

Adolescents' Views on Food and Nutrition

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ABSTRACT. This study, which investigated the opinions and views of adolescents throughout the state of Minnesota, examines a range of nutrition-related topics. Using a small group discussion format and qualitative survey methods, we polled 900 high school students. Data were analyzed using content analytic techniques. In general, we found that adolescents were well informed about good health and nutrition practices, but they did not translate this knowledge into food behavior. Adolescents felt that there were many barriers to changing their dietary behaviors – specifically, lack of time, lack of discipline, and lack of a sense of urgency. We discuss the implications for nutrition education and designing programs aimed at changing adolescent dietary behaviors. (JNE 18:188-192. 1986)

Adolescents, as a group, are at risk for nutritional problems both from a physiological and a psychosocial standpoint. The dramatic increase in physical growth and development creates a high demand for nutrients and energy. Psychosocial changes, such as the adolescent's search for independence and identity, concern for appearance, and active lifestyle, can have a strong impact on nutrient intake and food choices. Studies have frequently found adolescents to have poor dietary habits (1-5). Often, nutrition and health educators find that developing education programs to promote healthy eating patterns and to change dietary behavior among this age group is challenging, but frustrating.

There have been several studies assessing adolescents' level of nutrition knowledge, dietary habits, and various factors contributing to poor dietary habits (1-9). However, these neither examine food and nutrition from the perspective of adolescents nor do they provide a contextual understanding of how adolescents perceive the role of food and nutrition in their lives. We conducted this study to investigate Minnesota adolescents' opinions and reviews on a range of nutrition – related topics. We felt that such a survey would provide insight into adolescent eating behaviors and might sensitize educators and practitioners to the thoughts and beliefs of adolescents.

METHODS

The Minnesota Youth Poll is an ongoing research project that asks high school students across the state for their opinions on topics and issues significant to adolescents (Note 1). The research project has conducted polls on a wide variety of topics over the past 10 years, including teenage pregnancy, health, school policy, friendship and leisure time, delinquency, and nuclear war. The poll utilizes a method distinctly different from standard survey research techniques. Standard survey research generally reports the degree of agreement or disagreement that sample members have with a pre-stated position. Response categories designed by investigators provide ratings, rankings, researchers design forced-choice questions, this presumes the researchers' understanding of the range of possible response to an item. Such forced-choice questions can be analyzed quickly, presented easily, and understood widely. However, such research is less about the underlying thinking or reasoning behind respondents' answers to the questions (10).

The youth poll is more akin to a focus-group format than a standard survey. The method uses small, self-selected discussion groups in which a member of the group acts as both the discussion leader and data recorder. The teenagers discuss an issue using a series of open-ended questions designed to stimulate discussion, explanation, and elaboration. The same questionnaire, question sequence, and content are used for all groups.

This small group format provides the best environment for discussions since it closely approximates the typical teenage environment – the peer group without an adult present (Note 1). By responding in-group contexts, adolescents are able to casually articulate their conventional, taken-for-granted assumptions about the topics under examination. On the one hand, information about individual respondents is not available since statements made within the group are self-selected and are not attributed to individual participants.

Specific age and gender attributions cannot be made since the groups tend to be mixed-gender and, in the case of several urban and rural schools, include mixed age groups as well.

When the youth poll was initially developed, it was found that eliminating individual characteristics of the group made open and spontaneous discussion easier among adolescents, without the self-conscious assumption that ideas or thoughts about a discussion question would be in any way attributable to the individual. In this way, use of the group as the unit of analysis focuses more on subjective meaning rather than the frequency of occurrence of events or responses – something which typically distinguishes qualitative research methods from conventional quantitative techniques and represents one of its most important strengths (11). Thus, it is not possible to isolate single characteristics and study their association with specific responses, presuming some kind of independent-dependent variable relationship.

The use of self-selected group recorders has implications for the type of data obtained. As the teen participant-recorder writes down the comments and dialogs of group members, some screening and selection will occur. For example, some recorders write faster than others. Consequently, not all of a group's comments are noted. Yet, other methods such as taping and the use of adult recorders have been attempted, but proved to be overly intrusive. Thus jeopardizing the validity of the data (Note 1). The overall goal of this method is to record and analyze the conventional, everyday thinking of teens. Creating a peer context is an effective way of collecting such data on the group level. But because the unit of analysis is the group rather than the individual specific point and interval estimation is not possible with this methodology. While a variety of schools from urban, suburban, inner city, and rural areas participate in the poll, they constitute a nonrandom sample. We note that our findings are not necessarily representatives of all Minnesota youth, but suggestive of important themes and issues that are salient in the minds of adolescents.

As in other youth polls, more than 900 high school students from over 25 schools throughout the state participated in this study. We selected participating schools to provide diverse regional, ethnic, and socio-economic backgrounds. In each school, the questionnaire was administered in a required class, either English or social studies. The students (grades 9-12) sat in small, self-selected discussion groups of 4 to 7 people. Each group identified a discussion

leader/recorder, whose job it was to read each question and, in turn, record all responses. In total, there were 180 such discussion groups.

The questionnaire consisted of 13 open-ended discussion questions that dealt with participants' perceptions of teenagers' diets, barriers to change, attitudes towards food and eating, food preferences, fast foods, school lunch programs, and family meals. We pretested the questionnaire with 100 students in grades 9-12 from one urban, one rural, and one suburban school. Pretest participants included 54% females and 46% males. On the basis of pretest information, one question was eliminated and other revisions were made to improve clarity.

Data Analysis. We analyzed the group questionnaires using conventional content analysis and coding techniques for qualitative data that clustered response into thematic groups, focusing both on the perceptions of respondents and the language used (12-15). First, we read through the questionnaires. Then we split them apart for content analysis by question and by area of residence (inner city, urban, rural, and suburban). Inter-rater reliability was computed following the development of a coding scheme using the following formula for double coding (16):

$$R = \frac{\text{Number of agreements}}{\text{Total numbers of agreements} + \text{And disagreements}}$$

A respectable coefficient of 0.94 was obtained in this manner. Intra-rater consistency was also computed for three of the questions with one-week interval, using the same formula. Overall concordance was quite high (0.95), facilitated by the initial creation of mutually exclusive categories for the classification of data (15, see Note2).

RESULTS

The teenage diet: good or bad? The first set of questions focused on the teenage diet and respondent's perceptions of teenagers' eating patterns. We asked participants to respond to the statement that adults often claim that "teenagers do not eat the right kinds of food" and whether they agreed with this. The prevailing attitude was strong support of this statement. Although the vast majority of the participants felt this was true, the students from suburban areas were more likely to support it than were the students from urban or rural areas. When citing reasons, students tended to give specific examples of poor eating habits such as skipping meals, unbalanced meals, and too much snacking. They also felt that teenagers did not have the time to eat nutritiously. In addition, several groups said that healthy food was not available to them (either at home or at outside places such as vending machines).

When asked how teens could improve their diets, three general themes emerged. The most frequent suggestion was to “balance their diet”. This included eliminating some foods and adding others. Specific suggestions made by teens included: eat more vegetables, fruit, meat, and nuts; drink milk; and take vitamins. The second theme that emerged dealt with mealtimes and better planning. Ideally, students felt they should take more time to prepare and eat meals. Some also proposed that they should be eating at home with their families more often. A few groups viewed the schools lunches, as a way to improve their diets and felt the schools should offer healthier, more nutritious food. The third theme was that, in general, nothing had to be done to improve young people’s eating habits, since they eat well and are healthy.

Barriers to improving the diet. From the above responses, it was evident that adolescents know what they should and should not be eating. We were interested in identifying the barriers that prevented young people from acting upon their knowledge and practicing more healthful dietary behaviors. In general, the students reported three reasons why youth do not act upon their nutrition knowledge: lack of time, the inconvenience of eating properly, and lack of a sense of urgency. Time was viewed as a major factor – students perceived themselves as being too busy to worry about food, nutrition, meal planning, and eating right. The following comments were typical: “People our age are so busy that we don’t have enough time to change bad habits.” “We don’t have the time – too many pressures.” “There’s a lot more than food that’s really important to us.”

Additionally, some students pointed out that their time schedules of other family members often did not coincide. They said those factors such as both parents working, parents being gone in the evening, and hectic family schedules interfered with family meals and, thus, had a negative impact on the quality of their diet. Several groups that held parents completely responsible for meal preparation (both breakfast and dinner) blamed their own poor eating habits on their parents.

The second barrier that these students cited was the inconvenience and expense involved in improving their diet. Since many teenagers perceive themselves as leading active, busy lives, they sometimes believe it is too much trouble to prepare a meal and eat what they feel are healthy foods. Rather, they say they are lured to fast-food places and convenient foods (such as pop, candy, and chips). Such food choices are easy to obtain

and involve no preparation. The prevailing view among the teenagers we polled is that good nutrition is “too big a bother” and they are too busy and pressured to think much about food. Students also suggested that many teens’ lack the self-discipline needed to eat healthy foods since their preference is for junk foods. Finally, some of the respondents suggested that practicing good nutrition habits had little urgency to teenagers. While acknowledging the importance of healthy eating practices, they thought they would worry later in life about eating better.

Junk foods. The term “junk food” is a popular and widely used phrase that is often used to describe the typical adolescent diet. Although there is not agreement on a definition, nutritionists generally define the term as foods having minimal nutritional value. We asked adolescents to give their definitions and perceptions of junk food. According to the students, junk food is defined not only in terms of content, but also in terms of its consequences. Adolescents attributed the following characteristics to junk food: high in sugar, fat and calories; bad for health; high in additives; fattening; lacking nutritional value. Specific foods listed included: candy, potato chips, soda pop, cookies, cake, brownies, pizza, Hostess products, ice cream, French fries, and fast-food hamburgers.

While the majority of students in the group said they liked these kinds of foods (many recommended their inclusion in the school lunch program), there was widespread endorsement of moderation in consuming foods of minimal nutritional value. The primary appeal of junk foods, according to the students, is the taste. Most stated they liked and ate such foods despite the consequences, which included “getting fat,” “acne,” “bad mood,” “bad health,” “poor nutrition,” “laziness,” “cavities,” and “getting sick.” The second most popular reason given for eating these foods is their convenience. Always seeming to be in a hurry, adolescents find junk food, despite its negative qualities, to be a necessary part of their busy lives.

Food preference. Food preferences play a critical role in influencing food choices and intake. To give us a better understanding of adolescent food preferences, we asked students in the small groups to respond to the following question: “If someone from another planet asked you what kinds of foods American teenagers eat, what would you say?” The nearly unanimous response from urban, suburban, and rural adolescents was

fast foods and sweets. When asked what adolescents tend not to eat, the majority of respondents said, “fresh or cooked vegetables, spinach, or liver.” Another prevalent theme was “foods that take time to prepare”.

In a slightly different vein, students were asked: “Suppose that you have just spent the last year travelling through the galaxy on a space shuttle. You’ve had nothing to eat but food capsules and water, and now it’s your first day on Earth. What would you want to eat and why?” Overall, the respondents favored beef and potatoes, stereotypical standard American fare. Common responses were steak or prime rib, potatoes (baked or fried), and pop. There was also a strong preference for fast-food meals. These responses reflect the importance and symbolic value of meat to adolescents. A small minority of students opted for items, such as fruits and vegetables, either alone or in combination with a larger meal.

Family meals. The family meal has been a time-honored convention in our society. Over the past two decades, family structure has changed significantly in the United States with an increase in single-parent families and women employed outside the home (Note 3). Both of these factors can profoundly influence family communalism (i.e. eating meals together). A popular belief is that the family meal is becoming less important to Americans. We asked students their perception of the importance of family meals. The vast majority of respondents felt it was important to eat meals with the family, on a regular basis. They saw family meals as a time for communication and as a way to “touch base” with one another.

Many students noted it was the most likely time for families to be together. Among those who felt that the family meal was important, the most common reasons cited were family conflict of indifference. Rural students were more likely to cite family conflict than were urban or suburban students. Urban students tended to be more indifferent to family meals than rural or suburban youth. Although students valued the concept or family communalism, many stated that their work schedules, sports, and other extracurricular activities (or their parents’ schedules) often prevented family meals. Schedule differences were more problematic for urban and suburban respondents than for rural teens.

DISCUSSION

Research has shown that frequently there is a discrepancy between teenagers’ health knowledge and their behavior (18,29: Notes 4,5). Although teenagers may be generally well informed about good health practices, this knowledge is often not translated into their daily

lives. In the present study, although students acknowledged that they had poor dietary habits, did not eat the “right foods”, ate too many “fast-foods” and foods of poor nutritional quality, and were able to articulate how to improve their diets, they felt there were too many barriers to change – specifically, lack of time, lack of self-discipline, and lack of a sense of urgency. In our study, high school students throughout the state reported unhealthy eating patterns, and their food preferences were high in fat, salt and sugar. If these food patterns (diets high in salt and fat; and low in fruits, vegetables, and fiber) become established, they could place young people at a higher risk for certain chronic illnesses, especially for cardiovascular diseases and certain forms of cancer (20-22).

There is a need for intervention programs for youth that focus on behavior change rather than acquisition of knowledge. To be effective, programs must take into account the developmental needs and processes of adolescence and the adolescent lifestyle. Perry and Jessor (23) have developed a conceptual framework for health promotion interventions. The model is based, in part, upon analyses of the foci of interventions at three levels: environment, personality, and behavior. Efforts to change behavior can be focused at any one or at all of those levels. Nutrition educators may find this model helpful in conceptualizing and designing nutrition education and intervention programs for adolescents.

At the level of environment, nutrition interventions for high school students might focus on making changes within the school lunch program. In addition, vending machines and school stores could offer more nutritious and healthier snack foods. Other strategies might involve parent nutrition education programs offered through the school or community, and mass media campaigns via the radio, TV, billboards, and newspapers.

At the level of behavior, adolescents need to learn the skills necessary to make dietary changes. They need to learn to make appropriate food choices, to read food labels, to shop, to evaluate their own diets, and to evaluate dietary and nutrition information. Furthermore, training in areas such as decision making, assertiveness, and resistance to peer pressure need to be integrated into programs aimed at producing dietary changes. It is also imperative that teens have the opportunity to practice newly learned skills and have these behaviors reinforced. It is logical that this skill training be incorporated into nutrition education curricula within the schools. This represents a change in direction since the present focus of many curricular materials is on

teacher-dominated lessons that do not provide active participation of students and that are primarily designed for knowledge acquisition (24). To implement these ideas, teachers need to have better nutrition training, use experiential learning activities, and apply principles of dietary change. Instructional strategies to enhance learning and change behavior could also involve peer teaching, team projects, cooperative learning situations, and out-of-classroom experiences.

Finally, at the level of personality, nutrition interventions might focus on the individual factors that may affect nutrition and health behavior. This may include increasing personal valuation of health and nutrition, and developing a more positive body image. Strengthening internal locus of control about health and nutrition, that is, improving the individual's sense of mastery over diet and the ability to effect change could, in turn, promote better food and health behavior, in general, among adolescents.

Health promotion among adolescents is particularly difficult and challenging. However, by understanding adolescents' perceptions towards food and nutrition along with factors that influence adolescent food behavior, we can begin to design more effective nutrition intervention models.

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NOTES

1. Hedin, D., and H. Wolfe. The Minnesota Youth Poll. *Center Quarterly* 1-18, Sprint. 1979
2. At the content analysis and coding phases of the project, the distinctions between qualitative and quantitative methods diminish. Through coding, our qualitative data are, in fact, quantified and can be subjected to any number of analytic procedures although socio-demographic descriptors would be limited to urban, suburban, inner city, and rural since such information on individual group members could not be linked to overall group responses. While arrangements with participating schools do not permit the extension of the youth poll beyond its current time demands, it would be fruitful for researchers to triangulate this methodology (i.e. supplement it with individual questionnaires which would provide a multi-method approach to studying the same phenomena, and permit construct validation of

both the quantitative and qualitative data as well as sample estimation and inference for the individual data (16,17).

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