations for individual differences in observed practices. Therefore, it seems to be worthwhile to seek adolescents' explanations for their food behaviors.

Chapter III

METHODOLOGY

This study was guided by the perspective derived from the interpretive approach. As teenagers were both interviewed and observed, data collected were analysed employing constant comparative analysis. This chapter will describe how the interpretive method was adapted for this study. To be addressed are: selection of participants, processes of data collection, ethical considerations and data analysis.

Selection of the Study Group

Criteria for Participation

As has been described, the selection of study participants was based on their ability to address the topic of the study. As the data collected raised additional questions, new candidates or groups were included (see Glaser & Strauss, 1965; Lindemann, 1974).

Initial criteria for selection were:

-male and female teenagers of high school age

-healthy and not following a therapeutic diet

-able to converse in English

-from middle class families

As the study progressed and as initial interviews were analysed, it became a concern that particular characteristics of the family might be influencing the teenagers' perceptions. As teenagers described rationales for their food behaviors they often referred to the mother as

a role model and some qualified this with "my mother who is a nurse." Before all participants were chosen, two additional selection criteria were added so the researcher could explore more fully the implications of these family characteristics. The researcher also chose to include an extra participant in the study. For these reasons, both the eighth and ninth study participants were selected according to the following additional criteria.

-not having a mother who was a nurse

-not living in a single parent family

Having identified criteria for the selection of participants, procedure for selection and the characteristics of the final group will be described.

Procedure for Participant Selection

The study participants were volunteers from families recommended by friends or acquaintances of the researcher. The researcher had met one of the participants prior to the study.

Although the teenagers were legally minors and parental consent was required, it was considered important that the teenager be involved in the decision making process. To emphasize this point, wording of the consent letter was directed to the adolescent.

A letter and consent form (Appendices A and B) explaining the study were given to each participant by a person known to themselves and the researcher. The letter, as well as explaining the study's purpose, indicated the researcher's desire to interview and observe the teenagers in their homes. If the adolescents and their parent(s) agreed to participate, the researcher contacted them by telephone to provide

further clarification of the study's purpose, answer questions and to arrange an interview time. Interview times were then scheduled at the convenience of the boys or girls and their families.

Characteristics of the Participants

Five boys and four girls participated in two interview sessions. Their ages ranged from 13 years one month to 15 years ten months and they attended seven different high schools in Vancouver and its surrounding suburban areas. Three of the group were in grade 8, two were in grade 9, two were in grade 10, and two were in grade 11.

All the teenagers participated in at least one, and sometimes three to four, extracurricular interests depending upon the season. While most were sports-related, such as hockey, basketball, volleyball, swimming, cheerleading, floor hockey, or skating, others included music, dance and Sunday school teaching. Several teenagers had some source of revenue such as delivering papers, babysitting, mowing lawns, or working at gas stations or restaurants. Although family size varied, all of the participants lived at home with one or both parents and all had one or more siblings.

Two single trial interviews were conducted at the beginning of the study for the purpose of acquainting the researcher with the interview technique. Two teenagers, aged 15 and 18 years, each participated in one interview. These two interviews contributed data to the study. In contrast to the rest of the participants, these two teenagers were temporarily away from home. One was on vacation with his family and the other was staying with family friends while attending a course in Vancouver. Both of these teenagers normally lived with both

parents. One had several siblings and one was an only child. While some of the participants interviewed identified with cultural groups such as British and Italian, all were White.

In the final analysis the researcher came to question the apparent homogeneity of family characteristics. Three qualities were dominant: the number of working mothers, 9 out of 11; the number of single parent families, 5 out of 11; and the number of mothers who were nurses, 6 out of 11. The researcher chose to explore the current family trends for these three characteristics.

That more women are working is clearly documented (Statistics Canada, 1976). If mothers are working, it is more likely that their children will be of school age, particularly high school age.

On the second point, Vancouver and its surrounding area is estimated to have approximately 30,000 lone parent families (Statistics Canada, 1976). While the family situations of the study group may not be considered representative of all teenagers, the inclusion of teenagers from single and two parent families in this study is not inconsistent with local trends.

On the third point, it would seem that mothers who were nurses were overrepresented in the group. It was decided that teenagers' perceptions of their parents' role in their food behavior would be more clearly presented if the researcher could explore whether expressed similarities and differences related to parental roles or professional roles. Trends in the data and the need to address the defined purposes of the study, clarifying with teenagers their perceptions, were two more reasons for the writers' decision to include the extra participant in the study group.

Data Collection

Ethical Considerations

In carrying out a study one must ensure the rights of the individual participants. The particular rights in question are those of informed consent, confidentiality and minimization of risks or costs to participants.

This study was conducted considering the directives of the University of British Columbia Ethics Committee. As has been described, all teenagers were first contacted by a person known to them. The study's purpose and the nature of their requested involvement was then described in a letter from the researcher. Written consent was obtained from the teenager and one parent.

When the researcher re-contacted the teenagers for the second interview, all teenagers and parents were asked if they were interested in continuing to participate in the study. The researcher indicated they were not under obligation to do so.

To maintain confidentiality, transcriptions of tape recordings did not identify the participants, and if family names were mentioned on the tapes they were erased prior to the transcriptions. Although in the process of data analysis the researcher consulted with committee members and other graduate students familiar with the method, identity of individual teenagers was not revealed.

The method of selection of participants and the concern to maintain confidentiality presented some difficulty to the researcher. Those who referred teengers were often interested in enquiring how the interview went. Such situations were managed best by indicating the

researcher's concern to not breach the contract established with the adolescents and their families. It was usually indicated that the teenager had been a helpful participant.

In the process of the study the teenagers and their families contributed a great deal by giving up their time and accommodating the researcher in their homes. While the benefits to individual teenagers were not assessed, it was of interest to note that comments made to referring individuals included several which indicated such involvements made the teenagers feel "quite special." Thus, the researcher might assume that the experience for the majority was perceived to have had some positive outcomes.

Data Collection Procedure

The teenagers were interviewed in their homes on two occasions during the late summer and early fall, 1981. Two forms of data were collected. Audiotapes of interviews formed one category of data and hand recorded notes of the interviewer's observations formed the second.

The data collected during interviews and observations were guided by the three study purposes. An interview schedule was not employed. The study purpose was described to the teenagers and it was suggested to them they might begin by describing what they did in a typical day.

Combined interview-observation times ranged from one to three hours. Tapes of the interview period alone ranged from 30 to 60 minutes. Each interview was transcribed and analysis of it directed the researcher in seeking clarification or interpretation of accounts in subsequent interviews. Spradley (1979) considers the best source of data for ethnographic descriptions to be fully transcribed tape recorded

interviews.

The interview process as it has been initially described has two boundaries or dimensions. One is its focus, that is, on food behaviors and beliefs of teenagers. The second is its perspective, that is, a goal of the interview is for the researcher to identify teenagers' points of view or subjective impressions of events or topics related to their food patterns.

Although the interviews had these boundaries, it was the intention of the interviewer to allow the teenager to provide the direction and the structure. It is an assumption of the method that each participant will have definitions or impressions that differ from those of the researcher. Allowing the teenager to define the pertinent thoughts and issues facilitated this task of describing the teenagers' perspectives. The role of the researcher in the interview has been described as an active one. The researcher, once given a general view, seeks clarification by reflecting upon it, contrasting it with her own view, or asking the teenager to make comparisons with other views presented. Thus, the interview process is one in which the researcher participates. She follows the lead taken by the subject, as well as reflecting upon the subject's comments and her own interpretations of those comments.

Observations contributed to the enrichment of data collected in two ways. The first contributed to the researcher's understanding of teenagers' "taken for granted" knowledge or functioning. The second was the researcher's need for knowledge of what Schutz (1970) describes as the overall plan. Observations were made in the time spent with the teenager and different family or household members prior to, during

and after the interviews took place. Although on occasion observations were recorded simultaneously, most recordings were made immediately after the interview.

These observations contributed awareness of both unspoken routines and those that had been more readily described. The study method is dependent upon both the teenager's ability to describe and the researcher's ability to achieve understanding of the intended meaning. Some teenagers related daily experiences with greater facility than others. Observations contributed to the researcher's ability to formulate questions which were more relevant to each situation. This might include asking teenagers to rank interests or place them into the context of their larger social life. The observation period on occasion provided the opportunity for the researcher to compare statements made by the teenager with respect to behaviors and actual behaviors observed.

In order to meet the second goal, that of contributing to the researcher's understanding of the overall picture, the researcher spent time varying from 30 minutes to 3 hours with the teenagers and others present in the household. On occasion, attention was focused on particular meal behavior. At other times, the researcher participated in discussions of the adolescents' interests and activities at home and school, family projects and understanding how the teenagers spent their time.

Data Analysis

Data analysis was based on the principles of constant comparative analysis. This technique directs the researcher to examine data collected for basic patterns and to validate patterns or

conceptualizations by seeking clarification from the study group or in the research setting. As such, the processes of data collection and analysis are intertwined.

In this study, the researcher was guided by the initial three purposes, that is, the description of teenagers' perceptions of food and the value placed upon food. As each interview was conducted, the data were examined for themes and patterns and these directed subsequent interviewing and analysis. Several emerging themes may be remarked upon. A first is related to terminologies. Terms such as "junk food," "good food," "normal food," "healthy food," and "balanced meal" all held special meaning for each teenager. The exploration of these concepts allowed the researcher access to the teenagers' reasoning and it was by exploring these patterns that new interpretations of data emerged. Both in analysing collected data and during the interviews the researcher explored the nature of apparent inconsistencies and contradictions in accounts to make sense of them. Themes which began to develop and contributed to further development of the conceptualization of the meaning of food behaviors related to the exploration of family patterns for transmission of "food ways," the expectations of teenagers in families, the role of significant others in the formation of beliefs, and the relationship of knowledge and beliefs to practice.

In presenting the data, the goal was to organize the teenagers' accounts in a way that would be consistent with how the teenagers viewed their situations, as well as in a form that might be useful to health professionals. Despite this intention, one must note that the presentation of accounts represents the writer's interpretations of the teenagers' accounts.

Summary

The method used to address the study problem is derived from the interpretive school. Three characteristics of the study method make it particularly appropriate. These are; selection of participants, the processes of data collection and the relationship between data collection and data analysis.

Selection criteria were established in order to identify a group of teenage subjects with certain common characteristics. In this study method data analysis is ongoing and may direct the researcher to include extra participants exemplifying differing characteristics. Based on data analysed early in this study, the researcher chose to refine the criteria and augment the group size.

Data were collected employing both interviews and observations. The interviews had as their focus the identification of each individual's way of thinking about the topic of food rather than the categorization of his or her knowledge about food. In this way, the method differs substantially from others. The interviews were directed by what the adolescent participants perceived was important to share. This type of data collection process allowed the teenagers to identify issues or ideas they perceived to be relevant to their food behaviors. In this way, they contributed the type of information sought by the researcher as defined by the study's purposes. The observations and second interviews allowed the writer to identify consistency in behaviors and accounts and provided the opportunity to clarify interpretations.

In the study method used, data collection and analysis occurred concurrently. The activities of listening, reflecting upon comments,

assessing the nature of similarities and differences, interpreting accounts, and then returning to the teenagers for further clarification represent the major elements of the combined processes of data collection and analysis. This aspect of the study method differs substantially from other methods but it is this process which is seen to be most appropriate in collecting the type of information necessary to address the purposes of this study.

Chapter IV

PRESENTATION AND DISCUSSION OF ACCOUNTS

This chapter describes the processes involved as the researcher moved through the research process from the first stage of data collection to the latter stages of conceptualization. The process of data collection and analysis in interpretive studies such as this one are intertwined. The first topic addressed is the construction of accounts. Included in this description are examples of how initial data, once analysed, contributed to further data collection. The relationship between this data collection process and the identified study purposes is the second topic addressed. The third topic is the presentation of accounts. In presenting accounts the researcher attempts to make explicit how the teenagers made sense of information presented to them. How the activities in which the adolescents were involved contributed to the development of their particular frameworks or plans of action for their food behaviors is also discussed. As a result of describing how teenagers were seen to develop their frameworks, the researcher describes characteristics of two different patterns of food behaviors.

Construction of Accounts

It has been described that the interview process contributed to the researcher's understanding of the participants' perceptions and

points of view. This process involved both members of the interaction. Preconceptions of nurses and nurses' knowledge of food seemed to lead some subjects to expect that the researcher might in some way be evaluating their diets or assessing their knowledge. In the second series of interviews the researcher chose to explore questions pertaining to these expectations.

While the teenager might have ideas of what to expect of nurses or guests, researchers were another matter. Several teenagers were interested to know what kinds of information would be useful, how the information gathered might be used and if they had answered the questions thoroughly enough. In effect, most teenagers and their families were eager to be helpful. As such, one might assume that at times they were attempting to provide what they perceived the researcher to be looking for.

As the study evolved, the analysis of the data directed the researcher to seek clarification and evaluation of her interpretations. Interactions between the researcher and participants then changed somewhat because of the researcher's developing way of looking at the situations.

As it has been indicated, the goal of the interview was to allow the teenagers to present their perceptions without undue interference. While this was easily accomplished in most interviews, it presented difficulties in two types of situations. As the researcher summarized or made inferences from the data, these had to be validated with individual teenagers. Spradley (1979) cautions that one must guard against

transforming the participants' meanings to the language of the researcher. This might occur naturally when the researcher fails to recognize the differences in meaning between the teenagers' use of a term and her own. The interview process, then, included the researcher's developing awareness of her own assumptions or expectations in different situations. Mutual exploration was an important part of the "Construction of Accounts."

For example, in the initial interviews teenagers often employed the term "junk food" as they described what they or others might eat. Initial assumptions of the researcher about what this food category might be were related to preconceived notions and how "junk food" had been defined in nutrition studies. It became clear that the teenagers had differing perceptions of this type of food. As the inteviews progressed, if the teenager introduced the term, the researcher asked for an elaboration. If the teenager did not introduce the word then the researcher asked the teenager to comment on the "junk food" concept or enquired if it might be fair to include foods that had already been described as "unhealthy" or "bad" in such a category.

A second situation where it was difficult not to direct responses occurred when the teenager had difficulty explaining what was meant by an expression, or difficulty in identifying patterns that were so much a part of the everyday experience they were not considered remarkable to note. The researcher managed this situation in two ways. One technique was to ask the teenagers to make comparisons between their behaviors and those of other groups such as same and opposite sex

friends, siblings, or adults or their behaviors at different times and in different settings. Such contrasts elicited perceptions of elements which were important, different, or the same.

Another technique for understanding what the teenagers might have meant was to explore why a particular word was used and in what context, an approach recommended by Spradley (1979). The researcher's observations also contributed to the unravelling of meaning in these situations. At different points in the interview, the researcher might comment on or seek interpretations of the teenager's affect. This often introduced new dimensions to the discussion. As well as providing the researcher with the opportunity to observe food behaviors, feelings about the topic of food might be voiced or personal concerns introduced.

Relationship of "Accounts" to the Study's Purposes

Accounts were constructed in order to contribute to an understanding of teenagers' rationales for their food behaviors. In order to do this, three study purposes were identified. Each purpose directed the researcher to seek particular kinds of information with respect to teenagers' beliefs and food behaviors. As a result of the information gained by interviewing teenagers about their perceptions of food and by observing them in selected situations at selected times, the researcher developed an understanding of teenagers' perceptions of their food behaviors. The accounts were interpreted and organized to identify processes involved in decision making and to describe two conceptual categories.

Interpretations of Accounts

An important observation in this study was that there were implicit frameworks guiding the teenagers' reasoning processes concerning their food behaviors. A first goal in presenting the accounts is to describe how the teenagers used their frameworks in making sense of their daily situations. It has already been noted that Kleinman (1978a) describes individuals or clients in the health care system as having "explanatory models" which help them to understand their illness experience. One might consider the frameworks being described in this study to be comparable to these "explanatory models."

Three particular activities which contributed to the development of the frameworks are described. These included the teenagers' interpretations of cues and the use of knowledge, the comparison of themselves with others and the conceptual links seen between issues of personal concern and food behaviors. There were similarities in how several teenagers thought about foods or the effects of foods on themselves or others. Observations of such similarities and differences led to the elaboration of categories.

Two categories or patterns of thinking about food behaviors with descriptions of how they were seen to influence resulting behaviors were formulated. The patterns which have been labelled "convictions" and "convenience" will be presented and their implications discussed. The presentation of accounts will flow from general observations to the development of these specific categories.

Interpreting Cues and Applying Knowledge

A general and, indeed, universal view held by the teenagers participating in the study was that they all viewed their food behaviors positively. They employed terms like "good," "healthy," or "average" to describe their own situations. That is, although some teenagers might report they had some particularly "good" or particularly "bad" behaviors, their overall assessment was their food behaviors were "okay."

How did the teenagers develop this view? As the interviews progressed the researcher became aware of the variety and types of cues and events cited by the teenagers to support the development of their rationales for acting. An example of cues to which the adolescents might attend was the response of their bodies to particular foods or activities. In essence, the researcher became aware of some of the processes involved as the teenagers came to their definitions of "normal," "healthy" or "good."

It has been suggested that individuals respond to or identify cues in making food decisions or looking for consequences to food behaviours. The kinds of cues and meanings attributed to the cues were many and varied. During an interview, one adolescent both described a particular pattern of food behaviors and discussed the reasoning behind it. The following account is a comment on information that had been shared which apparently suggested that some patterns of eating were more healthy than others and might make one feel better. How this teenager responded to behavioral descriptions may be noted:

T: It doesn't seem to make any difference

so why bother with it anyways? It's just how most people feel.

R: Like what kind of differences would you look for?

T: Well I mean, the way people describe junk food compared to normal food?

R: Yes

T: Somebody who eats a lot of junk food would be walking around, you know, eyes all jerky, and kinda, sagging along, and somebody who eats regular food will be running along. You know, that's the kind of difference you'd expect if you listened to a lot of people (laughs).

Discussion such as this suggested to the writer that in this instance the teenager was operating from a framework which questioned the validity and credibility of conveyed knowledge. His interpretations in this instance suggested the consequences of eating some foods were exaggerated. The intangible nature of some of the criteria measuring healthiness might be considered one source of the problem. Another teenager seems to have examined her own situation quite closely looking for cues related to healthy and unhealthy eating patterns:

T: ...when I went dancing there was a lot of exercise involved...it was more like tightening and toning of muscles, not so much in losing weight ...So when I did dance according to the foods that I ate I could really feel the difference. You know, if I went out and ate a lot of pizza or, uh, pies and stuff like that, I could really tell by the way my body reacted after I had exercised.

R: Like what?

T: Well I'd really feel, uhm, blah, you know more pep more energy things like that. (If we ate pizza first)...by the time we were ready to go home it was like, ohh, I need some water, I need a glass of coke, I need this. Other times I'd just have a nice quiet dinner at home with regular, meat, vegetables, potatoes and by the time we were finished, an apple would satisfy my thirst.

This second account, like the first, suggests that the teenagers examine and present reasons for acting as they do. Both of these accounts, like others, present views of what is "normal" or "regular" food. Both of these teenagers identified cues which would be difficult to measure but nonetheless contributed to their developing convictions about food. Both of the teenagers looked for cues in terms of their body's response. It would seem their interpretations were limited either by the extensiveness of their knowledge or by accepting literal meanings which were presented to them.

The process of developing a rationale for acting was an active one. The teenagers were seen to be testing actions, consequences and weighing alternatives. Sometimes, as in the following instance, the feedback was immediate:

T: if you have to have energy, like in basketball, I get cramps if I don't eat.

R: Stomach cramps?

T: Yes, I get really bad cramps but like that's what happens so I can't skip it (lunch) 'cause I feel really bad.

The three previous accounts suggest that the teenager's body might act as a moderator for information or knowledge he or she might

have received. As such, the boys and girls interpreted their bodies' responses to foods within the context of their knowledge about food. Some teenagers actively sought dietary information or advice from sources such as their mother, physical education teacher or library books. Their purposes appeared to be the desire to gain knowledge of how they might modify food behaviors. Some reasons presented for doing this were to increase rates of growth, decrease weight or achieve a higher level of fitness. Despite the teenagers' choices to seek information they still described that they "tested" it out. As a result of such testing, some adopted new food behaviors as suggested and others selected some elements of the change which they viewed to be most helpful or easiest to maintain.

In the next account a boy is commenting on how he arrived at the decision to institute changes in his food behaviors:

> T: um, How did I get there? Probably because one day I just decided and I asked my mom. Started asking my mom, since she's a nurse, what would be good for me and how I could get slimmer and what foods you should stick with and she gave me some answers and I kept asking her and asking her.

Other teengers selected elements of advice or information viewed to be most helpful or perhaps easiest to maintain:

> T: I try really hard, I was on a, well not really a doctor's diet, but this diet out of a book. And I didn't follow it exactly or anything, but it was more or less. I tried to have meats and vegetables and a lot of salad and water. And a lot of fruits in between if I was hungry for my between meal snacks. And my energy level was really good and I was feeling really good, about it.

R: uh hum

T: And then something would change, you know change my, routine, you know like I would go away like for a weeks vacation, somewhere ...things like that and then I started eating differently.

The testing of knowledge was something all of the teenagers did. It appeared that on occasion information acted to reinforce the maintenance of food behaviors or provided teenagers with a new awareness of reasons behind recommended or family patterns.

Some teenagers described that they sought new information, and as such might be described as being more open to including information from other sources. The way they discussed their behaviors included references to these different sources of information. Several adolescents had problems with acne; such problems might prompt them to seek help:

T: Well eating too much sugar gives me 'zits.' And so now I'm trying to cut down on sugar and eat more things that will help. Like, the head guy at the gym told me there's lots of stuff that I can eat instead of sugar, like natural sugar. Oranges and apples and stuff instead of man made sugar. He says those work just as well except you have to eat more.

This latter account demonstrates an instance where the teenager has expanded information on which decisions to act were based and sought information from an outside source. Rationales for acting include this information.

On the other hand, there were adolescents who seemed to place less value on knowledge from other sources and relied more on their own

measurements of success as they decided they had "good," "normal" or "healthy" food behaviors. Despite differences in the number of information sources selected, all set limits on the nature of the information they would consider. Such limits might be based either on the teenagers' decisions that their behaviors were "okay," or their perceptions of the credibility of the information source.

To this point, the discussion suggests the participants in the study had particular ways of employing knowledge as they made decisions about their food behaviors. They had varying amounts of knowledge and some were seen to be seeking out or using this knowledge more than others.

In discussing the Construction of Accounts it was suggested that one type of food which held differing meanings for each participant in the study was "junk food." An examination of some of the teengers' definitions of this concept supports the view that the teenagers developed their notions not only from information from others, but also from their own experiences:

> T: It's not good for you, it hasn't got the protein and all that. That's called junk food, that's why it tastes good. ...No junk food doesn't really hurt me 'cause I guess I eat what I'm supposed to also. It gives me the calories. If I didn't eat junk food with all those calories, I'd just be a toothpick, worse than I am right now.

The idea that teenagers selected out knowledge which was useful or applicable to them is portrayed in the latter account. Not only did this adolescent have a detailed view of "junk food" but the account also

suggested why, despite information to the contrary, the adolescent felt the food was alright to eat. It becomes clear from their definitions that they all have some ideas about foods which really are not healthy and should be avoided. An account which presents foods identified as "okay" or "good" and "bad" follows. The teenager was prepared to limit intake of sugar, but considered it ludicrous that popcorn might be considered "junk food" by others. One argument presented is based on absence of media support. The strength of the position taken is supported by suggesting the unlikely but grave consequences of cancer or death:

> T: Well popcorn's never done anything to me, so. I've never heard...you see headlines saying sugar is bla, bla, bla, but then you don't see popcorn kills you or popcorn causes cancer in the head or anything like that, so.(laughs)

As one examines accounts of the teenagers' reasoning particularly when viewed out of context, one might question if indeed any notions or actions are based on knowledge or logic. One would think if all is logical that everyone would agree on what are "good" or "bad" foods or food behaviors. Instead, it appears that when individuals are faced with ambiguous cues or are required to overgeneralize knowledge, plans of action are developed which decrease ambiguity and direct daily decision-making.

Two sources which contribute to the development of reasoning have been identified. They are the interpretation of cues and the use of knowledge. Other activities were seen to contribute to the development of the teenagers' rationales for acting. These will be addressed in the sections which follow.

The Process of Comparing Oneself to Others

The second set of activities which provided teenagers with rationales for concluding their food behaviors were "good" relates to their comparison of themselves with others. As the adolescents defended their stance they described that they compared their food behaviors with those of others such as family members, adults, peers and perhaps athletes. As they compared themselves, they might choose a characteristic of the other they would like to emulate or avoid, and hence commented on the diet:

> T: Well they (food habits) aren't that good, they're just average. But I don't think they're any worse than most other people's. Well, even my own parents. Like I don't eat that much different. I have the same lunches practically, I have the same dinners, the same breakfasts.

One can see from this account that characteristics are not always clearly related to consequences of diet. In this instance, the fact the behaviors are as good as those of the adults provides support for the teenager's argument that it is inappropriate for adults to criticize teenagers' food behaviors.

In other instances, differences between the teenager's own response to foods and the responses of others contributed to the development of notions concerning concepts such as varying metabolic rates, or predisposition to certain characteristics such as "fatness" or "thinness," through heredity. While some teenagers might accept a

predisposition to being tall or fat, they also compared their behaviors to those of others in the hopes of achieving in a fashion similar to that of their role model:

> T: When you become a teenager, you kind of want to be as tall as everybody or as strong as everybody and you try and figure out what would be the best foods that you could eat to get you to be like the person you'd want to be. Let's see, the guy that won the decatholon, in the United States, in the Olympics, Bruce Jenner. Well, he had his name on Weetabix, Wheaties, you know the stuff, and everybody just went out and bought Wheaties, 'cause they thought oh wow, let's eat cereal and be just like Bruce Jenner.

Although all the teenagers in the study possessed information and compared themselves to others, it would seem that they did so for varying purposes and from differing perspectives. This teenager admired the athelete for his success in sports. It is also evident in the account that the boy was actively trying to figure out what would make him at least as tall or strong as others. Food presents itself as something which can contribute to the desired goals.

Another dimension or boundary in the information sifting process pertains to what the writer has labelled issues of personal concern. Information sifting pertains to the teenagers' consideration of information in light of such things as bodily responses or habits of themselves and others.

Conceptual Links between Behaviors and Issues of Personal Concern

Not only did the teenagers seek out or limit the types of knowledge they perceived to be useful and base on them some assessments

of their own behaviors or the behaviors of others, but they also defined areas of focus depending upon issues seen to be of personal importance. Issues of personal concern helped the teenagers to define what food behaviors were most important to maintain or modify.

All the teenagers cited at least one, and most teenagers cited more than one, of three personal issues which they considered to influence their food decisions. These were body image, friends and sports. While one may not assume that these were the only issues of concern to the teenagers in the study, they did contribute in important ways to the particular food behaviors of the teenagers studied.

For example, body image concerns were almost universal although they varied. Most teenagers wished to lose weight or maintain their weight. Some teenagers wished to build certain muscles and others had concerns about their skin, teeth or height. Why these issues were of concern was quite unrelated to food. Their importance to the teenagers, however, was clear. They perceived that how one looked influenced one's relationships with friends and one's feelings about oneself.

Food or particular food behaviors were seen as instrumental in resolving these issues. As teenagers described how they made decisions about what they ate they employed varying criteria. The participants described trial periods of testing particular foods, eliminating foods, or adopting meal patterns and assessing the effects in terms of the desired outcome. When the outcome was not easily or readily achieved, the teenagers sometimes described that they weren't convinced the particular food was contributing to the problem or that they had sought

additional solutions. Such solutions might include exercising, or the addition of special foods or vitamins to the diet.

Teenagers had more or less comprehensive approaches to solving problems or addressing issues of concern. Some focussed on the addition or elimination of a particular food, while others emphasized activity versus food, and still others strove more consciously to achieve some type of overall balance. As such, the observed behaviors and expressed rationales ranged in complexity.

A second personal issue of concern to teenagers in the group selected was the need to have friends. To have friends was most frequently cited as the most important or most valued thing for the boys and girls in the study. The idea that not having friends reflected on the individual in a negative way was introduced as well.

The desire to have friends was seen to influence the teenagers' food behaviors and perceptions of food. As they contemplated what would contribute to the development of friendships, the adolescents considered factors such as body size or weight, athletic ability, academic ability, looks, and common interests. One may note that while friendships were most valued, food behaviors were only one aspect of what teenagers described they would modify, change or think about to ensure or maintain them. The following accounts describe some of the ways teenagers conceptualized the relationship between their food behaviors and friendships:

> T: Everybody wants to be popular. So I guess one way to be popular, or to be liked is to look good. And so I guess that's one of the

reasons that I changed, so I could look better.

R: Do you think that affects the way people relate to him, that he's so big?

T: Yes, he, no one wants to be seen with him!

R: Why is that?

T: 'Cause he's so grotesque, kind of bad for your image too 'cause he's such a jerk. Like if he was nice it would be different but, he's not.

Some teenagers indicated their food behaviors were modified to achieve goals with respect to body image changes, which they perceived would contribute to their attractiveness and hence friendships. Other teenagers thought about food or food activities within the context of friendship activities. These teenagers indicated they consumed different foods when at home or when with friends. For some adolescents "going to the store" was an outing with friends, and meal times at school for half of the teenagers provided opportunities to socialize and visit with friends.

Doing well in sports or a particular sport was a third issue seen to be important for many of the teenagers studied. Again, the value of participating in a particular sport was independent of food per se. Some teenagers enjoyed the competition, the development of skills, the physical exertion and the idea that they might become a star. As with the two personal issues of body image and friends, food beliefs and behaviors of teenagers were conceptualized and tested according to their notions about what would best support or contribute to participation in a sport.

There are many instances which demonstrate how the teenagers might have arrived at, or reasoned out, what impact particular food behaviors might have on their performance. The criteria for decision-making employed by the teenagers relied predominantly on "how they felt". They attributed causes of "fatigue," "cramps" or "energy level" to various foods or the lack thereof:

> T: Well, I guess since I'm in sports and stuff, I don't eat a lot, like maybe before a game or something I don't like to go out and eat a lot. 'Cause it's about the only thing that concerns me. I just like to get a good meal, a balanced meal, or something before a game. I just don't like to carry a lot of weight around when I play.

The effect this personal issue had on the participant's described food behaviors was not constant. That is, the teenager also stated that what was eaten was not of particular concern except in the instances where it might interfere with participation in sports. As such, while personal issues might contribute to the development of notions about what was "good" to eat, this notion for some could be seen to change. An important observation in both the previous and the following account is the identification of what is really important to the teenager.

One element seen to be involved in the decision-making process was the weighing of risks. When it was really important to do well, despite perceived lacks of positive effect, the teenager carried out a plan that would not harm, but might not help:

> T: Like it doesn't have any effect on me no matter what I eat.
>
> R: Okay.

> T: I can eat steak or something like that, it's supposed to be full of iron or whatever, it doesn't make any difference to me. I just don't even seem to notice it so, I find it hard to believe that, you know what most people would...The only thing I've ever thought about is having steaks before the game. You know the old thing that you have to have a steak before a game.

This account again demonstrates that some of the teenagers question the knowledge statements given to them. In this instance, the teenager appeared to be expecting a change in feeling with the intake of iron. Another element present in this account is the idea that there are patterns or traditions that contribute to decisions in different situations. In this instance it was "the old thing," at other times it was described to be "we always do it this way," or "we always eat fish on Friday,...I think it has something to do with the religion or something."

As with the resolution of concerns related to body image, the complexity of approaches employed by the boys and girls as they assessed the usefulness or effectiveness of dietary change to resolve concerns about their athletic ability varied. The significance of the three identified personal issues to the discussion of how the teenagers in the study employed their frameworks in assessing food behaviors, lies in how personal issues guided the teenagers' decisions about what information was relevant or the prioritization of its relevance. In a sense, then, the personal issues were seen by the writer to provide the teenagers with a context for interpreting knowledge, cues and behaviors of themselves and others.

To this point in presenting the accounts the writer has argued that each teenger has notions concerning food. The notions have developed from interpretations of experiences and knowledge and contribute to the development of what has been called a framework. This framework, in turn, guides decision making about food and hence influences food behaviors. Despite the individual ways information was assessed and the variation in concerns or practices, there were similarities in teenagers' evaluations of their food behaviors and in their patterns of assessing the usefulness of information.

Having made the processes of developing and employing these described frameworks more explicit, it will now be argued that, depending on the teenagers' rationales, two particular food behavior patterns can be described. These have been labelled "convictions" and "convenience."

Food Patterns Associated With Convictions

Teenagers whose food patterns were consistent with what the writer has defined as the "convictions" category were seen to have developed a rationale for acting which was articulated in terms of beliefs and specific actions, and which was applied across most situations.

As these teenagers discussed their rationales they tended to employ terms like "We should do it this way," "I believe doing x has the effect y" and "I believe it is good for x." The teenagers who thought this way seemed to be more likely to plan their meals in advance. Or, if in a restaurant or cafeteria, they tried to make choices that were

consistent with their beliefs. There seemed to be a certain predictability in the food behaviors of this group.

The described beliefs seemed to be based on or at least were consistent with knowledge, but as well might have emotional, cultural or partial knowledge origins. Teenagers described certain beliefs as having evolved from taking a stand on a moral issue or being part of their family or cultural pattern. As was stated earlier, the process of considering information and making decisions about actions was an active one. These teenagers' conclusions appeared to be that certain foods and food patterns are "good for you" or preferred over others.

The following account describes how one teenager reasoned out the difference between "junky" foods and the "good" foods that were seen to be better to eat:

> T: ...hamburgers, it depends what you really mix with hamburgers, whether they're junky or bad. If you eat hamburgers and potato chips and a pop or something, that would be junky...But if you had a glass of milk, a hamburger, a couple of chips, and carrots, and lettuce in your hamburger and stuff that would make it a bit better.

An important element to behaviors of teenagers whose food decision were guided by "convictions" was the element of consistency. One reason cited by a teenager was dependent upon the strength of one's beliefs:

> R: What do you suppose is the difference between sticking with it or not sticking with it?
>
> T: Well it depends how strongly you feel about it, if you do it just for the sake of doing it or if you do it because you believe in it.

What comes across in the latter two accounts, as in others, is that there is a value or merit attached to behaving in a certain way. In addition, most of these teenagers took actions to ensure "good" meals by taking their own lunches. It was reported earlier that the teenagers made decisions about the relevancy of information and were seen to compare themselves with others. Some of the teenagers it would seem, were committed to seeking out new knowledge and were willing to change their behaviors accordingly. Their resulting behaviors were consistent with their beliefs.

One teenager commented on how a teacher modified an approach to be consistent with described beliefs:

> T: Like last week we made chili, we work in partners and we just made ours without meat. (We) made the meat in a separate frying pan and my partner just put the hamburger in. We never thought of doing that at home.

While in this instance the teenager incorporated the information and considered using the information in later practice, other teenagers had different attitudes. Some seemed to present the view that their knowledge and behaviors were adequate and the maintenance rather than modification of them was what was important. This appeared to be the case in two class room instances. One was a situation where the participant felt that a teacher unjustifiably assumed that the students were lacking knowledge and skills. The teenager's impression was that the students would be prepared to participate if they felt they were going to gain knowledge they perceived to be relevant.

In a second instance the teenager was willing to "make it" but

not "eat it." Lessons were not perceived valuable because the foods prepared were outside of the adolescent's "normal" diet. In one instance the preferred diet would not have been assessed as adequate. In several of the instances, the emotional element to their arguments provided reasons for challenging knowledge. One sensed from several of the accounts that there was commitment to the origin of the beliefs and the modification of such beliefs might be a form of betrayal. Examples of this include teenagers' accounts which indicated their behaviors were part of a family pattern and they identified with their family.

Those adolescents whose food behavior pattern might correspond with their "convictions" are seen to have particular sets of food beliefs that direct them to ensure their food behaviors are consistent across situations. These beliefs also influenced their use of information. The second pattern interpreted from the teengers' accounts and observations of their behaviors is related to issues of "convenience."

Food Patterns Associated With Convenience

The teenagers who have been included in this category interpreted information given to them and responded to cues, but were seen to come to the decision that it was not particularly important to ensure that certain foods were eaten daily. It would seem the greatest tendency was to make decisions based on availability. The teenagers reported they didn't think much about what they ate or tended to choose foods based on their preferences. Their experiences suggested to them that there was usually no harm in eating whatever was there. It would appear some

adolescents had behaviors which were more situationally dependent.

The following accounts suggest that often the adolescents were concerned about things other than food per se.

> T: If you're hungry, you just grab something, whatever there is to eat in the caf'. Most of the times it's usually what you have enough money for.

> T: Well, ...it depends on when you wake up. Depends how you feel. If you feel like you want to eat junk food or, if you want to eat somethin that's good for you, healthy for you....It depends what you do with your friends. If your friends say, 'Let's go for a hamburger.' You can't really tell what you will do. Like say today I'm going to do this and tomorrow I'm going to eat that.

More than having decided particular foods were important or preferred, these teenagers reported that the consumption of preferred foods was likely to be limited by issues related to availability. Such factors might include what was available at home or school, what they could afford or what they had time for.

As the teenagers supported their view that their food behaviors were "normal," "healthy" or "good," they participated in similar processes as those who were guided by convictions. They attended to cues examined their own bodies' responses to foods, queried the applicability of knowledge to their own situation and compared themselves to others. The conclusions or thoughts of those concerned about "convenience" were often quite different from those who were "convictions" oriented. This might influence how ready they were to incorporate new information or

change their behaviors. Those who were concerned about issues of "convenience" have been described as having behaviors which were situationally dependent or changing. Another reason for changing behavior was sometimes attributed to gaining new knowledge. In this sense, new information provided a new situation. Some teenagers were quite interested in adopting new behaviors or trying new "programmes." However, some of them indicated changes might only be maintained until new information provided another alternative. It might seem they were not committed to, or perhaps convinced of, the idea that one pattern of acting is preferable to another and might be susceptible to fads.

As opposed to those who were guided by "convictions," these teenagers were less likely to think of foods in evaluative terms. "I don't like to think of it as junk food, just food." As they discussed their preferences or challenged recommendations, they described things in terms of what was "easier" or "more economical." They supported their arguments by suggesting there was not really any documentable difference in how they felt or how well they performed. It is interesting to note that while those who wished to act in accordance with "convictions" evaluated courses such as home economics in terms of the type of knowledge that was shared, those who were "convenience" oriented assessed courses more in terms of increasing personal autonomy.

As a result of examining accounts and exploring with the adolescents the evolution of their reasoning, the researcher was made aware that, although they behaved in ways that were very individual, their own pattern was consistent with their developed beliefs and

notions. Such behaviors when observed or measured outside of the individual's framework might appear to be inconsistent, illogical or irrational. When viewed in the context of his or her explanations or accounts one has a better understanding of the individual's view of the situation.

Discussion of Accounts

Having presented the accounts, the writer will discuss how this study adds to an understanding of teenagers' food behaviors. Literature reviewed in Chapter II identified the merits of studying nutrition from an ethnographic perspective and discussed how information from such studies might be employed to increase the effectiveness of nutrition intervention programmes. Reviews of studies of adolescent nutrition identified a decided lack of information of adolescents' perspectives of nutrition. This was the general problem identified for this study. The discussion will review accounts in relation to cited literature and will describe how the study problem has been addressed.

Initiation and Maintenance of Change in Health Behaviors

It was assumed food behaviors are a category of health behaviors. For this reason literature was reviewed to identify issues related to the initiation and maintenance of change in health and lifestyle behaviors. Findings of these studies indicate individuals' perceptions of the value of a treatment regimen, how they perceive it to influence other aspects of their lifestyles, how individuals define their situation,

and their commitment to the change all influence the likelihood they will comply with prescribed regimens. This literature, as was suggested earlier, also indicates that modifying or maintaining change in health or lifestyle behaviors requires the use of approaches different from those successful in achieving adherence to prescribed illness oriented interventions. Some reasons for this are that the prescribed regimens can be more complex and can affect more aspects of the individual's life. Furthermore, negative consequences of non-compliance with health or lifestyle regimens, if perceived at all, may be less meaningful to individuals than consequences of non-compliance with illness regimens. These findings merit discussion in light of the observations made in the present study.

In this study teenagers made decisions about the validity of recommended eating practices. They assessed the effects of consuming certain foods through bodily changes and how they felt. This practice sensitizes one to the perceived ambiguity of messages which suggest eating will make you "feel better" or make you "healthier." Several teenagers concluded non-compliance with recommended eating practices would have negative consequences. This study demonstrated that adolescents' perceptions influenced food behaviors. The teenagers' definitions of what was important such as issues related to "convictions" or "convenience" contributed to the adoption of different food behavior patterns. Consuming certain foods was perceived as contributing to the resolution of issues of personal concern. These issues also influenced the food behaviors adopted. Three issues of personal concern were body

image, to succeed in sports or to have friends.

Reasons for non-compliance with a recommended food pattern could be related to teenagers' perceptions that the recommended patterns were not relevant to their own situation or recommendations based on concepts such as "you'll feel better" may be too broadly interpreted.

It has already been mentioned that food and food behaviors were perceived by the teenagers as instrumental in the resolution of three personal issues. On first examination the meaning of these observations is not at all clear. The literature does not present such problems or concerns as rationales for encouraging the modification of food behaviors. However, re-examination of the works of Becker and Maiman (1975) and Taylor (1979) provide one basis for interpretation. The authors describe an individual's perception of the effects of either a prescribed regimen or illness on other activities as factors influencing compliance. A contribution of this present study identifies some factors the adolescents would consider in making decisions to modify their food behaviors, what they perceive to be important in relation to foods and how such perceptions can influence subsequent food behaviors.

As the writer described the patterns of behavior associated with categories of "conviction" and "convenience," major behavioral differences were noted. The behavior patterns associated with "convictions" were characterized by consistency across situations and the adolescents described specific beliefs which guided their food decision making. Food behavior patterns were described as something "valued" or "important." Commitment was also identified by both Becker,

Maiman, Kirscht, Haefner, & Drachman (1979) and Taylor (1979) as a factor which predicts sustained behavioral change or long term compliance. Perhaps teenagers whose food patterns were consistent with their "convictions" could be described as committed to their particular food behaviors.

Several comments may be made as one examines the writer's interpretation of accounts in the light of the Health Belief Model. Rosenstock (1966) described four sources of influence on an individual's health behaviors; one of these was the desire to maintain health. A co-requisite to the Model's usefulness as a health behavior predictor was that the concept of health be meaningful or salient to the individual.

This study did not examine health beliefs in general, but it did assume food behaviors to be a category of health behaviors. While some of the study participants would have been described as valuing health, it seemed that most teenagers did not view their food behaviors in relation to health. They considered food in relation to more general issues, for example, what was important to the teenagers was how their perceptions of how food affected their daily functioning or their interactions with peers. As such, descriptions in this study would be consistent with those of Radius et al. (1980) who concluded that many teenagers do not value health. The conceptual categories and processes described in the present study provide an alternative way of looking at teenagers' food behaviors which is not necessarily dependent upon valuing health.

In describing health behaviors using the Health Belief Model, Rosenstock (1966) indicated that individuals would carry out preventive

actions if they perceived the risks of illness to be greater than personal inconvenience. That is, individuals would consider the likelihood they would develop an illness, what they would have to do to decrease their chance of contracting it, and the degree of behavioral change such preventive actions would require. The present findings suggest convenience is not the only consideration. The categories, as they have been described, suggest that factors related to convenience such as availability or cost are predictors of food behaviors only for some individuals. Those whose food behaviors are consistent with the descriptions of the "convenience" pattern might be the individuals whom Rosenstock (1966) describes as weighing risks of illness and basing decisions on what is easier or more convenient. Those individuals whose food decisions are guided by their convictions might be prepared to work around inconveniences in order to ensure compliance with the prescribed regimen.

Studies of Nutrition

Food Patterns as an Element of Culture

The problem of encouraging individuals to modify their eating patterns to support health or to accommodate the availability of resources has been addressed differently over time. Research which has been instrumental in the design of nutrition intervention programmes is that which has increased health care workers' understanding of the cultural group's perspective of its food behaviors.

Studies which have examined food patterns as an element of

culture contribute two types of information. They describe food beliefs held by the groups studied and provide insight into how beliefs were developed. Researchers who studied food behaviors from the cultural perspective report that individuals have a need to communicate both thoughts and feelings about food. They also suggest that food is more clearly understood when examined in the context of other life events. While life events may account for variations in food behaviors there is a group influence which contributes to similarities in food behaviors. Different groups of people are described as conceptualizing or developing their notions differently. Cussler and De Give (1952) identified variations between community members and professional groups or between community members of differing social standing. They label the food patterns associated with groups as "food ways." Cussler and De Give (1952) also describe how individuals are involved in the transmission of "food ways." The authors described the meaning of food within the culture and explained how personal and community values, individual food beliefs and family and community members contributed to the maintenance and change of food behaviors.

This study of teenagers perceptions of their food behaviors demonstrated it was important for adolescents to communicate their ideas and concerns about foods. It also supports the view that food behaviors are more clearly understood when examined in the context of other life events. As has been mentioned earlier in this discussion, understanding the development of rationales for acting requires one to explore food in

relation to family and lifestyle. The participants' accounts only began to make sense to the writer when she broadened her definitions of the desirability of certain food behaviors and the negative consequences of others. Instead, an effort was made to understand the boys' and girls' ideas of these same issues.

It has been proposed that different groups of people conceptualize or develop their notions differently. The researcher discovered that adolescents perceive their behaviors to be similar to those of some groups and different from those of others. Most often the perceived or desired similarities were with groups with whom the teenager identified. Such groups might be family or friends.

The writer's study identified the individuals teenagers perceived as influencing the development of their food beliefs. In this study parents and friends were individuals with whom teenagers compared their food behaviors. One reason comparisons were made was to justify food patterns adopted. The teenagers also sought information from others. Most frequent information sources were parents, professionals or on occasion people with desired characteristics such as athletes. By providing information and acting as role models these individuals contributed to the development of teenagers' definitions of what were appropriate or "good" food behaviors. These observations are similar to those of Cussler and De Give (1952) who identified mechanisms of transmitting "food ways" which included input from family and community members.

Awareness of food beliefs is important in planning to change

behaviors. The patterns of food behaviors associated with "convictions" and "convenience" could be considered as representing two differing value sets. The teenagers considered both information and recommended actions in light of their frameworks. Those guided by issues of "convenience" had different food beliefs and behaviors than those who considered food in relation to "convictions." The conceptualized food patterns associated with "convictions" and "convenience" might be seen as representing the value sets of differing classes or groups of community members and representing two differing points of view. If individuals interpret information or formulate knowledge in light of their own situation and beliefs and values then those with different values would perceive different types of information important. Clearly intervention strategies that would appeal to one set of values would not necessarily appeal to the other.

The writer did not contrast teenagers' perceptions of their food behaviors with those of other groups, but the conceptualizations developed in this study may contribute to the exploration of potential differences between groups in several ways. The conceptualization of teenagers' perceptions of their food behaviors which has been proposed is a clear example that teenagers have their own ways of viewing their food behaviors and that their views may differ from those of others. Also, contrasting one's own conceptualization with that of another implies that individuals must begin to clarify their own beliefs about food behaviors. Such notions might be personal and based on knowledge and experiences or they might reflect defined professional orientations. Making explicit

one's own framework is important if a professional is going to enter into negotiation of therapeutic interventions.

Studies of Adolescent Nutrition and Food Patterns

Patterns of food consumption during adolescence. The review of this category of literature indicates that, while researchers document a range of adolescent food behaviors, the patterns are not easily explained. Two studies suggest that food consumption is related in some way to the availability of foods (Crawford, 1977; Stepien, 1978). Other studies suggest a lack of responsiveness to increased energy and nutritional requirements of the age group. Reasons proposed to explain the described patterns include lack of awareness of the nature of increased needs and lack of knowledge.

The behavior patterns associated with "convictions" and "convenience," and the characteristics of situational independency and dependency, contribute to an explanation of how or why teenagers' food behaviors might alter with changing conditions. Changing the availability of foods might change the kinds of foods consumed by teenagers whose food behaviors were guided by factors related to "convenience." Changing the availability of foods would likely result in a change in food behaviors, but not necessarily foods consumed, if teenagers were operating under the orientations related to the "convictions" category. In this latter instance food behaviors would include eating as well as planning, purchasing or preparing meals or snacks.

Another explanation for the range of food behaviors reported in the literature can be attributed to the beliefs teenagers hold about particular foods. As the adolescents articulated their notions about why they might eat certain foods and avoid others, they included the characteristics ascribed to foods as reasons. The qualities such as "light," "quick," "greasy," or "fattening" were named, as were the desires to include "light" foods when one was concerned about one's weight or to exclude "greasy" foods if one was concerned about complexion. Foods were also discussed in terms of being "healthy," "junky" or "nutritious." An interesting part of these observations was that although the adolescents might use the same terms, they were not always describing the same foods or the same food qualities. Similar observations were reported by Kaufman et al. (1975).

Described influences on teenagers' food behaviors. When Kaufman et al. (1975) reported that adolescents attributed qualities to different foods and food types, they indicated this influenced the teenagers' decisions about food consumption. The present study suggests food decisions are also influenced by the participants' perceptions of their bodies' responses to food and how they perceive foods to affect their personal development or functioning. The presentation of accounts described processes which involved the teenagers' attendance to cues and their use of knowledge. Cues which were described as contributing to the development of the teenagers' rationales included food qualities like "lightness" or "greasiness" and corresponding bodily responses

such as "strength," "energy" or "healthiness."

Additional influences on food behaviors may also be considered. Three issues of personal concern have been discussed in relation to how perceptions influence behaviors. As the patterns of eating associated with "convictions" and "convenience" were described, the writer identified factors influencing not only food behaviors but adolescents' rationales for seeking nutrition information. One factor is the desire to acquire skills in food preparation or purchase in order to increase personal autonomy. A second is that for those who are guided by issues of "convenience" new information can induce changes in food behavior patterns but these behavioral changes may not necessarily be maintained. Deciding to maintain "healthy" or recommended food behavior patterns depends upon the teenagers' interpretations of their bodies' responses to foods as well as their abilities to critically examine information. Perhaps for some teenagers the source of information and its mode of presentation are more important reasons to modify behaviors than the nature of the information itself.

Teenagers' knowledge of nutrition. Several studies in the literature report varying levels of knowledge among differing groups of teenagers. An assumption in assessing knowledge is that it is a pre- or co-requisite to healthy practice. Studies such as those by Thompson and Schwartz (1977) and Saucier and Gauthier (Note 2) suggest that knowledge of nutrition does not correlate with recommended practices. One explanation for this observation may be found in the results of this

study. As accounts were presented the researcher decribed how teenagers used their experiences and perceptions in defining how "facts" were incorporated into rationales for acting.

In assessing the usefulness of information given to them by teachers, nurses or others, the teenagers validated it by examining its relevancy to their own situation, its compatibility with personal beliefs or notions, and its consistency with messages from other sources identified as credible. Such credible sources might include parents, teachers or nurses.

The teenagers sought information for the purposes of solving problems or to expand the amount of information used in making decisions. Learning new skills was also described as being motivated by the desire to increase choices and to increase personal autonomy. All of the adolescents described that on receiving information they "tested" it out. In making sense of information presented to them, the teenagers interpreted it in light of their perceptions of what was important, valued, or likely to contribute to the resolution of issues of personal concern.

These observations emphasize that information or a dietary routine recommended by a professional will likely be pondered, examined, tested, and prioritized for its perceived relevance to the individual's situation. Information may be challenged not only by the teenagers but also by their established routines, practices or preferences as well as their observations of general trends.

This process of interpreting information in context of the

individual's experiences contributes one explanation of why recommendations may not always result in the desired behavioral change. It also has implications for how health care workers might assess an individual's understanding of conveyed information. The measurement of knowledge by ability to recall "facts" does not assess how teenagers have interpreted information in light of their everyday experiences. Everyday knowledge is more likely to be assessed if one explores what is understood or how information is incorporated into an existing knowledge base or framework. One type of knowledge assessment reveals "facts" and the other, the framework which is guiding daily decision making.

Influence of social status and family. The participants in this study were all from middle class families. It is worthy of note that as well as having a range of food behaviors, the teenagers within the study group held differing views of what was important or valued as far as their food behaviors were concerned. Studies such as that by Dwyer et al (1967) suggest that cultural and familial factors in some way influenced adolescents' food practices. In the process of developing their perceptions of food, the teenagers in the study described here cited their parents as sources of knowledge. They also validated their food behaviors by comparing them with those of their parents or peers. Many teenagers, as well as identifying family members as sources of information, indicated that some food behaviors or beliefs derived from family patterns or traditions. Some teenagers perceived it more important to maintain these traditions than others. The importance of

maintaining traditions could be seen to correspond with the types of behaviors and beliefs characterized by the "convictions" category.

The idea that knowledge is socially constructed and that information is interpreted in light of beliefs and experiences reinforces the need for health care workers to assess individuals' food behaviors and rationales for their behaviors in the context of the family. Family environments contribute to the individual's assessments of what is meaningful and what types of information or behaviors are perceived by the teenagers as important to consider.

Summary

The presentation of accounts described processes involved in the development of teenagers' rationales for their food behaviors. The discussion addressed how this study adds to an understanding of why teenagers have the food behaviors they do, how they make food decisions, how they make sense of information and how they develop their attitudes towards food.

In constructing accounts the writer was guided by the three purposes of the study. One purpose was to explore with the teenagers their perceptions of their food behaviors. A second was to understand the position food and food behaviors have within the values of the adolescent group. The third was to describe variations or changes in adolescents' food related activities by observing them. Data collection was guided by the study purposes and data analysis organized accounts into conceptual categories.

This chapter described that teenagers have frameworks which guide their food decision making. Processes which contributed to the development of the frameworks were the interpretation of cues and knowledge, the comparison of themselves with others and the desire to resolve issues of personal concern. The teenagers were also described as having food behaviors directed by issues related to either "convictions" or "convenience."

The presentation of accounts is unique in comparison to reviewed literature in that it represents the teenagers' points of view and identifies, for example, who they view as information resources, their interpretations of the effects of recommended eating patterns on their bodies or sense of well being and their perceptions of both the positive and negative outcomes of adopting particular food behavior patterns. The writer's description of both the processes which contributed to the development of the adolescents' frameworks and the two behavioral patterns associated with "convictions" and "convenience" conceptualizes the adolescents' perspectives differently than what is presented in reviewed literature. In discussing this study in relation to the literature it was also proposed that presented accounts can both provide explanations for patterns of food intake which were described in studies cited and identify factors which influence teenagers' food behaviors.

This study demonstrated that food behaviors are most often perceived in relation to issues of lifestyle such as activities or friendships and not necessarily in relation to concerns of health or illness. In describing the patterns of food behaviors associated with

"convictions" and "convenience," the writer proposes a way of explaining teenagers' food behaviors in a way that is not necessarily dependent upon valuing health.

Chapter V

SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS FOR FURTHER STUDY

Summary

Both the writer's observations of teenagers in clinical settings and a review of relevant literature identified that we know little about adolescents' food behaviors. This presents a problem to nurses and other health care workers as they identify the need to design or implement nutrition intervention programmes. Understanding why people behave as they do can help health care professionals provide care in terms meaningful to the clients and in a way which is consistent with clients' expectations. Studies which examined issues related to the initiation and maintenance of change in health behaviors were reviewed. They addressed questions related to when and why individuals carry out prescribed behaviors. Reviewed studies of health behaviors indicated that, while some aspects of "preventive" actions are viewed similarly to "curative" ones, there are also differences. Examples of cited differences are clients' perceptions of the value of the prescribed behaviors, perceptions of the prescribed regimen's impact on other aspects of their lifestyle and the complexity of the prescribed routine.

Early nutrition researchers studied problems related to the initiation and maintenance of change in food behaviors. They employed ethnographic methods and studied food as part of a culture. The

understanding gained by their research contributed to the design of more effective nutrition intervention programmes. Similar research methods and applications of findings have been described more recently in understanding how different cultural groups perceive and resolve illness concerns.

It is important to describe and identify patterns of what it is people eat to assess the incidence and type of nutritional problems. Several researchers have done this for the adolescent population. Recent studies also suggest that family, culture and perception of self influence food behaviors. Although adolescent food behaviors ranging in degrees of healthiness are documented in literature reviewed, there are not satisfactory explanations of individual differences in observed practices. What has not been responded to are the questions related to why teenagers act as they do.

Such information has been described as critical to the effective provision of care. Provision of care in the context of this study would mean communicating nutrition information in a manner that would be acceptable to teenagers and result in their adoption of recommended eating patterns.

It was proposed that providing a description of how teenagers explain their food behaviors would help to increase understanding of how adolescents interpret or make sense of knowledge or facts, how they develop their attitudes and in turn how they make decisions about their food behaviors. It could also provide information about what teenagers consider to be important or what they perceive to influence their food

beliefs or behaviors.

The interpretive method was chosen to address the study problem. Characteristics of the method include researcher involvement in the research process of understanding how individuals develop their views. The researcher both interviewed and observed teenagers to identify factors which were meaningful to them and to understand why they were meaningful. This enabled the researcher to respond to the study's purposes which were; to describe adolescents' perceptions of their food related behaviors, to develop an understanding of the position food and food related behaviors have within the values of the adolescent group and to describe variations or changes in food related activities as adolescents were observed in selected situations at selected times.

In this study method, data analysis is ongoing and may direct the researcher to include extra participants exemplifying differing characteristics. Based on initial data analysis the researcher chose to augment the sample size and to refine the selection criteria of age, sex and ability to speak English. Nine teenagers were interviewed and observed on two occasions and two teenagers were interviewed and observed on one occasion. The transcribed interviews and recorded observations formed the data for the study.

Presentation of an interpretive study does not involve the measurement of the incidence of particular behaviors or statements, but describes how factors such as events, activities or knowledge become meaningful to individuals. A goal was to identify each individual's way of thinking about the topic of food. This method was particularly

appropriate to study the described problem because observations and second interviews allowed the researcher to identify consistency in behaviors and accounts and provided the opportunity to clarify interpretations. In this way, the researcher constructed accounts of food behaviors with the teenage participants.

The presentation of accounts demonstrated that teenagers have frameworks which guide their decision making about food. Processes which contributed to the development of the frameworks were the interpretation of cues and knowledge, the comparison of themselves with others and the desire to resolve issues of personal concern. The adolescents were also described as having food behaviors directed by issues related either to "convictions" or "convenience." An example of cues to which they might attend was the response of their bodies to particular foods or activities. In their use of knowledge, the teenagers were described to both assess the usefulness of shared facts and to actively seek solutions to particular problems identified. The teenagers defined the relevancy of such cues or knowledge in terms of how they might contribute to reaching identified personal goals.

The reasoning processes used by the boys and girls provide insight into how beliefs about foods and food behaviors are developed and how teenagers use information. The presentation of accounts contributes to an understanding of teenagers' food behaviors by identifying not only what the teenagers' perceptions are, but also what factors contribute to their development.

In discussing this study in relation to the literature, the

writer identified that making explicit the frameworks guiding teenagers' food decisions contributes to an understanding of what issues are perceived as important by teenagers and how the issues influence food decisions made. In conceptualizing food patterns associated with "convictions" and "convenience," the writer presents ways of explaining teenagers' food behaviors which reflect their perceptions, attitudes and values. Understanding how adolescents develop their points of view, the nature and types of cues to which they attend, the role models they choose, and the way they interpret information in light of their beliefs can provide direction to health care professionals as they develop intervention programmes. There is a need to present nutrition information in relation to issues of importance to teenagers and in terms understood by them.

Conclusions

The observations and conceptual categories developed in this study represent how teenagers view their food behaviors. As such, this study contributes one explanation of adolescents' everyday food decision making.

This study, like others, reinforces the notion that individuals develop ways of viewing their own situations that may differ from those of others. Health care workers most frequently conceptualize and present nutrition information within the context of health related issues. While some teenagers in this study were concerned about health, most were more concerned about the impact food behaviors had on other parts of their

life. As such, health care workers and teenagers might be seen to have differing "explanatory models," (Kleinman, 1975) or in the context of this study, frameworks.

That teenagers perceive their food behaviors to be "normal" or "good" is an important observation which contrasts with reports of nutrition researchers. This belief was cited as a rationale by the adolescents as they justified decisions made, considered how they would use knowledge and chose their food behavior role models. Nutrition research, however, reports that many teenagers have "bad" or "unhealthy" diets.

The conceptual categories of "convictions" and "convenience" and the described processes of decision making suggest the adolescents' rationales for acting are more clearly related to issues of personal concern, established patterns or routines, and interpretations of information communicated than they are to issues of health.

Descriptions of the processes involved as teenagers develop their particular food beliefs strongly suggest that, although one may control the content and types of information shared (such as in nutrition teaching or intervention programmes), how the individual teenager might use it or make sense of it is less predictable.

Implications

This study assumed that individual respondents spoke as competent members of the adolescent group. The writer through the use of interviews and observations sought to clarify with the teenagers their

perceptions of their food behaviors. The importance of the description, then, lies in the clarity of presentation, allowing others to develop, question and refine the observations and conceptualizations in interaction with teenagers or groups. The accounts presented show that individual teenagers think about their food behaviors in ways that differ from health or professional models. Kleinman (1978a) states the implications of differing points of view on the effective provision of care. In order to increase satisfaction with care and for professionals to be able to achieve higher levels of compliance with regimens they prescribe, awareness of how individuals arrive at decisions or view their situations is required. Inherent in such a statement is the implication for professionals to articulate their models or ways of viewing a topic such as food.

This study supports the view that in order to increase the effectiveness of teaching interventions the teaching situation should provide opportunities for exploration of preconceived notions concerning the topic of food. Such a process would facilitate assessment of what teenagers would perceive as necessary information as well as aiding the intervening nurse in presenting information in a manner the adolescent would perceive to be relevant.

The process oriented approach would also encourage the nurse to seek the individual's perceptions of what had been "taught." In this way the intervening nurse would have the opportunity to clarify misconceptions, add more information, or identify conceptual barriers inhibiting the client's ability to incorporate new information.

People influence the types of beliefs developed or food behaviors adopted because, through a process of validation, the teenagers compare their food behaviors and seek information or advice. This implies health care workers should identify the teenagers' preferred role models and their sources for information.

Literature, observations and this study reported that most teenagers have reasons for their food behaviors which were not related to health and this could account for an observed lack of receptivity to intervention programmes. A variety of different views were described. For example, food behaviors were influenced by beliefs and the teenagers' perceptions that particular foods would contribute to the resolution of issues of personal concern. The behavioral patterns associated with "convictions" and "convenience" are examples of how different orientations or value sets may influence food decisions and food behaviors. These observations and the adolescents' perceptions that their food behaviors are "good" or "healthy" suggest some reasons why teenagers might consider they do not need nutrition intervention programmes or that nutrition information is not useful to them. This study can provide direction to health care workers interested in encouraging teenagers to participate in nutrition intervention programmes by presenting information in a manner which would be meaningful to them.

Recommendations For Further Study

As the teenagers recounted experiences and their reasons for for adopting new food behaviors, they often indicated something had

happened to change the way they prioritized the importance of some food related issues. Developing an awareness of new food ideas was one reason cited; others were often related to changing perceptions of themselves. Further research might usefully explore the process of sensitization of teenagers to food related issues, what might be an optimum time for teaching or intervention programmes, i.e. prior to or post puberty, and the identification of strategies of intervention which would support the introduction of change in teenagers' diets. While this study focused on healthy teenagers, a similar study of teenagers on therapeutic diets would contribute to an understanding of how they develop views of their food behaviors and in what ways, if any, they may differ from teenagers such as those included in this study.

The notion that some persons were identified by the teenagers as more "reliable" or credible information sources than others raises questions requiring further exploration. How might nurses enhance their credibility as informants? Or, how might one intervene to change a situation where established routines are supported by persons identified as "credible?"

The boys and girls in the study all participated in activities outside of school. One had the sense that most of them were very busy. Some teenagers would say that, despite being busy, planning a "good" lunch was important so "you make time." Several of the adolescents who were more situationally dependent valued opportunities which would increase their range of choices. These might include having increased

spending money, desiring greater variety in cafeterias, or learning skills related to food preparation. Such observations make one question whether the described tendencies are only related to food behaviors or if they represent two differing ways of coping with a busy lifestyle, by planning or by responding.

The two differing value sets also suggest that, although all of the adolescents may have known what they "should" eat, their perceptions of their own abilities to provide the foods either through preparation or purchase influenced their food behaviors. It would be worthwhile to further explore this notion.

Finally, although this study focused on adolescents' perceptions, understanding the extent to which such perceptions might be shared by those of different age groups and with different cultural orientations would also be useful to explore.

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APPENDIX A

APPENDIX B

July 31, 1981.

Consent Form

I am interested in spending some time talking with Judy Lynam about my eating patterns. I understand that she is interested in knowing more about how teenagers made decisions about their diet.

I understand that we will get together twice in my home where Judy will ask me some questions and observe me. An example of a question I might be asked would be to describe a typical day's eating pattern. Observations made might include; time, place and composition of meal and type of interactions between those present.

As we talk the discussion will be tape recorded. These tapes will be kept confidential.

I am aware that I may refuse to answer any specific question(s) or completely withdraw from the study, without prejudice, at any time.

I have discussed this with my parents.

_____ Date_____
Teenager

I (agree/do not agree)_____to allow my son/daughter to participate in the study as it has been described.

_____ Date_____
Parent