Healthy Eating: What Does It Mean to Adolescents?

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ABSTRACT

Objective: The objective of this study was to investigate the meanings of “healthy” and “unhealthy” eating and the importance of healthy eating among adolescents.

Design: Twenty-five structured focus groups were conducted.

Subjects: These focus groups consisted of 203 adolescent girls and boys enrolled in three senior high schools and one junior high school.

Variables Measured: The variables measured were adolescents’ self-report of perceptions of healthy and unhealthy eating and their descriptions of the importance of healthy eating to adolescents.

Analysis: Data analysis was done by general content coding and specific content coding.

Results: Adolescents have a significant amount of knowledge regarding healthy foods and believe that healthy eating involves moderation, balance, and variety. Despite this knowledge, they find it difficult to follow healthy eating recommendations and frequently consume foods that they perceive as unhealthy. Barriers to healthy eating include a lack of time, limited availability of healthy foods in schools, and a general lack of concern regarding following healthy eating recommendations.

Implications: These findings suggest that healthy eating messages based on the Dietary Guidelines for Americans are reaching adolescents, but interventions are needed that assist adolescents with the translation of this knowledge into healthy behaviors. Interventions should help make healthy eating easy for youth to apply and explain the consequences of unhealthy eating in terms that they value, stressing meaningful short-term benefits.

KEY WORDS: adolescent nutrition, healthy eating, nutrition knowledge in adolescence

INTRODUCTION

Eating behaviors are central to an adolescent’s physical development, health, and identity and are determined by a wide range of factors, including knowledge, attitudes, sociodemographic characteristics, and behavioral, familial, and lifestyle factors. Adolescence is also a time of growth and development, with total nutrient needs higher than at any other period during the life cycle. Thus, adequate intake of nutrients and energy is critical to healthy development. In addition, behavioral patterns developed in adolescence are likely to influence long-term behaviors, given the development of identity and increased autonomy and independence during this time.

Research shows that adolescents’ eating practices and nutritional intake may have long-term impacts on health. In an effort to help adolescents optimize health and decrease the risk for chronic diseases such as obesity, heart disease, and diabetes, nutrition and other health professionals are encouraging incorporation of healthy eating practices into the lifestyles of youth. Nutrition professionals have set guidelines and definitions for the terms healthy and unhealthy eating, but this does not necessarily mean that adolescents represent or perceive healthy eating in the same way.

Current recommendations for healthy eating are in accordance with the Healthy People 2010 Objectives for Improving Health and are summarized in the Dietary Guidelines for Americans. Among other things, these guidelines encourage people to choose a diet low in saturated fat and cholesterol; choose a variety of fruits, vegetables, and grains each day, with an emphasis on whole grains; and be physically active each day. Despite the widespread dissemination of these guidelines and the importance of healthy eating in adolescence, nutritional problems are prevalent among adolescents. Many youth engage in unhealthy dieting practices and have erratic eating patterns that include high intakes of fast foods and other foods high in fat and sugar, as well as low intakes of fruits, vegetables, and cal-
cium-rich foods.9–11 The message of healthy eating has not been put into practice by many adolescents. Studies to date show a lack of concern for healthy eating on the part of young people and little normative support for healthy eating.10,12 Although health care professionals, educators, parents, and others encourage teens to “eat healthily,” it is essential to understand how adolescents perceive healthy eating recommendations and the associated health implications. This understanding can facilitate the development of effective interventions to create normative support for healthy eating among adolescents and assist them in adopting the recommendations.

The aim of this study was to examine the perceptions of adolescents regarding “healthy eating,” “healthy” and “unhealthy” foods and the importance of healthy eating during adolescence. Focus groups were employed as a strategy for data collection. The focus group method was chosen to give adolescents the opportunity to discuss their opinions, understandings, and needs in more detail than typically allowed in traditional surveys. Focus groups facilitate data collection that enables programs and messages to be subsequently customized to meet the specific needs of the target group and can provide a rich understanding of a target group’s personal motivations, environments, and needs.13,14

METHODS

Study population. Twenty-five focus groups were conducted with 138 adolescent girls and 65 adolescent boys in grades 7 to 12 from three senior high schools and one junior high school in the St. Paul, Minnesota, public school district. The schools were selected because they serve an ethnically and socioeconomically diverse population. Approximately half of the focus group participants were Caucasian and one-third were African American; the remaining participants were Asian American, Hispanic, or Native American. Five focus groups were conducted with junior high students (n = 59) and 20 with high school students (n = 144). Sixteen groups consisted of girls (n = 138) and nine of boys (n = 65). The mean group size was eight students.

Description of focus groups. Focus groups were held during the school day in classrooms, typically during health or home economics classes. The groups lasted 45 to 60 minutes, were audiotaped, and were facilitated by moderators and comoderators from the research team who completed a training course in focus group methodology and moderating.14 The moderators facilitated the group discussion while the comoderators operated the tape recorder, took detailed notes and, at the end of the session, verbally summarized the main points made by the group for each question.

Multiple moderators were used for the 25 groups with consistency between moderators facilitated by group training, use of a structured question guide, and periodic observation of all moderators by one of the authors (DN-S).

A consent form explaining the study was sent to the parent or guardian of each student prior to the day of the focus group. Parents were requested to sign the form and return it with the student only if they did not wish the student to participate in the focus groups. Each participant also signed an assent form immediately preceding the focus group indicating willingness to participate in the group. In signing the assent form, students also agreed to follow focus group ground rules (e.g., information discussed in the group is to remain in the group, participants should show respect for each other). Alternative activities were planned for students not participating in the study; however, all students chose to participate.

Immediately following each focus group, the moderators and comoderators discussed and recorded their impressions of the group, including content, atmosphere, nonverbal communication, and group dynamics. Only first names were used in the focus groups and subsequent data processing to maintain confidentiality.

In each focus group, a series of questions were asked pertaining to healthy eating, exercising, dieting, and binge eating behaviors. Questions of interest for this study included the following: “We hear a lot about ‘healthy eating.’ What does the term ‘healthy eating’ mean to you?” “We often hear the term ‘junk foods’ and/or ‘fattening foods.’ What do these terms mean to you?” “What foods do you see as ‘healthy foods’? ‘Unhealthy foods?’ How important is healthy eating to you?” These questions were asked near the beginning of the focus groups, after a warm-up question about participants’ favorite foods, and comprised approximately 10 to 15 minutes of the focus group session. The moderators probed for additional information based on the responses from each group. For example, if students gave only cursory answers regarding foods considered in each group, a moderator asked the group to think of the foods typically found in their home or school and how they would describe them in terms of healthy or unhealthy. This protocol was approved by the Institutional Review Board of the University of Minnesota.

Data analysis and interpretation. Focus group discussions were transcribed verbatim from audiotape and were then coded and analyzed using a content analysis two-step method: general content coding and specific content coding.15

Coding phase 1: general content coding. The aim of the first coding phase was to provide a broad framework for analysis, organize responses by content area, and exclude extraneous dialogue not relevant to the research questions. Transcripts were read carefully for overall content and identification of major categories. A master coding template was developed around the major categories that emerged from the groups, including perceptions and descriptions of healthy and unhealthy eating and the importance of healthy eating to adolescents. Based on this master template, a separate coding template was created for each focus group with statements and phrases from transcripts placed directly into the coding template according to the established content areas. Comments or phrases that fit in more than one category were placed under each appropriate category on the template. This phase of coding was done by two graduate students who assisted in moderating the focus groups. Revisions in the
The aim of the specific content coding phase, done by the first author, was to identify major themes regarding adolescents’ definitions and perceptions of healthy and unhealthy eating. Transcripts and coding templates for each of the 25 focus groups were read and categories of interest were highlighted to create a synopsis of the group. Each synopsis was reviewed carefully for relevant themes. Recurring themes in a particular group were coded only once per group as the objective was to gather information regarding the opinions of each group, not the number of times a particular theme was mentioned. An overall grid was then established that allowed for examination of the codes and themes across and within groups and comparisons across age and gender. Of interest was the number of groups in which the theme was expressed, with particular attention given to themes communicated by the majority of groups. The goal was to gain a sense of overarching concepts cross-cutting gender and age groups.

RESULTS

The results reflect a compilation of information gathered from the focus groups for the questions of interest to this study. Two overarching themes emerged: perceptions of healthy and unhealthy foods and eating behaviors and the importance of healthy eating. Under the broad heading of perceptions of foods and behaviors as healthy and unhealthy, four subthemes emerged: food characteristics, situations, eating behaviors, and benefits and barriers. Each of the themes and subthemes that emerged from the analysis of focus group transcripts are described below.

Perceptions of healthy and unhealthy foods and eating behaviors. Participants were asked to explain what “healthy eating,” “healthy foods,” and “unhealthy foods” meant to them. Healthy eating and healthy and unhealthy foods were discussed in terms of characteristics of foods, situations, behaviors, and perceived benefits of and barriers to healthy eating.

Food characteristics. Healthy eating was most frequently described in terms of foods that were central to healthy eating using either summary statements, such as “the right types of food” and “just the natural stuff,” or by naming specific foods or food groups, such as “fruit,” “like salads and yogurts and shakes,” and “stir-fry.” Fruits and vegetables were the most commonly mentioned healthy foods. Other foods considered healthy were salad; carbohydrate-rich foods (especially rice, pasta, and bread); lean meats (particularly baked chicken and turkey); and tofu. Also mentioned were natural foods; specific vegetables, such as home-grown vegetables, greens, corn, and celery; juice; peanut butter; fluids; and vitamins. Almost no one included milk in their description of healthy foods, and low-fat and fat-free foods were mentioned infrequently. Some descriptions of healthy foods from the participants included “not lots of heavy sauce . . . [but] lots of vegetables and salad,” “bread, meat, but not a whole lot of meat, healthy foods,” and “some healthy foods are like carbohydrates, vegetables, fruits.”

Students offered numerous foods that they considered to be unhealthy, many more than they considered healthy. Many named chips, candy, fast food, and soda pop as unhealthy foods. Also considered unhealthy were pizza, sugary foods, butter/oils, junk food, hamburgers, and McDonald’s™ food. These kinds of foods were described more globally as “. . . like artificially made, with like grease and stuff. Stuff like that.” Adolescents also determined snack foods such as Twinkies™ and Little Debbie’s™ and Hostess™ cakes unhealthy, and as one student stated, “if it comes in the little red plastic bags that you get for a quarter, it is probably junk food.” In addition, baked goods such as pies, cakes, cookies, and browies; chocolate; ice cream; meats, specifically steak, beef, ribs, chicken with skin, and pork; high-cholesterol and high-calorie foods; peanut butter; and monosodium glutamate were considered unhealthy. Participants were quick to point out, however, that unhealthy foods are much more readily available than healthy foods and generally look much more appealing.

Situations. Some participants described healthy foods as having a place in some situations, such as at home or a relative’s house (“when I’m at home my dad cooks greens”), but not in others (“at fast-food places”). Healthy eating and foods were often mentioned in connection with family members, especially parents or older relatives, and less with friends and other social situations.

As with healthy foods, some unhealthy foods were described as situational, such as place of purchase. One older boy described this as “yeah, like at a Saints [baseball] game, anything like hotdogs.” Others described unhealthy foods as “anything out of a vending machine” and “all fast-food places.”

Participants also broadly discussed unhealthy foods in terms of what they perceive that they or others think they should be eating or how healthy eating may be important to others, such as their family and friends, but not to them. One student explained, “Unhealthy foods are stuff that your parents don’t like you eating.” Some students described apathy toward eating unhealthy foods, inferring that they were foods they did not think they should eat but ate anyway. A senior high girl described unhealthy foods as “foods that I eat all the time and don’t care about . . . I don’t care that I’m eating them. I mean . . . they’re just good. You know, I’m concerned about my weight and all but . . . .” Another commented, “Stuff that y’know taste [sic] excellent that you want all the time, but it’s like you know you should stay away from it, but then again, I’m young, so who cares?”

Eating behaviors. Healthy eating was also described in terms of dietary practices that emphasized some behaviors and discouraged others, such as “eating vegetables without butter because butter makes them fattening,” “watching fat and calories,” “limiting caffeine,” and “not eating a bunch of junk.” Students commonly emphasized “eating less junk food” and “not eating greasy or fattening foods” as a behav-
ior central to healthy eating. Additional behaviors discussed included taking vitamins, eating breakfast, dieting, and eating less fast food. Whereas many discussed specific behaviors to describe healthy eating, some participants used more global terms such as “eating right” and “eating nutritious foods.” Of interest, rarely was following the Food Guide Pyramid included in a description of healthy eating.

The idea of balance in relation to eating was discussed in terms of eating behaviors. To some, healthy eating was summed up as a balanced, varied diet and eating foods in moderation. Students described balance and moderation as “eating three meals a day,” “eating food, but just the right amount,” “like eating when hungry and not when you’re not hungry,” and “eating from all of the food groups.” Other descriptions of moderation and balance included “Like having a balanced diet. You know, not eating too much of one thing and not enough of another” and “Three balanced meals a day or eating modest. Eating three times a day, not necessarily junk food.” Some respondents discussed the idea of balancing unhealthy foods with healthy foods. This idea of balancing foods allowed them to include all types of foods, while still maintaining what they considered a healthy eating pattern. Students described balancing unhealthy foods in these terms: “I mean, they’re not terrible if you eat enough good stuff with them” and “It’s not as bad to eat meat if you mix it with other foods.”

Benefits and barriers. Some participants described healthy eating in terms of how they could benefit from eating healthily. Specific benefits mentioned were healthy growth and energy as in “stuff that will give you energy for the rest of the day.” These benefits were also discussed in more all-encompassing terms such as “it’s good for you” and “something that does something good for you.”

Only a few described long-term benefits to healthy eating and expressed attempts to limit certain foods owing to their potential effects on health. Students discussed this as “. . . like if it’s going to give you a heart attack if you eat a lot of that” and “not eating . . . something that would clog your arteries and make you at high risk . . . .”

To a small extent, healthy eating was discussed in negative terms, referring to taste, appearance, acceptability, and practical applications. Healthy eating in terms of taste was described as “eating a lot of low-fat stuff with no taste” and “not really tasting that good to begin with” and in terms of appearance as “. . .cause they got some nasty old looking stuff . . . and that was low fat!” To some participants, healthy eating was also seen as “uncool” or undesirable and a behavior susceptible to peer pressure. Certain foods were considered healthy but were not foods that would be common choices in social situations with friends. This dilemma is illustrated by an older adolescent girl’s comments: “It’s just like when all your friends are eating chips, Doritos®M, and pop, you don’t want to bust out with like the carrots and celery . . .”

Healthy eating was also seen as time consuming (“I always picture it as taking like hours to cook”) and characterized by limited availability at restaurants, especially fast-food restaurants (“if you want fast food . . . you can’t get healthy food”). They indicated that foods they considered unhealthy, such as fast food and candy, are commonly eaten because they are readily available and require little to no preparation. Some students found healthy eating too difficult to incorporate into their lives. One student remarked, “I just can’t do it.”

Importance of healthy eating. When asked to discuss the importance of healthy eating to them, respondents varied in their opinions. The majority of students indicated that healthy eating was not important to them, summarized as “I don’t really care what I eat right now.” Others reported that healthy eating was important to them. Sometimes, healthy eating became important as the result of some nutrition and health education, “after seeing . . . the dying of arteries . . . I don’t like that at all,” as one student stated.

In general, healthy eating was not important to teens as a group, but a few students indicated that it was important to teens. Students made statements regarding the relative unimportance of healthy eating such as “Not at our age! At this age, you just eat and eat whatever . . . it doesn’t matter,” indicating that healthy eating was not to be a priority for adolescents. A few students did concede that healthy eating might be beneficial to long-term health (“it’s sorta [sic] important”) but said that it was difficult to do.

Balance was again a key component of making healthy eating important. Students indicated that balance is an important message when encouraging healthy eating. Adolescents thought that a message of balance would reinforce the recommendations to follow healthy eating guidelines but not mean that “junk foods” or favorite foods had to be completely eliminated from the diet. In addition, most students indicated that they had received enough information about healthy eating and did not necessarily need more information about recommendations to follow them.

Differences among age and gender groups. In general, older students articulated their ideas in more detail than younger students, but no striking differences in age groups were noted. Although there were no strong differences in perceptions of healthy and unhealthy foods and eating habits between girls and boys, adolescent boys tended to focus more on energy and appetite when describing healthy eating, whereas girls tended to focus more on appearance as a motivator for healthy eating. In boys, healthy eating was considered an important component in sports, expressed by some senior high boys as “that’s really important for sports” and “yeah, it’s important before a game.” Healthy eating was also linked to energy, as in “things that make your body healthy or give your body energy.” In girls, appearance concerns were more evident. Girls discussed healthy eating in regard to weight loss and appearance for special events such as a prom or other school social events. Sports or other activities in which they were involved affected their perceptions of healthy eating, expressed by a senior high girl as follows: “because I’m a dancer, you know I have to stay thin and I don’t really eat a lot of fattening foods. Now if I feel like after eating healthy for a while now . . . I can eat chips or some-
thing now.” Another senior high girl remarked, “you should stay away from [unhealthy food] . . sometimes you know if it gets out of hand like prom is coming up, so you start doing crunches and stuff.”

DISCUSSION

The concept of “healthy eating” was fairly consistent across adolescents and was generally described in terms of specific foods, behaviors that lead to eating these types of foods, the benefits of eating in this manner, and “balanced” eating. Healthy eating was occasionally discussed with a negative connotation. Previous work in this area has been done primarily with adults, with only a few studies focusing on or including adolescents. Prior research has reported “healthy eating” to be defined in a similar manner by adults in qualitative and quantitative studies. In these studies, “healthy eating” was predominantly defined as eating more fruits, vegetables, and pasta and grains and achieving a balanced diet, less fat, more fruit and vegetables, balance and variety, and high fiber. It was also described in terms of beneficial effects, with “helps maintain weight” and “helps clear skin” described as characteristics of healthy foods. Behaviors such as “watching what one eats,” limiting intake of high-fat, high-calorie foods, and avoiding processed foods were discussed by adults asked to describe concepts of healthy eating. The adolescents in this study mentioned similar behaviors associated with healthy eating, namely, limiting “junk” or high-fat food and “watching fat and calories.”

Descriptions of unhealthy foods in this study are also reflected in other studies. In a study exploring interpretations of healthy and unhealthy eating in an adult British population, Povey et al. found that adults most frequently described unhealthy foods as chips (French fries), burgers, sausages, and sweet foods, including cake, sweets, and chocolate. Chap- man and MacLean, in their qualitative study with adolescent females, reported characteristics associated with junk food, such as high in sugar, fat, salt, and calories; containing preservatives; and fattening. They also reported that adolescents associate eating unhealthy foods predominantly with their peers, whereas healthy foods are eaten in the home with family, as was seen in the situational determinants of healthy eating shown in this study.

In addition to the study done with female adolescents by Chapman and MacLean, a large pan-European Union (EU) study and a study using the Spanish subset of the pan-EU study sample included subjects 15 years and older. Adults and adolescents alike have a general understanding of healthy eating recommendations as set forth by nutrition and health professionals.

However, despite this understanding, adolescents do not consistently follow the recommendations. This inconsistency suggests that although the understanding of healthy eating guidelines and recommendations may be fairly strong, there must be other constraints on adolescent action to engage in healthy eating rather than general lack of knowledge. These constraints may include peer norms that do not support healthy eating. The adolescents in this study commonly cited lack of time and peer-related social pressure as barriers to healthy eating.

This peer norm of low support for healthy eating has been documented to a limited extent in the literature. In a California study, Evans et al. found low support for healthy eating by adolescents to be relatively uniform across age groups and varied slightly among ethnic groups, with Hispanic and Asian teenagers in California more likely to report concern regarding healthy eating than their Caucasian counterparts. In fact, the study revealed that the major health norm among 85% of surveyed Californian teenagers was weight control among girls of their own age. Only 8.5% indicated a lot of concern about eating healthily. In their study, Evans and her group compared California data with national data from the National Health Interview Survey Teenage Attitudes and Practices Survey regarding health concerns, which revealed that weight concerns among teenagers ranked second in priority, after avoiding drunk driving, and the importance of eating healthily ranked last.

Similarly, a survey in a Tasmanian high school showed that students’ perception of a food being healthy had little influence on consumption of the food, except for meats and some snacks. In addition, a Danish study of nutrition attitudes of adolescents indicated that peer influence and the desirability of unhealthy foods contribute to adolescents’ food choices and limit their conformity to healthy eating recommendations.

In spite of most adolescents having adequate knowledge of healthy eating recommendations, findings from previous research and the current study show youth to have little concern for healthy eating during adolescence. Given this low level of concern and the strong influence of peers on eating practices, future messages urging adolescents to adopt healthy eating recommendations need to include components of peer acceptance and promotion and a method of promoting the immediate benefits of healthy eating. Doing so can serve to increase the importance of healthy eating in the eyes and minds of adolescents. Nutrition educators may be more successful in their pursuit of imparting recommendations for healthy eating to adolescents by including adolescents into the preparation and delivery of healthy eating messages and consulting with adolescents on effective methods of initiating norm changes. Peer education may be an effective strategy in establishing new peer norms and disseminating information in a manner meaningful to teenagers. Targeting perceived barriers to healthy eating such as the lack of availability and affordable, appealing healthy foods in school and the time involved in preparation of healthy foods may serve to increase teens’ willingness and ability to incorporate recommendations into their lifestyles.

A strength of this study was the rich, in-depth information gathered from youth using focus group methodology. If messages and interventions about healthy eating are to be effective with adolescents, they must be targeted specifically
to youth and address the points they express as critical. Other strengths include the ethnically diverse population encompassed in the groups and the age, gender, and grade diversity among participants. A potential limitation of this study was that the characteristics of the classrooms agreeing to participate in this research, health and home economics, did result in a sample with a higher percentage of girls than boys and a larger number of older students than younger. Although health and home economics teachers were the most supportive of participating in this research and felt it beneficial to their curriculum, fewer junior high classes were taught and available than senior high classes in these subject areas, resulting in an uneven distribution of age and gender among subjects. Although this information is not representative of all adolescents, the ideas presented here held together across and within the majority of the 25 groups of varying ages, ethnic groups, and gender. Data collection and analysis procedures were carefully planned and executed to maintain the validity of findings. However, it is important to remember that although focus groups provide in-depth, rich data, they are difficult to analyze and must be taken in context. The groups varied in comments; whereas some had numerous comments and thoughtful insights, others had less discussion and more superficial comments. Since students in the same classroom had likely interacted with each other prior to the focus groups and would continue to do so throughout the school year, the group process of discussion and interaction may have been influenced by peer relationships and each student’s ability to express individual views in the context of a peer group. This context of peer interaction could result in some individuals not expressing their personal opinions as clearly or forcefully as others. Therefore, the opinions set forth by these adolescents cannot be considered representative of all adolescents and must be taken in the context in which they were discussed.

IMPLICATIONS FOR RESEARCH AND PRACTICE

These findings are salient for nutrition educators and other health professionals working with adolescents. To more fully reach youth in their own language, based on their interpretations of dietary recommendations, messages regarding healthy eating need to be meaningful in the short term. It is also critical to involve youth in planning nutrition intervention programs to more fully address their needs and create more effective interventions. Understanding the perception and relative importance of healthy eating to adolescents can aid in developing interventions that make healthy eating easier, more appealing, perceived as more beneficial in the short term, and more supported as a peer norm. This study also illustrates the importance of knowing how teens perceive healthy eating so that Healthy People 2010 or other large-scale public health promotion objectives can be more successfully reached by establishing appropriate interventions tailored to the needs of adolescents.

REFERENCES