

CALIFORNIA ADOLESCENT NUTRITION & FITNESS CULTURAL NEEDS ASSESSMENT GUIDE

NOVEMBER 2002

TABLE OF CONTENTS

I.	Introduction.....	1
II.	Designing a Culturally-Relevant Needs Assessment for Ethnic Youth.....	4
	Information Areas for Needs Assessment.....	4
	Data Collection in Youth Nutrition and Physical Activity Needs Assessments.....	7
	Basic Steps for Developing an Ethnic-Specific Needs Assessment.....	11
III.	Tailoring Needs Assessment Surveys for Specific Ethnic Groups.....	13
	The Asian American Example.....	14
	The African American Example.....	17
	The American Indian Example	18
	The Latino Example.....	18
IV.	Using Needs Assessment Data to Develop Interventions.....	19
V.	Appendices.....	20
	(A) The Role of Culture in Nutrition and Physical Activity: Theory and Research...20	20
	(B) Master Questionnaire.....	23
	(C) Sample Introductory Script.....	40
	(D) Sample Interview.....	41
	(E) Sample Focus Group.....	42
	(F) Sample Community Mapping.....	45
	(G) Post-Program Follow-up Questions.....	46
	(H) Tables.....	48
	(1) Categories of Needs Assessment Information.....	49
	(2) Nutrition and Physical Activity-Related Diseases Prevalent in U.S. Ethnic Populations.....	51
	(3) Relative At-Risk Levels of Nutrition and Physical Activity-Related Diseases for U.S. Ethnic Groups.....	53
	(4) Cultural Patterns of Low-Income U.S. Ethnic Groups	54
	(5) Summary of Nutrition and Physical Activity Data from CANFit Grantees.....	56
VI.	References.....	62

SECTION I: INTRODUCTION

In public health, the concept of “excess death” refers to a sub-population’s death statistic being greater than the average for the total population. Each of the four major U.S. ethnic groups – African American, Latino, Asian/Pacific Islander and American Indian – suffers excess death from chronic diseases such as diabetes, hypertension and obesity. It is estimated that more than 75% of excess death is directly attributable to four “lifestyle” factors: poor nutrition, inadequate physical activity, excessive alcohol intake, and tobacco use.

Two of those factors in particular, poor nutrition and a lack of physical activity, also contribute to chronic disease. However, the process through which disease occurs does not happen overnight. Rather, it begins in childhood, a time when a complex interaction of social, educational, economic, and cultural forces, as well as manipulative marketing campaigns, leads to the development of lifelong eating and fitness habits. This also means that the effects of poor nutrition and a lack of physical activity can be reversed if addressed early. Moreover, youth can experience beneficial improvements to their cardiovascular and muscular systems if they engage in consistent, vigorous activity from an early age.

Unfortunately, a large number of American youth have unhealthy diets and physical activity levels. According to a needs assessment conducted by researchers at the Universities of California at Berkeley and San Francisco, adolescents:

- Consume diets high in fat, sugar, cholesterol, sodium, and calories, and low in essential nutrients;
- Do not consume enough fruits and vegetables; and
- Engage in frequent snacking, meal skipping, and eating away from home.

Reports by the U.S. Surgeon General also note that:

- Only 50% of American youth ages 12-20 does vigorous physical activity;
- Twenty-five percent of youth have no physical activity;
- 43% of adolescents watch more than 2 hours of television each day; and
- Physical activity decreases as adolescents, especially girls, get older.

These trends are even higher among multi-ethnic youth from low-income backgrounds. Because the forces that impact nutrition and physical activity habits are so complex, efforts to improve the nutrition and physical activity of low-income, multi-ethnic youth require an understanding of the intricate links between poverty, culture, ethnicity, and health-related behaviors.

Take as an example the physical activity habits of some multi-ethnic adolescent girls. Many young women of color (primarily non-Asians of color) may have a genetic predisposition toward excess weight gain and obesity. Some Latino and African American female adolescents complain that their hair and make-up get messed up when they are physically active. Girls from several ethnic groups report that they do not like to sweat during physical activities. Moreover, some Latino parents, particularly fathers, disapprove of their daughters engaging in physical activities, including running, playing sports, dancing, and even walking. Similarly, some Asian American parents emphasize academic achievement for their children and downplay the importance of physical activity. These examples illustrate that there are clear cultural explanations that partially account for the disparities facing multi-ethnic youth.

The mission of the California Adolescent Nutrition and Fitness Program (CANFit) is to engage communities and build their capacity to improve the nutrition and physical activity status of California's low-income African American, Latino American, Asian/Pacific Islander and American Indian youth 10-14 years old. Since 1993 CANFit has been awarding planning and intervention grants to a variety of organizations sponsoring adolescent education projects that fulfill CANFit's mission. CANFit has learned valuable lessons from years of successfully influencing the nutrition choices and physical activity habits of multi-ethnic youth. The lessons learned are contained in this easy-to-follow guide.

This CANFit Needs Assessment Guide outlines a process for uncovering the role of culture in the nutrition and physical activity habits of multi-ethnic youth so that the information may be used to improve their habits in a culturally appropriate way. Specifically, it describes how to:

1. Devise methods for obtaining information about cultural and ethnic beliefs and behaviors related to food, health, and physical activity, especially among multi-ethnic youth from low-income backgrounds. This information includes adolescents' thoughts and feelings about traditional dishes, family, and ethnic customs associated with eating; the cultural meanings they associate with body image; and how they view themselves in relation to ethnic role models and/or "pop culture" figures from either the dominant white American society or ethnic groups different from their own.
2. Set guidelines for making a comprehensive and meaningful needs assessment that realistically takes into account levels of literacy and cognitive development of the youth in each target group. For example, some multi-ethnic youth may not relate to paper and pencil questionnaires because they may view written or even verbal responses to some questions as a violation.
3. Develop strategies for promoting positive changes in nutrition and physical activity that foster intrinsic motivation for personal health-related change, improved self-esteem, and self-empowerment.

The Importance of Culture

In Appendix 1, we expand on the theoretical and research information on culture and human behavior. For now, we provide a general explanation of our focus on culture. *Culture* refers to the set of beliefs, values, habits, customs, and perceptions of the world that are shared by the members of a social group. A *social group* can include individuals from the same or different ethnic groups who are organized around age, language, socioeconomic (SES) status, or ethnic affiliation.

Culture must be taken into account in theories to predict and change health behavior, including diet and exercise habits. What people eat, what foods they choose, how these foods are prepared, what tastes they prefer, when the foods are eaten are as varied as life itself. What people consider exercise and when they engage in such activities also have an enormous range of possibilities. In anthropology, one of the defining virtues of a social group is its pattern of eating and physical activity. For example, the nomads of Somalia historically lived inland, where there was no fish. In the famine of the 1970s, they were relocated to the coast and taught how to fish. Fish then became a major part of their diet. By adapting their traditional culture to include fishing, their values were maintained, but their food and physical activity choices changed. For multi-ethnic youth the situation is similar. In the food marketplace of America, they are migrants with traditions influencing their

food and physical activity choices. The key to improving health, well-being, and quality of life is understanding how those traditions impact current nutrition and physical activity behaviors.

The CANFit Needs Assessment

Knowing what one would like to change is not the same as knowing how to change it. In addition, numerous research studies have demonstrated that strategies intended to change behavior are more likely to be effective when they are tailored to the specific needs and concerns of a group and when they address the physical and social environment in which the behavior takes place. Therefore, in order to change nutrition and physical activity behavior, it is necessary to consider the complex relationships between socioeconomic status, culture, and lifestyle behaviors.

This Guide for creating a culturally and ethnically informed needs assessment can help project administrators differentiate between unhealthy eating and physical activity behaviors associated with adolescents' personal values and unhealthy behaviors stemming from a lack of adequate health-related knowledge. This Guide is also helpful in planning adolescent nutrition and physical activity interventions as it offers conceptual models and concrete steps for addressing the unique cultural characteristics of different ethnic groups.

Needs assessments can enhance understanding of the maze of attitudes, beliefs, and motivations underlying health-related behaviors in youth from different ethnic groups. Sometimes, attitudes and motivations vary from individual to individual, while others may be related to gender, age, or developmental stage. For instance, the desire and tendency to eat more food during growth spurts are due to biological development. Project administrators must be able to concretely describe the attitudes and motivating factors of the young people whom they are serving. A needs assessment based on this Guide will enable project administrators to design and implement interventions that have long-term effects. Further, understanding cultural and ethnic patterns and ecological (environmental) influences on adolescent health-related behaviors can help:

- Increase recruitment and improve retention of youth participants;
- Formulate program strategies that make learning potentially interesting, stimulating, meaningful, and rewarding to youth;
- Communicate nutrition and physical activity information to youth via ethnically-sensitive and culturally-meaningful messages;
- Create questionnaires for surveys, focus groups, and informal interviews with youth that are likely to engage adolescents;
- Set realistic goals and objectives that are challenging, yet feasible to accomplish;
- Develop cost-effective and efficient methods for implementing healthy nutrition and physical activity lifestyle changes, such as increased knowledge, more favorable attitudes, and improved health-related behavior;
- Understand gender-specific beliefs, attitudes, and motivations of male and female youth in the target ethnic group, as well as the attitudes of their parents toward gender-related issues; and
- Take into account different levels of literacy and cognitive development between ethnic communities and among individuals within the same community or ethnic group.

SECTION II: DESIGNING A CULTURALLY-RELEVANT NEEDS ASSESSMENT FOR MULTI-ETHNIC YOUTH

Information Areas for Needs Assessment

Each CANFit needs assessment should be custom-designed to meet the specific cultural, economic, and regional needs of the target group. At the same time, all needs assessments should produce valid and reliable information about nutrition and physical activity knowledge and behavior trends of youth participants in the following major areas: culture, individual, and environment.

An adolescent nutrition and physical activity needs assessment should capture a person or group's nutrition and physical activity status, their nutrition/physical activity environment, and the relationship between the two. A wide array of factors is embedded in this relationship including food choices and portions, general health history, socioeconomic status (SES), family attitudes, peer influence, and access to food and places for recreation. A needs assessment must go beyond an evaluation of food intake and activity patterns and examine the target group's level of knowledge about nutrition and physical activity, food likes and dislikes, and attitudes and motivating forces that influence food selections. Understanding the influence of family, friends, and peers on adolescent behavior permits insight into the forces that shape youth behavior. Finally, the needs assessment should take into account social, cultural, gender, and developmental issues facing ethnic youth. These broader issues may offer clues as to how to motivate adolescents to change unhealthy habits.

Culture

Acculturation

Acculturation, or the degree to which an individual identifies with a particular (in this case mainstream American) culture, is difficult to assess. However, three factors have been associated with acculturation: the language youth speak with their families, the main language used in their immediate ethnic community, and the ethnic background of most of their social relations. Date of arrival in the United States can also indicate an adolescent's level of acculturation. In general, rural, low-income populations tend to be less acculturated than urban dwellers of the same ethnicity.

Family Influences

Family influences are often closely linked to ethnic values, beliefs, and behaviors and can vary from one ethnic group to another, depending on the norms of family structure in the ethnic group.

Peer Influences

Peer pressure can have varying degrees of influence on adolescents' nutrition and physical activity patterns, depending on the period of adolescent development. It is important to try to separate peer influences that are the result of popular youth culture from those originating from ethnic customs.

Individual

Nutrition Knowledge

Assessing multi-ethnic adolescents' level of nutrition knowledge is a critical first step in knowing how to design intervention programs for them. Youth have a range of knowledge about nutrition. Some are familiar with the groups of the Food Guide Pyramid, while others are virtually ignorant of basic nutrition information. By identifying gaps in nutrition knowledge, project leaders can determine how complex to structure their surveys and, ultimately, their interventions. However, there is no clear relationship between health knowledge and behavior change. Even when youth

know the difference between healthy and unhealthy eating habits, there is no guarantee that they will change their diets.

Eating Patterns

Documenting eating patterns offers an indirect way to assess nutrition status, or the degree to which an individual's physiological needs for nutrients are being met. In adolescents, especially low-income multi-ethnic youth, an examination of eating patterns often reveals inadequacies. An assessment can allow for an understanding of which meals are skipped and the nature of snacking on fast foods and low nutrient foods, both of which account for much of the food consumed by adolescents. An evaluation tailored to get specific information on snack preferences is also an important part of the needs assessment because it can be used to develop healthy and tasty snacks.

Attitudes About Food Choices and Preferences

Attitudes are influenced by ethnic associations, family experiences, social factors such as teen fads and trends, and personal tastes. Very often they are formed with little prior knowledge. It is important to understand the relationship between attitudes and knowledge about nutrition and physical activity.

Physical Activity Behavior

Various types of physical activity promote physical fitness in youth. Although climbing stairs, walking to school, and walking on errands are hardly organized sports, they are still physical activity. A needs assessment should be flexible enough to accurately determine overall physical activity levels, regardless of involvement in formal physical exercise. It should also consider the three different types of exercise: aerobic, flexibility, and strength exercise, which can be assessed by measuring aerobic capacity, muscular strength and endurance, and flexibility.

Physical Activity Knowledge

Assessing adolescents' level of physical activity knowledge is also critical. Similar to the variation in nutrition knowledge, there is a wide range of knowledge about physical fitness among youth. Increasing young people's knowledge about the benefits of physical fitness is necessary, but not sufficient, to changing their physical activity habits. In addition, enhanced knowledge can help them develop discipline and build self-esteem.

Body Image and Self-Esteem

Body image focuses on size, weight, shape, and even color. It is very much tied to influence and power. Youth are very aware of what body type influences members of the opposite sex, peers, and authority figures, and for most adolescents, body image is more a matter of appearance than of health. While the popular culture of the United States carries psychological and social pressures to be thin, particularly in females, body image can vary along both ethnic and gender lines. Several ethnic groups in the United States have images in which being big is healthy. This may explain why if an African American mother has a thin child, she may be told immediately that she is not feeding her child enough and made to feel guilty. Understanding body image and body image conflicts in a particular ethnic group is an important prerequisite to devising ethnically-sensitive approaches to healthy eating. Body image is also directly related to self-esteem. Needs assessments must uncover the habits that lead to conflicts in body image, self esteem, and poor nutrition.

Gender Differences

Girls and boys often have different attitudes and behaviors when it comes to eating, physical activity, and body image. For example, girls may not want to engage in physical activity in the presence of boys. Some families may treat boys and girls differently in terms of curfews and activities in which they are allowed to participate in. Gender may also influence responsibilities such as cooking, shopping, and meal planning. It is important to know what these differences are when designing an intervention to encourage healthy eating and activity.

Literacy/Ability to Understand Surveys

Literacy level can determine how well youth participants understand and can accurately respond to nutrition and physical activity questions. Bilingual needs should also be assessed, and CANFit programs should be tailored to realistically meet the literacy levels of the target population.

Health Awareness

Adolescents' self-perceived notions of health are complex. Health awareness can be based on ethnic and cultural, family, and/or personal values and is influenced by the youth's level of cultural and social integration. Often, the more acculturated that ethnic adolescents are, the more likely they are to equate concepts of healthy with physical activity and balanced nutrition.

Environment

Access to Foods

In needs assessments, it is critical to ascertain what is made readily available within the environment for snacks, lunch, eating out with friends or family, and the availability of both snack and meal items at home. The information should also examine local alternatives that are not well-known, but cost-effective, like produce stores, gardens and food co-operatives. The stores and places where adolescents buy or have access to snacks should be documented. Such findings can be helpful in planning intervention strategies aimed at persuading grocery and convenience stores, restaurants and fast food-outlets, school cafeterias, and snack bars to change their stock and/or menus and offer healthy, alternative, and affordable snacks instead.

Safety of Places in the Community

Multi-ethnic youth in communities served by CANFit grantees can face several barriers to the safety and comfort of their environments, such as noise, pollution, and the presence of gangs. In addition, other problems can influence how safe young people feel in their communities. For example, adolescents who do not have automobile transportation to parks or physical activity facilities may be less inclined to visit these facilities because they do not want to walk or take the bus and face associated threats. People sometimes feel unsafe in unfamiliar areas outside of their immediate neighborhoods. Youth attitudes toward safety and costs can determine where and what they eat, as well as where they avoid going to eat and do physical activities.

Facilities for Physical Activities

As in access to foods, this category of information reveals what places in the community are available for doing physical activities. These can include sports and athletic clubs, the YMCA and YWCA, school facilities, community recreational centers, churches, and public parks and playgrounds.

Data Collection in Youth Nutrition and Physical Activity Needs Assessments

Needs assessments can be conducted using several research tools. Written and oral survey questionnaires, interviews, focus groups, town meetings, observation, 24-hour dietary recalls, and community resource mapping (or community inventories) each have their strengths and drawbacks. These methods are briefly described in a later section, however first, it is important to be aware of a couple of research issues.

Research Issues

Needs assessment surveys must have validity and reliability if they are to generate meaningful data. The *validity* of a health survey refers to how well the questionnaire measures what it is supposed to measure, while *reliability* refers to a survey's capacity to produce consistent results whenever it is administered.

Questionnaires must be appropriate for the age group and specific ethnic community being surveyed. The age distribution of youth participants taking written or oral surveys must also be considered since there is a wide range of cognitive abilities between a 10-year-old and 14-year-old. Where necessary, questions should be reworded to match the level of comprehension of different age groups.

Project leaders' cultural and ethnic background and awareness can influence how participants respond to questionnaires. According to diversity advocates, the most accurate health survey information is obtained from a group when the facilitator is of the same ethnic background and socioeconomic (SES) status of the group. On the other hand, individuals of different ethnic and SES backgrounds can also be effective if they have good cross-cultural communication skills. This means that the leaders must not only understand the subtleties of a group's spoken language or dialect, but also the group's nonverbal communication style. Effective communicators are sensitive to how others respond to their verbal and nonverbal cues and recognize that different cultures may have different rules for communication. For example, the sharp sounding, high-pitched words voiced by some speakers may be interpreted by others from a different ethnic group as insulting or condescending. The ability to be sensitive to these issues largely determines which facilitators are effective in working with groups of ethnic and socioeconomic backgrounds different from their own.

Another data collection issue concerns when the survey is administered. If group trends are to be analyzed, then questions can be given one time to a single group of participants. On the other hand, if the objective is to analyze the behavioral change of individual participants, then youth should be given the survey more than once. Responses about eating and physical activity patterns from the same group of youth may also differ, depending on the time of year they take the survey.

Research Tools

Choosing an Appropriate Research Format

A culturally-sensitive and ethnically-relevant needs assessment method can generate several categories of information. Some questions work better for focus groups and interviews, while others are more suitable for short written questionnaires. For example, factual data on dietary habits such as what is eaten for breakfast can be asked using any of these needs assessment tools. However, other questions dealing with attitudes require more open-ended answers. A question addressing the perceptions of adolescents, such as which foods youth considered appropriate for babies or older people, may be better asked in small group settings.

Project staff should be cautious when asking complex questions, especially those that may be perceived as culturally-sensitive. Questions which are designed to obtain information on deeper beliefs and attitudes associated with food and physical activity should be delicately worded and are best posed during one-on-one interviews or, in some cases, small focus groups in which all the youth belong to the same ethnic group. Also, because these culturally-oriented questions deal with sensitive issues, young people may be hesitant to respond to them unless they feel comfortable with the interviewer and other youth who may be present.

Queries about young peoples' attitudes toward the physical fitness ability or about the perceived body size of adolescents in their own ethnic group are usually inappropriate to ask in ethnically-mixed, and sometimes gender-mixed, settings. Yet these questions can reveal how family and cultural values influence youth attitudes toward food and physical activity. One example is how African American youth sometimes buy into stereotypes of African Americans superiority in dance and athletic ability, even though a high percentage of African American youth are not physically fit. It behooves project planners to be aware of subtle and potentially influential attitudes such as this in choosing an appropriate needs assessment format.

One-On-One and Small Group Interviews (See Appendix D)

The one-on-one interview permits sensitive information to be obtained from individual participants who may shy away from giving candid answers in the presence of their peers. The one-on-one interview may be informal or based on a predetermined set of questions. Similar to the one-on-one interview, the small group interview design targets 3-4 participants.

Questions used in this research design can address a range of topics, including nutrition and physical activity behavior and knowledge. One-to-one or small group interviews are appropriate for asking questions about sensitive issues such as fears that may arise when youth have to think or talk about changing their eating and physical activity behaviors. This type of information should never overshadow findings on eating patterns and physical activity behavior, but it can help to explain the underlying reasons behind their attitudes, perceptions, and values about eating and physical activity.

Focus Groups and Town Hall Meetings (See Appendix E)

Focus groups consist of about 5-10 people from a particular target group, who share a commonality such as ethnicity, gender, age, or neighborhood affiliation. They are useful for assessing a range of opinions, attitudes, and values, as well as concrete knowledge of a larger group of participants. Ideally, the focus group represents a cross-section of the target community. Focus groups can be held with youth, teachers, parents, community leaders, and health professionals serving the community. Facilitators who are of the same ethnicity and socioeconomic status as the group and can relate well to youth also tend to get more information from adolescent focus groups.

The town meeting format involves more participants than focus groups and is useful for free-for-all, brainstorming sessions.

Both focus group or town meeting discussion questions are designed to obtain general information on food frequency, snacking habits, and physical activity patterns. They can also deal with personal likes and dislikes, factors that influence personal patterns (such as taste, cost, cultural importance, availability in the neighborhood), and ethnic/cultural beliefs affecting food and physical activity.

Focus groups have the potential to probe into young people's underlying motivation, or lack of motivation, to change unhealthy eating and physical activity behaviors.

Written Survey Questionnaire (See Appendix B)

Written survey questionnaires can be given to small, medium-sized, and large groups of youth. This tool furnishes a rich source of data on nutrition and physical activity awareness and behavior of adolescents, provided that the youth understand the questions and are willing to answer them honestly. Written surveys are usually best for getting information on specific nutrition and physical activity patterns that have already been identified through focus and small discussion groups.

There are advantages to both short-answer and multiple choice questions. Short-answer questionnaires may be hard for adolescents who have reading difficulties. A more balanced survey questionnaire can have alternating multiple choice questions and open-ended questions requiring short answers. This will allow project coordinators to gather highly specific information through short answer responses, as well as comparative data from multiple-choice questions that can be used for evaluating trends. The basic survey should include questions on food frequency, food preference, nutrition knowledge, physical activity patterns, and physical activity knowledge. In addition, it can also address body image, attitudes about dieting, and peer and family influence. Questions should always be culturally and linguistically appropriate. They should be understandable even to youth who have lower literacy levels, poor comprehension of standard English, or a low vocabulary.

Oral Questionnaire

The same structure used in written questionnaires can be applied to oral surveys. The main difference between the two is that someone must read the questions out loud. When youth are not adept at writing down their own responses, it may be necessary for the person giving the survey to tape-record or write down the participants' answers. Also, by making the survey administration participatory, project coordinators may also find that youth are more interested and enthusiastic about completing the questionnaire.

24-Hour Dietary Recall

The recall provides a qualitative, or descriptive, evaluation, of the adolescent's diet. It takes about 15-20 minutes to complete, but has some limitations. Only trained interviewers should give the dietary recall. If the participants have problems readily remembering what they ate during the previous day, this method is of limited value in producing valid information. Also, even if participants can recall what they ate during the previous 24 hours, that particular day may not be representative of their overall daily diet.

Food Intake and Activity Records

Food intake records contain information about the variety of foods eaten, the number of servings eaten from each major food group, the time elapsing between meals and snacks, and consumption of beverages, fast foods, and quick fix meals. Records allow youth to write down exactly what they eat, when they eat it, and even why they eat it, as well as the types of daily physical activity they engage in. For the most part, fourth and fifth graders can keep reasonably accurate records and can be asked to record additional information, such as their own reasons for eating or engaging in an activity. Even with accurate information, however, food intake records can be difficult to analyze. It is not always possible to match quantities of servings, and participants do not always record

information in a uniform manner. Records also necessitate a preliminary training period so that youth understand what type of information is needed and how to fill out forms.

Community Mapping / Community Resource Inventories (See Appendix F)

Community mapping is a method for collecting information on elements of the physical and social environment in the target community to determine the health-related strengths and weaknesses of the community. The inventory can include grocery stores, restaurants, health care facilities, places for physical activity, schools, churches, role models, presence of law enforcement, criminal elements, available jobs, types of residences, and billboard advertisements, all of which directly or indirectly impact adolescent nutrition and physical activity.

Youth participants can use community mapping to organize their observations of nutrition and physical activity-related places in their neighborhoods. A map can show how these places are spatially related to each other and reveal the proximity of these spaces to homes, schools, churches, and other facilities they frequently use. Information from the community resource inventory can help explain how various aspects of the target community influence the individual choices that youth make about the foods they eat and the amount of physical activity in which they take part. The map helps identify elements of the community that have both an adverse and beneficial impact on adolescents in the target population. For example, in one CANFit grantee project, the participants found that their community had only one small grocery store, in which healthy food choices and fresh produce were priced higher than in larger grocery stores. Since very few families in this community had transportation to large chain grocery stores, most people in the community had limited access to nutritious foods. The CANFit participants used the findings of their community map to petition stores and restaurants in their area for changes.

Observation

Based on the anthropological method of ethnography, observation means that a person takes part in the events that he or she is observing, as when an adolescent peer leader observes and records the lunch menu patterns of his or her schoolmates while eating lunch. Although this method is qualitative rather than quantitative, it is a valid tool for gathering descriptive information on health-related behaviors. Observing what students purchase for lunch at school provides direct evidence of what youth actually eat. The findings can then be used to assess dietary trends of adolescents in the target community.

Anthropometric and Biomedical Measurement

A comprehensive examination of dietary, physical activity, biochemical, anthropometric, and clinical data provides a uniform and comparable assessment of an adolescent's physiological health status. However, it is impractical for most CANFit grantees to conduct this type of nutrition and physical activity needs assessment on all of their participants. Survey questionnaires and several of the other methods highlighted earlier are adequate in most cases. Although interviews and surveys do not provide objective data on nutrition and fitness status, they can be an invaluable, cost-effective way of gathering other important data on young people's behaviors and attitudes about physical activity. Understanding the predominant psychosocial factors associated with poor eating and poor physical activity patterns in low-income multi-ethnic youth is critical to developing successful interventions that ultimately can change their lives for the better. For precisely this reason, qualitative methods of interviews, surveys, observation, and community mapping can generally be considered more relevant to CANFit needs assessments than direct measurement approaches.

Basic Steps for Developing an Ethnic-Specific Needs Assessment

The following is a protocol for designing an ethnic-specific CANFit Needs Assessment. This protocol is a working model which CANFit project administrators can modify to suit the needs of their own target populations.

1. List the basic health care needs, including nutrition, physical activity, and diseases (morbidity and mortality) status of the target community as a whole. (See Tables 2 and 3.)
2. Make a list of the traditional ethnic foods typically eaten on a daily basis by participants in your target group. If the youth are recent immigrants, find out through small interview groups or through one-on-one interviews if they eat the same foods consumed in their parents' native countries. Not all of the youth participants will know the origin of the foods they eat at home, but youth who sometimes shop with their mothers know. If possible, note the ingredients, particularly the relative quantity of fats and oils including saturated fats and hydrogenated oils, refined carbohydrates, and sugars in some of the main dishes and favorite foods eaten by the youth.
3. Use the information from the Appendices and Section III of this guide to develop an initial, informal questionnaire on nutrition and physical activity needs of adolescent youth in your target population. These questions can be asked in one-on-one interviews, small group interviews, focus groups, or larger discussion groups. These initial questions should be pilot-tested with a small group, ideally your youth advisory group. For youth who seem to have good memories, a 24-hour-dietary recall can also be administered. Additional information can be obtained from parents through questionnaires and focus groups. Also, the eating and physical activity behaviors of youth can be observed and described in writing using observational methods. The initial phase of the needs assessment should provide:
 - a. Specific information about the nutrition patterns of youth in the target population. Even before developing written surveys for a larger group of youth, the project coordinators should be aware of traditional foods commonly eaten by this group, the cafeteria menus available to the youth in the schools, and the typical diet of most kids, based on both the literature and casual, informal conversation with some of the kids in this community.
 - b. Specific information about the physical activity levels of youth in the target population. For example, do most of them take the bus or walk to school? How active are they in sports programs, whether school activities or in the community? Is the body size of a noticeable proportion of the youth in this target population about right, or underweight or overweight (and by whose standards)?
 - c. Specific information, based on input from local school and/or community-based organization staff, about the peer social structure of the youth. This information will be critical to developing a core group of adolescent peers who help CANFit project coordinators run a nutrition and physical activity assessment for a wider group of youth in the community.
 - d. Specific information about the environment, including facilities, food stores that sell snacks, fast-food restaurants, nutrition information taught in various grades at school.
4. Develop a comprehensive questionnaire that can be given to the youth advisory group from the target population. Select the number of youth and their demographic mix, as appropriate, to reflect as much as possible the range of backgrounds within the target group. Plan a realistic

schedule of events with project coordinators, volunteer professionals and para-professionals (parents, teachers, and students).

5. Implement the needs assessment.
 - a. Hold discussion groups, conduct interviews, give questionnaires, administer 24-hour dietary recall and other needs assessments tools to youth advisory group.
 - b. Have youth advisory group conduct a community resource inventory of their neighborhood and community. Information should be recorded on restaurants, grocery stores, stores that sell snack items, places for doing physical activities, safety of places.
 - c. Have youth advisory group work with project leaders in analyzing preliminary data.
 - d. Administer needs assessment, in conjunction with youth advisory group, where appropriate, to a larger youth sample drawn from target community.
6. Analyze needs assessment data. Leaders and youth advisory group should work together in analyzing data from all phases of needs assessment. Data will help to understand the links between certain ethnic and cultural beliefs and behavior.
7. Use findings from the analysis to develop culturally appropriate and specific interventions for youth. (See Section IV.) After identifying knowledge deficits, group values, behavioral patterns of resistance, and areas of low-self esteem and low self-image of youth participants, work with youth advisory group to design innovative, ethnic-specific intervention approaches such as:
 - a. Developing healthy snacks with ethnic taste preferences that are satisfying to youth from a particular ethnic group;
 - b. Creating educational messages that promote behavioral changes in culturally-sensitive and meaningful ways;
 - c. Advocating for menu modification in school cafeterias, neighborhood restaurants, and snack bars;
 - d. Increasing availability of alternative snacks;
 - e. Producing ethnically and youth specific nutrition guidebooks; and
 - f. Devising fun and culturally-specific physical activities.
8. Refer to Appendix G (Post-Program Follow-up Questions) to develop evaluation questions for your specific intervention.

SECTION III: TAILORING NEEDS ASSESSMENT SURVEYS FOR SPECIFIC ETHNIC GROUPS

These are examples of information that can be obtained in different areas of the needs assessment:

Nutrition Knowledge

- Food Guide Pyramid and recommended servings of major food groups
- Relationship between nutrition and diseases
- Food group breakdown of fast foods
- Food group breakdown of traditional ethnic foods

Physical Activity Knowledge

- Components of physical fitness
- Types of exercise and their benefits
- Relationship between physical inactivity and diseases

Eating Patterns & Attitudes About Food Choices and Preferences

- Food frequency
- Meal frequency
- Favorite fast foods
- Snacking patterns
- Snack preferences
- Determinants of snacks choices
- Determinants of fast food choices
- Meal skipping
- Dieting versus “watching what you eat”
- Frequency of ethnic vs. American meals and meals
- Beverage consumption
- Adverse reactions to food and beverages
- Food preferences
- Willingness to try new foods

Physical Activity Behavior and Attitudes

- Participation in PE class; organized sports, exercise, athletic activities
- Daily/weekly activities (running, bicycling, walking)
- Attitudes about exercise
- Gender differences in perceptions of physical activity
- Reasons for and for not exercising

Body Image and Self-Esteem

- Self-perceived body size
- Self-esteem/feelings about body size
- Ideals/role models of fit individuals in and outside of ethnic group
- Efforts and desire to gain/lose weight/stay the same

Access to Foods

- Fast food restaurants
- Sources of snacks
- Sources of lunch time meals
- Sources of family food shopping
- Sources of fruits and vegetables

Safety

- Level of crime and violence in community
- Things most feared
- Playground safety

Facilities for Physical Activity

- Awareness of facilities
- Frequency of use
- Reasons for and for not using facilities
- Transportation

Acculturation

- Length of time in U.S.
- Primary language spoken in home
- Competency in standard spoken English
- Literacy in English
- Ethnic background of most friends
- Food preferences
- Meal time rituals and practices
- Extracurricular activities (ethnic social clubs, native language schools)

Peer Influence

- Ethnicity of peers
- Frequency of eating with peers
- Frequency of doing physical activities and other things with peers
- Influence of peers on snack and fast food choices

Health Awareness

- Attitudes about personal health
- Criteria for self-perceived health status (body size, foods eaten, exercise level)
- Future-oriented preventive lifestyle concerns
- Relationship between body weight, nutrition, physical activity, health

Family Influence

- Home rules for meals and eating patterns
- Permission to snack
- Permission to purchase snacks
- Permission to eat out with friends
- Money spent on snacks, lunch, fast foods
- Views on physical activity (sports, dance)
- Views on new foods, low-fat, healthy foods
- Frequency of traditional ethnic versus conventional meals
- Gender roles

Questions that elicit responses in each of these categories can be found in the Master Questionnaire in Appendix B. The Master Questionnaire can be modified to produce a culturally relevant needs assessment for any ethnic adolescent group. The following examples illustrate a step-by-step process of adapting the generic questionnaire for different groups of ethnic youth.

The Asian American Example

First we will look at Chinese American adolescents living in San Francisco. This example illustrates how a questionnaire can be tailored for an “umbrella” ethnic group, such as Asian Americans, as well as for a specific subgroup, Chinese Americans.

Nutrition Knowledge

Questions #1-4 are straightforward knowledge-based items and require no amending. Questions #5-6 also deal with nutrition knowledge, but in this case, relate specifically to lactose intolerance. Questions #7-9 require no change. Question #10 can be modified to get more in-depth information on the adolescents’ level of knowledge about a disease to which Asian Americans are prone - osteoporosis. Additional questions on the relationship between dietary calcium, particularly during adolescence, can be asked.

Questions #11-13 do not need to be changed. In question #14, foods such as bean curd (tofu) can be put into the “ethnic food” slot. Questions #15-18 can stay as they are. “Chinese” can replace “ethnic food” in #19-20. Questions #21 and #22 can be left alone.

Physical Activity Knowledge

Question #23 also taps into possible ethnic and cultural differences regarding girls participation in physical activities. If there are certain sports or PE activities that are generally approved of in the Chinese American community, and others perhaps not approved of, these can be inquired about in separate questions in this section. Questions #24-26 examine the level of factual knowledge and do not have to be ethnically specific.

Eating Patterns & Attitudes About Food Choices and Preferences

Questions #27-29 require no change. Because no choices are given for ethnic-specific breakfast foods typically eaten by Chinese Americans, traditional foods such as jook, noodles or rice with vegetables and/or meat, dim sum, soup, and other items can be put into the “ethnic food” category of responses to #30. Also, it may be appropriate to add tea or green tea if it is known from the focus groups that adolescents drink tea.

Questions #31-35 can remain as they are. Questions #36-39 are important because many Asian Americans have lactose intolerance, and some get sick from drinking milk. Some youth may drink soy milk, either because it is a traditional Asian food or because it is a substitute for cow’s milk. Question #40 further explore the possibility of lactose intolerance in the target youth’s families. Responses to these questions, therefore, should be carefully noted.

Questions #41-47 do not need to be changed. Question #48 can include additional ethnic choices of pasta (noodles). Note that even traditional Asian American youth eat Italian pasta. If specific pasta combinations are known from the focus groups, question #48 can be revised to include different choices and combinations of pasta foods.

Questions #49-53 can stay as they are. Because traditional Asian dishes do not contain much meat, these questions can be modified to ask how much meat is being eaten at meals. Also, specific meats typically eaten by this group of Chinese Americans can be included in this set of questions.

Questions #54-57 can stand as they are. The answers to question #58 can include specific Asian and Chinese snacks, based on food preferences discussed in the focus group. In some cases, youth may not know the exact name of a snack and instead refer to them as “just Chinese crackers.” There should be a response category called “Chinese crackers.” Similarly, in question #60, specific descriptions of Asian tastes, such as hot mustard and sweet and sour, can be included in the responses. Questions #61 and 62 should have Chinese American substituted for “ethnic group.” Questions #63-68 require no special attention.

Questions #69-74 deal with fast food preferences. Some communities may have ethnic fast-food restaurants, which may be part of a restaurant chain. The names of these can be obtained during focus group sessions and from community mapping. If there are ethnic fast food eating places, these should be listed as possible answers to question #71. Question #72 examines cultural attitudes about eating. Questions #73-74 tap into family influence and rules about fast-food eating patterns.

Question #75 can also be modified for ethnic specificity. Many Chinese consider soup to be one of the most vital and wholesome foods available because it is associated with nourishment and seen as important to preventing disease. It is therefore likely that Chinese American youth want soup when they are sick. Different types of soup traditionally eaten by Chinese Americans can be included in the choice of responses to #75.

Questions #76-78 do not need to be changed. Question #79 could list other oils, such as sesame oil, commonly used in Chinese cooking. Questions #80-85 can remain unchanged. However, #84 and #85 should list soy sauce as a possible response. The Chinese use soy and fish sauces, high sodium foods, to add a salty taste to food. Questions #86 and #87 require no amending.

Because bread is not part of the traditional Asian diet, question #88 can be changed to include other foods from the grain and pasta food group. Rice, Chinese buns, and noodles can be added to this list. The different types of breads listed can be left as is, since many Chinese Americans also eat bread.

In light of the widespread use of traditional Chinese herbal medicine, Question #89 could be modified to include herbal medicines along with vitamins. Many Chinese view herbs as similar to vitamins. The response to question #89 will reveal whether the youth participants think that their traditional foods (assuming that these are served in their homes) are more nutritious than cafeteria or snack bar food. Question #91, which deals with meal preparation, could be made more specific. It can ask whether the mother or grandmother or an elder sister prepares the food. Questions #92-95 can remain unchanged.

In Question #96, “ethnic group” should be replaced with “Chinese.” This question examines how much the youth are tied to their traditional foods through their older relatives. And question #97 probes into how much the youth actually enjoy traditional food. Answers to question #98, which is structured as an open-ended question, can shed light on traditional ethnic concepts of food. However, family food values and behaviors can sometimes be unique, based upon level of acculturation. A family’s notions of what is good food may not always be representative of the ethnic group’s views as a whole. Questions #99-101 help to reveal the parents’ level of health consciousness and, to some degree, their level of acculturation.

Questions #102 and #103 are culturally sensitive and should only be asked if the project coordinators feel that this question will not bother any of the participants. Responses, however, can be revealing about underlying attitudes, perceptions, and even self-esteem associated with food, eating, and body image.

Body Image and Self-Esteem

Questions #104 and #105 require no change. Question #106 could be modified to include, as possible responses, Chinese or Asian American celebrities who symbolize fitness through martial arts or other sports. Questions #107-111 do not need to be altered.

Physical Activity Behavior

Questions #112-128 can stay as written.

Access to Foods

Many Chinese Americans, both affluent and low income, buy their foods at Chinese grocery stores. Different types of Chinese grocery stores (markets, dry goods, etc.) can be listed in the response to Questions #129-131. The adolescents’ answers to #131 may say something about the types of snacks they usually buy. However, they may not always purchase their own snacks. At home, some youth may eat traditional Chinese snacks that their parents have bought for them.

Safety

Questions #132-135 are straightforward, although there is always the possibility that inter-ethnic strife adds to real or perceived threats against safety. Culturally sensitive issues along these lines are better left for small group and on-on-one interviews than questionnaires.

Access to Places for Physical Activity

Questions #136-138 do not need to be ethnically specific.

Acculturation

Questions in this group speak directly to cultural and ethnic specificity. Mandarin, Taiwanese, or Cantonese (the three Chinese dialects) should replace ethnic language in question #139. Questions #139-141 give information on how well the youth can communicate in English. Many Chinese-Americans are equally fluent and adept in their traditional language and standard English. Question #142 probes into whether the youth has peers of a similar ethnic background. Questions #143 and #144 are based on findings from a focus group held with Chinese American youth. For some of them, American foods were associated with eating with knives, forks, and spoons instead of chopsticks. Question #145 can be tailored to include traditional schools such as Chinese language educational centers. This question examines the degree to which youth are exposed to traditional values.

Peer Influence

Questions #146-149 deal more with youth culture than with ethnic culture, so they require no modification.

Family Influence

Questions #150-161 tap into cultural and ethnic-specific beliefs and behaviors. Family values and parental authority, are central to traditional Asian culture. Some Chinese American youth in the CANFit grantee projects were not allowed to buy snacks, and seemed to not want snacks unless they were permitted by their parents to have them. Question #156 deserves special attention since it hints at family and ethnic values about physical versus mental fitness. Academic excellence and mental discipline are emphasized in most traditional Asian cultures, including the Chinese American community. The question can be revised to ask more detail about how much time parents allow their kids to be involved in physical activities and how much they approve of them playing sports.

Health Awareness

Questions #162-164 can stay as is. However, more detailed information can be asked about osteoporosis, since Asian Americans are at risk for this disease. Also, questions on preventing heart disease and diabetes are important, because all Americans have increased chances of developing these conditions when they change over to a high fat diet and become less physically active.

Demographic Background

Questions #165-176 do not require any modification.

The African American Example

While the previous Chinese American example gave a step-by-step process, we will not go into this level of detail in the African American example. Rather, let us look at some of the questions that can be reconfigured to develop a relevant needs assessment for African American youth.

- Question #10: revamp question to ask about ethnic-specific diseases in African Americans such as hypertension, diabetes, heart disease, and stroke
- Questions #14, 48, 58, 60: list appropriate examples of traditional African American foods (fried chicken, collard greens, black-eyed peas) and restaurants (Church's, Popeye's)

- Question #30: list southern African American traditional breakfast foods such as grits, biscuits, pork sausage, etc.
- Questions #104-107: elaborate on self-perceived images of body weight compared to popular American culture norms of thinness
- Question #106: use African American role models (especially female) who are larger than typical popular American culture norm

The American Indian Example

As in the African American example, we will look at a few of the questions in the master survey that can be modified to create an ethnic-specific American Indian adolescent nutrition and physical activity needs assessment.

- Question #10: revamp question to ask about ethnic-specific diseases in American Indians such as diabetes, hypertension, heart disease, and stroke
- Question #88: include fry bread and ask about frequency of eating fry bread
- Question #99: included pow wows, big times, and camps as occasions where traditional foods might be eaten
- Questions #104-107: elaborate on self-perceived images of body weight compared to popular American culture norms of thinness
- Questions #132, 136: use reservation in addition to neighborhood or community

The Latino Example

Finally, we will create a Latino adolescent nutrition and physical activity needs assessment.

- Question #10: revamp question to ask about ethnic specific diseases in Mexican Americans, such as diabetes, heart disease, and hypertension
- Questions #23, 122: provide response choices that elaborate on why parents do not like their daughters to do physical activities, such as “my father won’t allow it”
- Question #30: list Mexican American breakfast foods (atole, liquados, flan)
- Question #88: use pan dulce as example of Mexican bread
- Questions #129-131: include ethnic stores and restaurants
- Questions #139-141: ask about Spanish literacy, since many Latinos speak and read Spanish

SECTION IV: USING NEEDS ASSESSMENT DATA TO DEVELOP INTERVENTIONS

In this last section, we will discuss how information gathered from needs assessments can be used to inform interventions. Findings from focus groups, interviews, surveys, and community mapping all provide valuable insight into the nutrition and physical activity knowledge, attitudes, beliefs, behaviors, and motivating factors of youth in a community. These results can help project leaders to determine how to most effectively help youth eat healthy and exercise regularly. Two real-life success stories of how previous grantees translated their data into action are described in the examples that follow. There are numerous potential interventions that can be invented based on the resources of a project and community, and program leaders should not limit themselves to the ones listed here. However, these offer a useful demonstration of how to use needs assessment data.

Example 1: Design a Nutrition and Physical Activity Curriculum

Needs assessment information is quite often used to inform the design of a nutrition and physical activity curriculum. Through focus groups conducted during their planning grant, one CANFit grantee uncovered several reasons why their population of African American and Latina girls did not engage in enough physical activity. Briefly, these included concerns about appearance, cultural beliefs that traditionally discourage physical activity, PE classes that offered outdated physical activities, and a lack of appropriate role models. These girls also skipped meals as a way of controlling body weight, while indulging in high fat and high sugar food choices.

In response, the organization created a 10-week curriculum, in which each session was comprised of a nutrition topic, such as weight management and low-fat eating, and a physical activity topic, such as body image and self-esteem. The curriculum also incorporated specific elements resulting from the focus groups. First, to minimize concerns about appearance, only girls were allowed to participate in the program. Dance and cultural expression was also a topic during one session as a strategy for encouraging discussion about cultural beliefs. The curriculum offered hip-hop dance classes because the girls had expressed interest in it. And as a way to increase the number of positive role models available to these girls, older high school girls of similar ethnic backgrounds were trained to lead the classes.

Example 2: Implement Environmental Changes to Promote Nutrition and Physical Activity

While many interventions that result from CANFit needs assessments involve improving knowledge and behavior at an individual level, needs assessments often identify barriers within a community or the environment which make it difficult for youth to eat well or exercise. One CANFit grantee found that not only did many youth not eat breakfast, but also that breakfast was not provided at their school. Youth also did not participate in PE on a regular basis in large part because of a lack of appealing activities and equipment.

For their intervention, the organization facilitated improvements within the school to address some of the identified needs. The school instituted a breakfast program and made curriculum changes such as the addition of cooking classes and more extensive PE offerings. PE teachers also received funds to purchase needed equipment. Other teachers were awarded mini-grants to implement projects that raised student awareness of nutrition and physical activity. One was a garden project that reinforced what the youth were learning in different subjects.

SECTION V: APPENDICES

Appendix A – The Role of Culture in Nutrition and Physical Activity: Theory and Research

Culture refers to the set of beliefs, values, habits, customs, and perceptions of the world that are linked to language and shared by the members of a social group. A *social group* can include individuals organized around language, similar socioeconomic (SES) status, or ethnic affiliation.

Ethnicity means identifying with the culture of a social group. An ethnic group is defined on the basis of a common language, religion, kinship, historical experience, or geographical origin. Ethnicity is often confused with *race*, a term which, according to human biologists, refers to populations descended from the major geographical groupings of humankind. While people of the same ethnic group generally share cultural values and language, ethnic labels sometimes can be misleading because ethnic groups can be subdivided into smaller groups.

For example, in the United States, Latino refers to people of Latin American heritage. Yet, Latino Americans from Puerto Rico have a distinct culture from the culture of people originally from Mexico. Even among Central American and South American Latinos, there are often striking cultural differences. Although most Latin American ethnic groups in the United States (except those from Brazil) speak Spanish, they frequently have different dialects. Even Latinos from the same country, or from the same region within the same country, may see the world differently depending upon their life experiences.

Similar ethnic subdivisions can be made for other groups in the United States. For instance, Southeast Asian Americans include Hmong, Laotians, and other groups with similar cultures, yet distinctive languages. Southeast Asian cultures not only contrast with each other, but also with the cultures of Chinese Americans, Filipino Americans, Korean Americans, and other Asian American ethnic groups. In fact, the tendency to lump all Asian Americans together, and to further include them with Pacific Islanders, is a misleading oversimplification of their cultural traditions.

Culture describes a wide array of beliefs, attitudes, values, and behaviors. Food preference is one aspect of culture that can vary from one to another. For example, certain high-caste Hindus of India are vegetarians, both Muslims and Jews consider pork sinful, and the Apache, who traditionally lived near water, did not eat fish. In the United States, few people would consider dogs a desirable source of food. However, historically dog meat was eaten in parts of the world where dogs were not domesticated as pets, and today, it is still valued as a high protein food in some cultures.

Most people eat foods that have a “stamp of approval” from their own culture. In almost every society, there are nutritious foods that are hardly ever eaten because they are not socially accepted as foods. Thus, for people in a society where kiwis, artichokes, and fat-free salad dressing are not recognized as foods (even though they are sold in many American grocery stores), these products do not symbolize edible substances. In addition, people of all social groups resist changes to their eating practices. For example, despite the nutritious value of wheat, it was rejected by Southeast Asians facing near-starvation when it was shipped to them by the United States. Soy beans, a good source of protein, are another example of a food that is not accepted by cultures unfamiliar with them. International relief organizations have had relatively little success getting famine-stricken populations to eat soy products, a behavior change which if implemented could help prevent

malnutrition and starvation. Despite the high nutrient value of wheat and soy, people who were not raised on these foods tend to resist eating them even in the wake of potential starvation.

The traditions governing eating behavior are complex. Often it is the case that families alternate between traditional ethnic diets and more mainstream American meals (whether conventional or fast-food). Consequently, youth may hold contradictory beliefs and attitudes about different types of food. On one hand, they may truly enjoy their favorite ethnic foods, but perhaps only in certain social contexts. When dining with close friends and relatives, or on holidays and during ethnic festive occasions, they may indulge in traditional dishes, but they may not consume traditional foods on an everyday basis. The social setting, with whom we eat and what we eat when we are with them, is an important cultural aspect of nutrition.

Besides social context, there may be several reasons why families avoid routinely eating traditional ethnic foods. One is that the demands of work and school schedules may prevent family members from cooking traditional, and sometimes even conventional American, meals. As a result, like much of the American mainstream, they may turn to the convenience and relatively lower cost of fast food meals, even though they are high in fat, sodium, and refined carbohydrates. Second, ethnic families or youth, may consider themselves too Americanized to eat traditional meals. They may perceive these foods as a relic of their heritage, something to be embraced on special occasions but not on a frequent basis. For some ethnic families and their children, avoiding traditional foods stems from their desire to appear all-American.

One relevant example can be seen in the Latino American community, where some families consider traditional diets inferior. Even though under-nutrition is a problem in Guatemala, immigrants to the United States are often plagued with obesity. One explanation is that visits to fast food restaurants become frequent, as they provide pride and positive reinforcement in addition to high-fat and high-calorie meals for these families. As one family said, “We feel good when we go to these places. We feel like we’re Americans, that we’re here, and that we belong here.” The acculturation of immigrant adolescents from Southeast Asia is also telling. The traditional diet of Southeast Asians is generally low in both fat and meat, and not surprisingly, their rates of heart disease are minimal. However, when they adopt a Western lifestyle, their rates of heart diseases increase substantially. In general, as Asian American youth become more acculturated to American life, they tend to eat more fat, which leads to higher levels of serum cholesterol, and to consume less complex carbohydrates.

There are other reasons why low-income multi-ethnic youth have poor nutrition and physical activity. First is that, as adolescents, they are at an age when they want to assert their freedom from their parents and other authority figures. Choosing the foods that they want to eat is one way in which they can express their independence. For some multi-ethnic youth, conforming to what they consider an “all-American” stereotype may be influential. Their image of appearing “cool” may involve listening to American music, wearing outfits and sneakers that symbolize fashionable trends of youth, and eating American foods instead of their traditional foods. Among Chinese American youth, American foods were associated with hamburgers, pizza, other fast foods, and “things you eat with a knife, fork, and spoon.” Latino American adolescent girls of both Mexican and Puerto Rican heritage associated American foods with hamburgers and hot dogs. Although the definition of American foods varies, for many low-income youth of color, it seems to frequently correlate with fast foods. Ironically, neither the fast foods and frozen dinners known for their nutrition deficits nor

the exceedingly high-fat and high-sodium meals of their traditional cultures are optimally nutritious.

On the other hand, some youth in CANFit programs seemed to be equally comfortable with their own ethnic foods and American foods. Under some circumstances, people of color may even boast about their traditional diets as a symbol of ethnic pride. While many youth are at ease with embracing food choices from two worlds, their traditional world and the American way, other adolescents may experience conflicts or embarrassment if they think that their food choices and preferences define their ethnic identity. If their ethnic foods are ridiculed or mocked by others from a different ethnic group, the individual and his or her family may feel ashamed of their own cultural background.

The events surrounding an innuendo made by Fuzzy Zoeller at the 1997 Masters golf tournament clearly illustrate this point. Although Zoeller made several disparaging comments about Tiger Woods, the one that perhaps captured most of the public's attention was his reference to collard greens and fried chicken and, in his now infamous words, "whatever it is that *they* eat." Zoeller used metaphors of food that are typically associated with negative stereotypes of African Americans, especially low-income, rural African Americans from the South. In doing so, he not only tried to belittle Tiger Woods, but also African American culture as a whole. Zoeller's intentions (whether malicious or simply ignorant) aside, it is apparent that the perception of traditional foods can influence the values associated with these foods. In some instances, these foods can be a source of shame if the insults lead some of the group's members, particularly its younger ones, to internalize feelings of inadequacy and inferiority.

Zoeller's words are significant because they reveal underlying attitudes and implicit meanings with which Americans are familiar. Language is the most important symbolic aspect of human culture. Words have meaning, and ethnic foods often carry symbolic meanings for people within a cultural group, as well as for those who look upon the culture from the outside. Ironically, as Tiger Woods soared to new heights in the world of golf, Zoeller's words became a harsh assault on African American cuisine. As a result, African American youth who followed the media reports may have felt the need to modify their attitudes, and even their behavior, about eating traditional foods. But rather than changing their attitudes and behaviors because of health and self-empowerment, they may have done so defensively, in response to a message that if African Americans want to succeed in the largely white world of professional golf, they must do so without their food and cultural traditions.

In all cultures, food can be an expression of social ties and group solidarity. Imagine a 12-year-old African American boy who cherishes occasional Sunday meals of fried chicken, collard greens with ham hocks, corn bread, and sweet potato pie. These meals perhaps represent a special time to him not only because of the delicious food, but also because of the shared dining experience with his grandparents, aunts and uncles, and cousins as well as his parents and siblings. Sunday meals may provide one of the few social settings in which he feels a deep bond with his extended family and where he sees positive images of his family and his ethnic group. What this example demonstrates is that eating and physical activity behaviors are influenced by many elements of culture. If one intends to alter the nutrition and physical activity habits of low-income multi-ethnic youth and their communities, it is not enough to simply increase knowledge. To be effective, interventions must address the language, historical traditions, and social environment of the target population.

Appendix B – Master Questionnaire

The following is a master pool of questions that project coordinators can choose from and modify for any type of needs assessment. Most are multiple choice, short answer, or fill-in-blank that can be paraphrased for written or oral surveys, but others are open-ended questions which are useful for focus groups and interviews, as well as surveys. Questions requiring ethnic-specific information are bracketed and can be amended using information from focus groups, interviews, and literature reviews. Other questions have been deliberately structured for responses that are linked to specific ethnic and cultural attitudes and behaviors. Finally, some questions ask for similar information, but by listing overlapping questions, project coordinators can select those questions whose wording or format (multiple-choice vs. open-ended) best elicits the types of information they are seeking from their target population. The Master Questionnaire itself is too long to administer. However, as a general rule, you should select 2-5 questions from each category to assemble a tool that is appropriate in length for your youth, usually between 24-60 questions. Also see Appendices 3-6 for examples of focus group, interview, and community mapping needs assessments.

Nutrition Knowledge

1. What are the food groups in the Food Guide Pyramid?

2. Where did you learn most of what you know about nutrition? (Check one.)
 - from my family
 - at school
 - from TV
 - from friends
 - reading
 - other _____

3. Are fat-free foods always healthy? Why or why not?

4. Cooked food should be put in the refrigerator because
 - it tastes good cold the next day
 - it can spoil and cause you to get sick if you don't
 - not sure

5. It is alright to drink chocolate milk if white milk makes you sick.

<input type="checkbox"/> true	<input type="checkbox"/> false
<input type="checkbox"/> somewhat true	<input type="checkbox"/> not sure

6. It is alright to drink soda if milk makes you sick.

<input type="checkbox"/> true	<input type="checkbox"/> false
<input type="checkbox"/> somewhat true	<input type="checkbox"/> not sure

7. Name 3 foods that are high in protein.

8. Name 3 foods that are high in complex carbohydrates.

9. Name 3 healthy, low-fat foods.

10. Which nutrition problems can lead to which diseases? (Match the correct letter with the correct number.)
- | | |
|------------------|--|
| 1. osteoporosis | a. obesity and high-fat food |
| 2. colon cancer | b. too much sodium (salt)/not enough potassium |
| 3. heart disease | c. not enough high-fiber food |
| 4. hypertension | d. not enough calcium (milk products) |
| 5. cavities | e. too much sugar and sweets |
11. Do you read food labels?
- | | |
|----------------------------------|------------------------------------|
| <input type="checkbox"/> always | <input type="checkbox"/> sometimes |
| <input type="checkbox"/> usually | <input type="checkbox"/> never |
12. What sorts of things do you look for on food labels?
- | | |
|---|---|
| <input type="checkbox"/> calories | <input type="checkbox"/> sugar |
| <input type="checkbox"/> fat | <input type="checkbox"/> preservatives |
| <input type="checkbox"/> salt or sodium | <input type="checkbox"/> other |
| <input type="checkbox"/> cholesterol | <input type="checkbox"/> don't look at labels |
13. Keeping your weight under control and avoiding high-fat meals can help prevent which of the following diseases? (Check one.)
- | | |
|---------------------------------------|------------------------------------|
| <input type="checkbox"/> diabetes | <input type="checkbox"/> hair loss |
| <input type="checkbox"/> anemia | <input type="checkbox"/> not sure |
| <input type="checkbox"/> osteoporosis | |
14. Which is a good source of protein for vegetarians? (Check all that apply.)
- | | |
|---|---|
| <input type="checkbox"/> beans and rice | <input type="checkbox"/> [high protein ethnic food] |
| <input type="checkbox"/> rice cakes | <input type="checkbox"/> not sure |
| <input type="checkbox"/> asparagus | |
15. Where or from whom did you first learn about nutrition?
- | | |
|------------------------------------|--|
| <input type="checkbox"/> school | <input type="checkbox"/> magazines |
| <input type="checkbox"/> parents | <input type="checkbox"/> videos |
| <input type="checkbox"/> doctor | <input type="checkbox"/> labels on food products |
| <input type="checkbox"/> friends | <input type="checkbox"/> other |
| <input type="checkbox"/> talk show | <input type="checkbox"/> never learned about it |
16. Cheese has a lot of calories and fat.
- | |
|-----------------------------------|
| <input type="checkbox"/> true |
| <input type="checkbox"/> false |
| <input type="checkbox"/> not sure |
17. Salad bars can be fattening if you add a lot of regular salad dressing and potato or macaroni salad.
- | |
|-----------------------------------|
| <input type="checkbox"/> true |
| <input type="checkbox"/> false |
| <input type="checkbox"/> not sure |

18. Being overweight is always unhealthy.
- true
 - false
 - not sure
19. Most [ethnic name] food is fattening.
- true
 - false
 - not sure
20. Most [ethnic name] food is not fattening.
- true
 - false
 - not sure
21. Most fast foods are healthy even though they are high in fat, calories, and sodium (salt), and low in fiber.
- true
 - false
 - not sure
22. People who belong to an ethnic group where many of the people, especially the females, weigh more should just accept the fact that they will always have large bodies because eating healthy foods and exercising will not make any difference anyway.
- true
 - false
 - not sure

Physical Activity Knowledge

23. Should girls exercise and participate in physical activities as much as boys? (Check one.)
- no, because it's not right for girls to exercise too much
 - no, because it can be harmful for females
 - sometimes, if boys are not around
 - sometimes, during PE and sports activities
 - yes, because girls need to be physically fit too
 - sometimes, if their parents think it's OK
24. To lose body fat, is it better to run, do aerobics, or both?
25. If you are overweight, you can never be in shape.
- true
 - false
 - not sure
26. List the three main areas of physical fitness.

Eating Patterns & Attitudes About Food Choices and Preferences

27. On most days, which do you usually eat? (Check all that apply.)
- | | |
|--|---|
| <input type="checkbox"/> breakfast | <input type="checkbox"/> lunch |
| <input type="checkbox"/> morning snack before or during school | <input type="checkbox"/> after school snack |
| <input type="checkbox"/> afternoon snack during school | <input type="checkbox"/> dinner |
| | <input type="checkbox"/> after dinner snack |
28. What is the first thing you eat when you get up everyday? Do you consider this food to be breakfast, or do you eat something else later for breakfast?
29. How many days each week do you usually eat breakfast?
30. How many times each week do you usually eat these foods for breakfast?
- | | | |
|---------------------|---------------------|--------------------|
| cold cereal ____ | coffee ____ | donut or roll ____ |
| hot cereal ____ | tea ____ | fruit ____ |
| bacon and eggs ____ | juice ____ | vegetables ____ |
| eggs ____ | toast or bread ____ | [ethnic food] ____ |
| bagels ____ | pancakes or | other ____ |
| milk ____ | waffles ____ | |
31. If you skip breakfast, do you have more or less energy during the day?
- less energy
- more energy
- I never or rarely skip breakfast
32. Do you ever skip lunch and/or dinner? If so, which meals? How often?
33. What are the main reasons you skip meals? (Check all that apply.)
- | | |
|---|---|
| <input type="checkbox"/> no time to eat | <input type="checkbox"/> do not like the food served or available |
| <input type="checkbox"/> to lose weight | <input type="checkbox"/> not hungry |
| <input type="checkbox"/> no money | |
| <input type="checkbox"/> no food in the house | |
34. What is your favorite meal of the day?
35. Have you ever felt any of the following during school? (Check all that apply.)
- | | |
|--|--|
| <input type="checkbox"/> unable to concentrate | <input type="checkbox"/> stomachaches |
| <input type="checkbox"/> tired | <input type="checkbox"/> sleepiness |
| <input type="checkbox"/> weak | <input type="checkbox"/> no, I haven't felt any of those |
| <input type="checkbox"/> headaches | |
36. I mostly like... (Check all that apply.)
- | | |
|--|--|
| <input type="checkbox"/> whole milk | <input type="checkbox"/> chocolate milk |
| <input type="checkbox"/> 2% milk | <input type="checkbox"/> not sure |
| <input type="checkbox"/> low-fat 1% milk | <input type="checkbox"/> I don't like milk |
| <input type="checkbox"/> fat-free or skim milk | |

37. Do you drink soy milk? How often? Do you drink it instead of regular milk?
38. How much white milk do you drink each day (including milk on your cereal)?
39. Do you ever get sick (upset stomach, nausea, diarrhea) when you drink milk? How often?
40. Does anyone in your family get sick (upset stomach, nausea, diarrhea) when they drink milk? Who? How often do they get sick?
41. How much soda do you drink each day or week? Do you drink diet soda? How much?
42. How many servings of fruit do you eat each day?
43. How many pieces or servings of fresh fruit do you eat each day?
44. How many servings of 100% fruit juice do you usually have every day? How about fruit drinks (Snapple, Kool-Aid)?
45. How many serving of vegetables do you eat each day?
46. How many servings of raw (uncooked) vegetables, such as salad, do you eat each day?
47. What color are most of the vegetables you eat? (Check all that apply.)
- | | |
|--------------------------------------|-----------------------------------|
| <input type="checkbox"/> white | <input type="checkbox"/> yellow |
| <input type="checkbox"/> dark green | <input type="checkbox"/> other |
| <input type="checkbox"/> light green | <input type="checkbox"/> not sure |
| <input type="checkbox"/> orange | |
48. How many servings do you have of noodles or pasta each week? (Check all that apply.)
- | | |
|---|---|
| <input type="checkbox"/> chow mein, chow fun ____ | <input type="checkbox"/> macaroni and cheese ____ |
| <input type="checkbox"/> yakisoba ____ | <input type="checkbox"/> [other ethnic-specific choices] ____ |
| <input type="checkbox"/> ramen ____ | |
| <input type="checkbox"/> spaghetti, ravioli, lasagna or tomato sauce pasta ____ | |
| <input type="checkbox"/> macaroni or potato salad ____ | |
49. How many times each week do you usually eat chicken?
50. What part of the chicken do you usually eat?
- | | |
|---|--|
| <input type="checkbox"/> the part after the skin is removed | <input type="checkbox"/> all of the chicken - both meat and skin |
| <input type="checkbox"/> the skin | |
51. How many times each week do you usually eat fish?
52. How many servings of red meat (hamburger, roast, steak, lamb, veal) do you usually have each week?

53. How many servings of pork (bacon, ham, pig's feet, ham hock) do you have each week?
54. What do you usually eat at lunchtime?
 lunch brought from home
 food served at the school cafeteria
 food available at the snack bar
 other _____
55. Do you like the food in the school cafeteria? In the school snack bar?
56. If you buy your lunch at school, what kinds of food do you usually get? Do you buy them, or does someone give them to you?
57. What types of foods do you eat for snacks?
58. Write the number of times each week that you eat the following snacks.
- | | | |
|--|---|---|
| <input type="checkbox"/> regular soda
_____ | <input type="checkbox"/> cookies ____ | <input type="checkbox"/> rice cakes ____ |
| <input type="checkbox"/> diet soda ____ | <input type="checkbox"/> cake ____ | <input type="checkbox"/> pretzels ____ |
| <input type="checkbox"/> 100% juice
_____ | <input type="checkbox"/> ice cream ____ | <input type="checkbox"/> fruit ____ |
| <input type="checkbox"/> fruit drinks
_____ | <input type="checkbox"/> frozen yogurt
_____ | <input type="checkbox"/> vegetables
_____ |
| <input type="checkbox"/> chocolate ____ | <input type="checkbox"/> popsicle ____ | <input type="checkbox"/> muffins ____ |
| <input type="checkbox"/> candy ____ | <input type="checkbox"/> nuts ____ | <input type="checkbox"/> [ethnic food]
_____ |
| <input type="checkbox"/> chips ____ | <input type="checkbox"/> cheese ____ | <input type="checkbox"/> other ____ |
| | <input type="checkbox"/> crackers ____ | |
| | <input type="checkbox"/> popcorn ____ | |
59. What are your favorite snacks? (List 3-5 choices.)
60. What kind of snacks do you like the most?
 sweet and crunchy
 sweet, but not crunchy
 salty and crunchy
 salty, but not crunchy
 crunchy
 pickle-tasting
 [ethnic choice/flavor]
 other
61. Would you eat [ethnic foods/snacks] if they were available at the school cafeteria or snack bar?
62. I choose my snacks because... (Check all that apply.)
- | | |
|---|--|
| <input type="checkbox"/> my friends like these snacks | <input type="checkbox"/> they fill me up and satisfy my appetite |
| <input type="checkbox"/> they taste good | <input type="checkbox"/> I don't always get enough to eat at regular meals |
| <input type="checkbox"/> they have [ethnic group] flavors and spices which I like | <input type="checkbox"/> I can afford them |

63. Sweet snacks usually... (Check one.)
- | | |
|--|--|
| <input type="checkbox"/> make me feel good | <input type="checkbox"/> are a cool food |
| <input type="checkbox"/> don't taste all that good | <input type="checkbox"/> are not available to me |
| <input type="checkbox"/> taste good | <input type="checkbox"/> are eaten a lot at our home |
64. I like salty snacks... (Check one.)
- | | |
|---|--|
| <input type="checkbox"/> more than sweets | <input type="checkbox"/> depending on how I feel |
| <input type="checkbox"/> less than sweets | <input type="checkbox"/> I don't like snacks |
| <input type="checkbox"/> about the same as sweets | |
65. How much do you spend each day on snacks? Each week?
66. What snacks do your parents have at home? (Check all that apply.)
- | | | |
|---|-------------------------------------|--|
| <input type="checkbox"/> regular soda | <input type="checkbox"/> candy | <input type="checkbox"/> vegetables |
| <input type="checkbox"/> diet soda | <input type="checkbox"/> crackers | <input type="checkbox"/> ice cream |
| <input type="checkbox"/> 100% fruit juice | <input type="checkbox"/> cheese | <input type="checkbox"/> frozen yogurt |
| <input type="checkbox"/> fruit drinks | <input type="checkbox"/> popcorn | <input type="checkbox"/> [ethnic food] |
| <input type="checkbox"/> chips | <input type="checkbox"/> pretzels | <input type="checkbox"/> other: _____ |
| <input type="checkbox"/> cookies | <input type="checkbox"/> rice cakes | |
| | <input type="checkbox"/> fruit | |
67. I eat snacks mostly because... (Check all that apply.)
- they are foods I can buy for myself with my own money
 - they fill me up when I am hungry
 - I get bored sometimes, and eating stops my boredom
 - I get nervous sometimes, and eating stops my nervousness
 - they taste good
 - they are not too expensive
 - my friends eat these foods
 - it's the American thing to do
68. I eat snacks... (Check one.)
- | | |
|---|---|
| <input type="checkbox"/> frequently (>5 times a week) | <input type="checkbox"/> rarely (1-2 times a month) |
| <input type="checkbox"/> a lot (3-5 times a week) | <input type="checkbox"/> never or almost never |
| <input type="checkbox"/> sometimes (<3 times a week) | |
69. I eat fast foods... (Check one.)
- | | |
|---|---|
| <input type="checkbox"/> frequently (>5 times a week) | <input type="checkbox"/> rarely (1-2 times a month) |
| <input type="checkbox"/> a lot (3-5 times a week) | <input type="checkbox"/> never or almost never |
| <input type="checkbox"/> sometimes (<3 times a week) | |
70. How many times each week do you go to fast food restaurants? Do you go by yourself, or with family or friends?

71. Which fast food restaurants do you eat at most often?
- | | | |
|--------------------------------------|--------------------------------------|--|
| <input type="checkbox"/> McDonald's | <input type="checkbox"/> Round Table | <input type="checkbox"/> Arby's |
| <input type="checkbox"/> Carl's Jr. | <input type="checkbox"/> KFC | <input type="checkbox"/> Other |
| <input type="checkbox"/> Burger King | <input type="checkbox"/> Pizza Hut | <input type="checkbox"/> [local ethnic |
| <input type="checkbox"/> Jack in the | <input type="checkbox"/> Little | fast-food |
| Box | <input type="checkbox"/> Caesar's | restaurant] |
| <input type="checkbox"/> Taco Bell | <input type="checkbox"/> Wendy's | |
| <input type="checkbox"/> Del Taco | | |
72. I eat junk food and fast food because that is what most American children and teens eat much of the time.
- | | |
|---|---------------------------------------|
| <input type="checkbox"/> agree | <input type="checkbox"/> do not agree |
| <input type="checkbox"/> agree somewhat | <input type="checkbox"/> not sure |
73. I eat fast food only when my parents let me.
- | | |
|---|---------------------------------------|
| <input type="checkbox"/> agree | <input type="checkbox"/> do not agree |
| <input type="checkbox"/> agree somewhat | <input type="checkbox"/> not sure |
74. I eat fast food anytime I want to.
- | | |
|---|---------------------------------------|
| <input type="checkbox"/> agree | <input type="checkbox"/> do not agree |
| <input type="checkbox"/> agree somewhat | <input type="checkbox"/> not sure |
75. When I get sick, I mostly like... (Check all that apply.)
- | | |
|--|---|
| <input type="checkbox"/> home-cooked meals | <input type="checkbox"/> fast foods |
| <input type="checkbox"/> soda | <input type="checkbox"/> snacks |
| <input type="checkbox"/> milk | <input type="checkbox"/> fruits |
| <input type="checkbox"/> juice | <input type="checkbox"/> vegetables |
| <input type="checkbox"/> soup | <input type="checkbox"/> nothing (I have no appetite) |
| <input type="checkbox"/> sandwich | <input type="checkbox"/> [other ethnic food] |
76. Do you drink coffee? How many cups per day? Per week? How does it make you feel?
77. Which kind of chicken do you usually eat?
- | | |
|--------------------------------|----------------------------------|
| <input type="checkbox"/> fried | <input type="checkbox"/> roasted |
| <input type="checkbox"/> baked | <input type="checkbox"/> broiled |
78. What kind of potatoes do you usually eat?
- | | |
|---------------------------------|---------------------------------------|
| <input type="checkbox"/> baked | <input type="checkbox"/> french fries |
| <input type="checkbox"/> boiled | <input type="checkbox"/> hash browns |
79. What type of fat or cooking oil is used in your home? (Check all that apply.)
- | | |
|--|--|
| <input type="checkbox"/> shortening | <input type="checkbox"/> meat fat (bacon drippings, roast juice) |
| <input type="checkbox"/> vegetable or corn oil | <input type="checkbox"/> fats and oils rarely used |
| <input type="checkbox"/> margarine | <input type="checkbox"/> other ____ |
| <input type="checkbox"/> butter | <input type="checkbox"/> not sure |
| <input type="checkbox"/> lard | |

80. Do you add butter or margarine to your food at the table?
- | | |
|------------------------------------|----------------------------------|
| <input type="checkbox"/> butter | <input type="checkbox"/> both |
| <input type="checkbox"/> margarine | <input type="checkbox"/> neither |
81. Foods cooked with oil, butter, and fat... (Check one.)
- taste good because you need oil to have flavor
 - sometimes taste too oily
 - taste too greasy most of the time
 - I can't tell the difference if they are cooked in oil or not
82. I don't eat much fruit because... (Check all that apply.)
- | | |
|---|--|
| <input type="checkbox"/> it costs too much | <input type="checkbox"/> it doesn't taste all that good |
| <input type="checkbox"/> we don't have much at home | <input type="checkbox"/> that's what adults want me to eat |
| <input type="checkbox"/> it's not a "cool" food | |
83. Have you ever been told that certain foods are just for kids or just for teens? If so, which foods?
84. Do you add salt, MSG, soy sauce, or seasoning salt to your food when cooking it?
- | | |
|------------------------------------|-----------------------------------|
| <input type="checkbox"/> yes | <input type="checkbox"/> never |
| <input type="checkbox"/> sometimes | <input type="checkbox"/> not sure |
85. Do you add salt, MSG, soy sauce, or seasoning salt to your food at the table?
- | | |
|------------------------------------|-----------------------------------|
| <input type="checkbox"/> yes | <input type="checkbox"/> never |
| <input type="checkbox"/> sometimes | <input type="checkbox"/> not sure |
86. Is sugar added to the vegetables cooked at your home?
- | | |
|------------------------------------|-----------------------------------|
| <input type="checkbox"/> yes | <input type="checkbox"/> never |
| <input type="checkbox"/> sometimes | <input type="checkbox"/> not sure |
87. Do you like to try new foods? (Check one.)
- | | |
|--|--|
| <input type="checkbox"/> yes, almost always | <input type="checkbox"/> sometimes, if it seems like it might taste good |
| <input type="checkbox"/> sometimes, if my friends are trying them too | <input type="checkbox"/> sometimes, if I think it will make me healthy |
| <input type="checkbox"/> sometimes, if an adult or someone else I know asks me to try it | <input type="checkbox"/> rarely |
| | <input type="checkbox"/> never |
88. What type of bread do you usually eat at home? (Check all that apply.)
- | | |
|--------------------------------------|--|
| <input type="checkbox"/> white bread | <input type="checkbox"/> English muffin |
| <input type="checkbox"/> brown bread | <input type="checkbox"/> [ethnic-specific bread] |
| <input type="checkbox"/> cornbread | <input type="checkbox"/> other |
| <input type="checkbox"/> muffin | |
89. Do you take vitamins? If so, what kind? Do your parents give them to you?

90. Where do you think you eat the most nutritious food? (Check one.)
- at home
 - at school
91. Who usually prepares the meals at your home?
92. Do you eat the foods my parents serve at dinner even though you know they have too much fat and salt? (Check all that apply.)
- yes, because if I did not, it would be rude
 - yes, because if I did not, they would get mad at me
 - yes, because food is expensive, and we should not waste it
 - yes, because I like it, and it tastes good
 - yes, because my parents know what foods are best for me, no matter what anyone else says
 - yes, because these are foods that I was raised on
 - no, I don't always eat it
 - no, the foods we eat do not have too much fat and salt
93. Who taught you about what is and what is not nutritious food? What foods did you first learn about? Which ones were good to eat, and which ones are not good to eat?
94. Is there always enough food at home to eat?
95. When I hear people talk about eating less fat, less salt, less sugar, and more fiber, I feel... (Check all that apply.)
- that's OK for adults, but I don't have to worry about it
 - I should listen so that I can be healthy
 - I would like to eat right, but it's hard to change my habits
 - I would like to eat right, but I can't help it because the foods I've been raised on have a lot of fat, sugar, and salt and not much fiber
 - it's none of their business, and I just ignore them
96. My grandparents (or older aunts, uncles, and relatives) mostly eat [ethnic group] food such as [examples of ethnic food].
- | | |
|------------------------------------|-----------------------------------|
| <input type="checkbox"/> yes | <input type="checkbox"/> never |
| <input type="checkbox"/> sometimes | <input type="checkbox"/> not sure |
| <input type="checkbox"/> rarely | |
97. I like to eat the type of food my older relatives eat... (Check one.)
- all the time, no matter when
 - sometimes, when I am in the mood for it
 - when it's served to me
 - when I am at home with my family, but not at school
 - never
98. Do your parents or does anyone in your family ever talk to you about what foods are good to eat? If so, which foods?

99. I talk to my parents (mother or father) about the food I eat and what is good to eat...
- | | |
|--|---------------------------------|
| <input type="checkbox"/> a lot of the time | <input type="checkbox"/> rarely |
| <input type="checkbox"/> sometimes | <input type="checkbox"/> never |
100. Do your parents eat healthy? Is eating healthy important to your parents?
101. When your family goes shopping, do they buy chips and sweets?
- | | |
|--|-----------------------------------|
| <input type="checkbox"/> yes, most of the time | <input type="checkbox"/> never |
| <input type="checkbox"/> sometimes | <input type="checkbox"/> not sure |
| <input type="checkbox"/> rarely | |
102. What are some of the foods associated with [your ethnic group]? Do you like most of these foods? Do you like them more, less or the same as American foods?
103. If [ethnic food/snack] were offered to you at school or some place outside of your home, would you ever feel embarrassed about eating it in the presence of other people? If so, why? What people would make you feel embarrassed?

Body Image and Self-Esteem

104. My body size (weight) is... (Check all that apply.)
- | | |
|---|--|
| <input type="checkbox"/> just about right | |
| <input type="checkbox"/> a little too big | |
| <input type="checkbox"/> a little too small | |
| <input type="checkbox"/> big, but OK for [ethnic group] people my age | |
| <input type="checkbox"/> small, but OK for [ethnic group] people my age | |
105. What are the messages you get about your body? How do they make you feel? What do you want to do about it?
106. I would like to have a body like a... (Check one.)
- | | |
|--|--|
| <input type="checkbox"/> professional athlete | <input type="checkbox"/> somebody from an ethnic group different from mine |
| <input type="checkbox"/> movie and television star | <input type="checkbox"/> other |
| <input type="checkbox"/> my PE teacher | |
| <input type="checkbox"/> [ethnic role model] | |
107. What do you want to do with your weight?
- | |
|--|
| <input type="checkbox"/> want to lose weight |
| <input type="checkbox"/> want to gain weight |
| <input type="checkbox"/> nothing, I'm satisfied with my weight |
108. Which of the following do you do to lose weight? (Check all that apply.)
- | | |
|--|--|
| <input type="checkbox"/> watch what I eat | <input type="checkbox"/> take diet pills |
| <input type="checkbox"/> diet | <input type="checkbox"/> take laxatives |
| <input type="checkbox"/> skip breakfast | <input type="checkbox"/> drink herbal teas |
| <input type="checkbox"/> skip lunch | <input type="checkbox"/> throw up or vomit after meals |
| <input type="checkbox"/> skip dinner | <input type="checkbox"/> exercise and work out |
| <input type="checkbox"/> avoid or eat fewer snacks | <input type="checkbox"/> I don't try to lose weight |

109. Do you do anything to lose weight or to keep from gaining weight? What do you do?
110. If you take diet pills, how often do you take them?
111. Have you ever deliberately made yourself vomit after you ate? Was it so that you would not gain weight?

Physical Activity Behavior

112. What do you do for fun?
113. What do you do after school? (Check all that apply.)
- | | |
|--|--|
| <input type="checkbox"/> do homework | <input type="checkbox"/> exercise or do physical activity |
| <input type="checkbox"/> play outside | <input type="checkbox"/> play a video game or on the computer |
| <input type="checkbox"/> eat dinner | <input type="checkbox"/> clean room or do chores |
| <input type="checkbox"/> eat one snack | <input type="checkbox"/> go to an after-school activity or class |
| <input type="checkbox"/> eat more than one snack | |
| <input type="checkbox"/> read | |
| <input type="checkbox"/> watch TV | |
114. What is your favorite sport or physical activity?
115. Do you participate in PE at school on a regular basis?
116. Do you like PE?
117. Do you usually sweat and breathe hard when you are in PE class or doing sports activities?
- | | |
|--|---------------------------------|
| <input type="checkbox"/> yes, most of the time | <input type="checkbox"/> rarely |
| <input type="checkbox"/> sometimes | <input type="checkbox"/> never |
118. Circle the activities that you have participated in now or in the past few months. Put a check by the activities that you do at least once a week:
- | | | |
|---|---|--|
| <input type="checkbox"/> basketball | <input type="checkbox"/> dance | <input type="checkbox"/> cheer-leading |
| <input type="checkbox"/> aerobics | <input type="checkbox"/> hockey | <input type="checkbox"/> pushups |
| <input type="checkbox"/> soccer | <input type="checkbox"/> swimming | <input type="checkbox"/> hiking |
| <input type="checkbox"/> running | <input type="checkbox"/> sit-ups | <input type="checkbox"/> stretching exercises |
| <input type="checkbox"/> jumping rope | <input type="checkbox"/> weight lifting | <input type="checkbox"/> muscle toning exercises |
| <input type="checkbox"/> jumping jacks | <input type="checkbox"/> roller-blading | |
| <input type="checkbox"/> skate boarding | <input type="checkbox"/> football | |
| <input type="checkbox"/> baseball | <input type="checkbox"/> volleyball | |
| | <input type="checkbox"/> bike riding | |
119. How many days a week do you exercise (walk, run, bicycle, play sports) for at least 1 hour?

120. How do you get to and from school?
121. Do you climb stairs every day? Every week? Where?
122. What are your main reasons for exercising (or being physically active everyday)? (Check all that apply.)
- | | |
|--|--|
| <input type="checkbox"/> to lose weight and fat | <input type="checkbox"/> to be strong |
| <input type="checkbox"/> to be with my friends | <input type="checkbox"/> to be healthy |
| <input type="checkbox"/> to feel good and have fun | |
123. What are your main reasons for not exercising (or not being physically active everyday)? (Check all that apply.)
- | | |
|--|---|
| <input type="checkbox"/> it messes up my hair and/or make-up | <input type="checkbox"/> it's too hard |
| <input type="checkbox"/> there's no time | <input type="checkbox"/> there's no place to do it |
| <input type="checkbox"/> I hate to sweat | <input type="checkbox"/> my PE teachers are unfair to females |
124. Do you usually have enough energy during the day?
125. Do your parents or older brothers and sister ever want to do physical activities with you?
126. Do your parents do any physical activities? Do they have enough energy to exercise?
127. How many hours a day do you watch TV?
128. Which best describes your level of physical fitness? (Check one.)
- | | |
|--|--|
| <input type="checkbox"/> out of shape | <input type="checkbox"/> in very good shape |
| <input type="checkbox"/> kind of in good shape | <input type="checkbox"/> in better shape than I was 6 months ago |
| <input type="checkbox"/> in good shape | |

Access to Foods

129. Which stores are in your neighborhood? (Check all that apply.)
- | | |
|--|---|
| <input type="checkbox"/> Safeway, Lucky, or other large grocery stores | <input type="checkbox"/> farmer's markets |
| <input type="checkbox"/> discount grocery stores like Food Outlet | <input type="checkbox"/> convenience stores like 7-11 |
| <input type="checkbox"/> small markets | <input type="checkbox"/> liquor stores |
| | <input type="checkbox"/> [ethnic] food stores |
130. Where does your family shop for groceries? (Check all that apply.)
- | | |
|--|---|
| <input type="checkbox"/> Safeway, Lucky, or other large grocery stores | <input type="checkbox"/> farmer's markets |
| <input type="checkbox"/> discount grocery stores like Food Outlet | <input type="checkbox"/> convenience stores like 7-11 |
| <input type="checkbox"/> small markets | <input type="checkbox"/> liquor stores |
| | <input type="checkbox"/> [ethnic] food stores |

131. Where do you buy snacks in your neighborhood? (Check all that apply.)
- | | |
|--|--|
| <input type="checkbox"/> Safeway, Lucky, or other large grocery stores | <input type="checkbox"/> vending machines |
| <input type="checkbox"/> discount grocery stores like Food Outlet | <input type="checkbox"/> mobile van or truck or cart |
| <input type="checkbox"/> small markets | <input type="checkbox"/> school cafeteria |
| <input type="checkbox"/> farmer's markets | <input type="checkbox"/> school snack bar |
| <input type="checkbox"/> convenience stores like 7-11 | <input type="checkbox"/> fast food restaurants |
| <input type="checkbox"/> liquor stores | <input type="checkbox"/> youth center snack bar |
| | <input type="checkbox"/> neighborhood "snack shack" |
| | <input type="checkbox"/> [ethnic] food stores |

Safety

132. Where do you go in your neighborhood to play? Do you feel safe there?
133. Which three things worry you the most? (Write 1, 2, or 3 next to the response.)
- | | | |
|--|---|---|
| <input type="checkbox"/> drugs | <input type="checkbox"/> family problems | <input type="checkbox"/> smoking |
| <input type="checkbox"/> crime | <input type="checkbox"/> health | <input type="checkbox"/> body image |
| <input type="checkbox"/> alcohol | <input type="checkbox"/> lack of exercise | <input type="checkbox"/> poor eating habits |
| <input type="checkbox"/> sex | <input type="checkbox"/> gangs | <input type="checkbox"/> self esteem |
| <input type="checkbox"/> teenage pregnancy | | |
134. Which three things worry you the least? (Write 1, 2, or 3 next to the response.)
- | | | |
|--|---|---|
| <input type="checkbox"/> drugs | <input type="checkbox"/> family problems | <input type="checkbox"/> smoking |
| <input type="checkbox"/> crime | <input type="checkbox"/> health | <input type="checkbox"/> body image |
| <input type="checkbox"/> alcohol | <input type="checkbox"/> lack of exercise | <input type="checkbox"/> poor eating habits |
| <input type="checkbox"/> sex | <input type="checkbox"/> gangs | <input type="checkbox"/> self esteem |
| <input type="checkbox"/> teenage pregnancy | | |

135. Would you play at [playground, center, or area] if there were adult supervision there?

Access to Places for Physical Activity

136. Do you know about many of the recreational places in your community?
137. Do you use any of these? If so, which ones?
138. What things keep you from doing more physical activities? (Check all that apply.)
- not enough recreational centers and parks
 - no transportation to recreational centers and parks
 - not enough after-school activities
 - schedule conflicts
 - parents want me to study more than play sports
 - parents do not want to exercise with me
 - not enough time during PE
 - away from home or school
 - other _____

Acculturation

139. What language do you usually speak at home? (Choose only one.)
- | | |
|---|---|
| <input type="checkbox"/> mostly English | <input type="checkbox"/> both English and [ethnic language] the same amount |
| <input type="checkbox"/> mostly [ethnic language] | |
| <input type="checkbox"/> other | |
140. Is it hard to understand your teachers sometimes?
141. Do you find it difficult to read?
142. What is the ethnic background of most of your friends?
- | |
|--|
| <input type="checkbox"/> the same as mine |
| <input type="checkbox"/> different backgrounds - some like mine, some different |
| <input type="checkbox"/> most of them are from a different ethnic background than mine |
143. What foods do you associate with being an American? What foods do you associate with being [ethnic group]?
144. Do you like foods better if you do not have to use American eating utensils (knives, forks, spoons)?
- | | |
|------------------------------------|---|
| <input type="checkbox"/> yes | <input type="checkbox"/> no |
| <input type="checkbox"/> sometimes | <input type="checkbox"/> it does not matter |
145. Do you do any extracurricular activities (such as belong to social clubs, girl scouts, [ethnic] language schools)?

Peer Influence

146. How often do you eat with your friends? When do you eat with your friends?
147. How often do you do physical activities with your friends? When do you do physical activities with your friends?
148. Do your friends influence the snacks you eat?
149. Do your friends influence the fast foods you usually eat?

Family Influence

150. List 3 rules that your parents have laid down about eating, snacking, and going out to restaurants (fast food or other types).
151. Do your parents care if you snack? Do they let you snack only at certain times? When?
152. Have you ever been told that you can't have any food (snack or more servings at meals) even though you still feel hungry?
153. How often are you allowed to eat out with friends?

154. How often do you and your family go out to restaurants (or fast food places) to eat? Where do you usually go, and on what days do you go there?
155. Do you have food money for snacks, lunch, and fast foods? Where do you get it from?
156. What do your parents think of you participating in sports and athletics?
157. What do your parents think of you participating in dance classes?
158. What do your parents think of you going to boy/girl dances?
159. Have your parents told you certain foods they ate when growing up on are good for you? Which ones?
160. Have your parents ever said anything about new foods, low-fat foods, or healthy foods? If so, do you remember what they said?
161. How often do you eat [ethnic] food at home (or at restaurants with your family)?
- | | | | |
|--------------------------|--------------------------|--------------------------|-------------------------|
| <input type="checkbox"/> | mostly every day | <input type="checkbox"/> | 1-3 times a week |
| <input type="checkbox"/> | more than 3 times a week | <input type="checkbox"/> | less than 1 time a week |

Health Awareness

162. Do you think that what you eat and how much physical activity you do can influence whether you get sick or not?
163. Do you think your eating and exercise habits at your age now can influence your health when you are an adult?
164. I would think more about being healthy... (Check one.)
- | | |
|--------------------------|---|
| <input type="checkbox"/> | if I were older |
| <input type="checkbox"/> | if I didn't have to worry so much about gangs, drugs, violence, and crime |
| <input type="checkbox"/> | if I didn't have so many problems |
| <input type="checkbox"/> | if I were not already so overweight |
| <input type="checkbox"/> | if I were more in shape |
| <input type="checkbox"/> | I already think about health a lot |
| <input type="checkbox"/> | other _____ |

Demographic Background

165. How old are you?
166. What grade are you in?
167. Are you a female or male?
168. How tall are you?
169. How much do you weigh?

170. Were you born in the U.S.?
171. Were your parents born in the U.S.?
172. What kind of job does your mother and/or father have?
173. How many people live in your house?
174. Do any of your grandparents or other extended family live in your home?
175. Are you Latino, Hispanic, or Spanish?
- no
 - yes, I'm Mexican, Mexican American, or Chicano
 - yes, I'm Central American
 - yes, I'm South American
 - yes, I'm another Latino/Hispanic/Spanish group: _____
176. What is your race/ethnicity? (Check all that apply.)
- | | |
|--|---|
| <input type="checkbox"/> White | <input type="checkbox"/> Asian Indian |
| <input type="checkbox"/> African American, Black, or Negro | <input type="checkbox"/> Cambodian |
| <input type="checkbox"/> American Indian/Native American or Alaska Native tribe: _____ | <input type="checkbox"/> Chinese |
| <input type="checkbox"/> Native Hawaiian | <input type="checkbox"/> Filipino |
| <input type="checkbox"/> Guamanian | <input type="checkbox"/> Hmong |
| <input type="checkbox"/> Samoan | <input type="checkbox"/> Japanese |
| <input type="checkbox"/> Other Pacific Islander: _____ | <input type="checkbox"/> Korean |
| | <input type="checkbox"/> Laotian |
| | <input type="checkbox"/> Vietnamese |
| | <input type="checkbox"/> Other Asian: _____ |
| | <input type="checkbox"/> Other: _____ |

Appendix C – Sample Introductory Script

The people who run the California Nutrition and Adolescent Fitness (CANFit) Program want to find out about ethnic differences in eating patterns and in ways of being physically active. In order to meet this goal, we need to understand more about why young people eat the foods they do in the first place and why so many youth are not physically active today. These are the reasons why we are asking these questions.

Remember, there are no right or wrong answers to the questions we discuss here today. Our goal is to hear directly from you as representatives of young people throughout California. We want to hear your attitudes and your deep feelings about eating, both traditional and “regular” American foods. Of course if any question bothers you, you don’t have to answer it. We appreciate getting answers to all of the questions that you feel comfortable about answering.

We thank you for taking the time to meet with us and sharing some of your honest opinions with us. This is a very important assignment. Your information can help us expand CANFit programs. We hope that these programs will encourage other young people just like yourselves to take more positive steps in eating healthier and becoming physically fit.

First, we will start of with some discussion questions about eating and physical activity, in general. Then we will talk about some of the eating and physical activity patterns that may be unique to your ethnic group...

Appendix D – Sample One-on-One/Small Group Interview

Eating Patterns

1. What are your favorite snacks? What are your favorite foods at meals? What are your overall favorite foods?
2. What is your favorite candy and favorite snack? What salty snacks do you like? Do you like crunchy foods or smooth-feeling foods on your tongue? Do you like bitter, pickle, or tart tastes?
3. When do you snack the most (walking to and from school, watching TV, hanging out with friends)?
4. Do you like the foods served in the school cafeteria? Why or why not?
5. Do you know many meals you eat each day, or is it hard to remember all of them?
6. Do you ever skip meals? Which meals do you skip? Why do you skip them?
7. Do you like home cooked meals?
8. Which meals do you eat at home? At home, does everyone in your family sit down and eat together?
9. What is the first thing you eat when you get up? Do you usually eat breakfast? If so, what do you eat?
10. What kinds of food do you eat at lunchtime?
11. What do you generally eat for dinner?
12. Do you drink milk? What kind of milk? Does milk make you sick?
13. What beverages do you usually drink?
14. Do you eat just when you are hungry or sometimes because you feel nervous, bored, or frustrated?

Physical Activity

15. Are you physically active every day of the week? Just some days? For example, do you walk to school, climb stairs at your home or at school, walk on errands? Do you consider these kinds of things physical activities?
16. What things do you think of when people, especially your teachers and counselors, mention exercise? Do you play sports or work out? If so, which activities do you like? Which do you not like?
17. How do you feel about exercising and playing sports, especially if it means getting sweaty and getting your hair messed up? (specifically for females)
18. Do you like to play sports in the presence of the opposite sex? Do you go to dances where both girls/young ladies and boys/young men are present?
19. Do you dance much? How many times a week or month do you dance? For how long? Where and with whom?
20. Do you consider dance a form of physical activity? Do you ever sweat when you dance? Do you enjoy sweating when you dance? Sometimes? All the time? Never?

Nutrition Knowledge

21. What are some of the most important things that you have learned about healthy nutrition?
22. Do you know what the Food Guide Pyramid is? What are the 6 main food groups? Do you remember which ones you're supposed to eat most of your foods from everyday?

23. Do you know about heart disease, osteoporosis, diabetes, hypertension? Does anyone in your family have any of these diseases?
24. Are any of these diseases linked to poor nutrition and low physical activity?
25. Have you ever been told that certain foods are just for kids? If so, which foods are these? Why are these foods supposed to be for kids?

Family Influence

26. Is there any difference between what you've learned about eating from your family and what you've learned about nutrition at school? If there is, how does this make you feel?
27. Who does the grocery shopping at your home? Who prepares and cooks the food?
28. Who first taught you about food? How old were you when you first remember being taught about different foods? Did anyone ever talk to you in detail about which foods are good for you and which ones are not? Did they ever say that some foods are healthy and make you strong? If so, which foods?

Cultural Beliefs and Influences

30. What's your idea of being "an American" when it comes to nutrition and eating? What foods do you think are associated with being American?
31. What foods are associated with your ethnic group? Does your family eat any of these foods? Often? Sometimes? Rarely? Never?
32. Do you ever feel embarrassed about the kinds of food people in your ethnic group usually eat, especially when you hear jokes about them on TV or at the movies? When do you feel this way?
33. Do you always like to eat these foods no matter what anyone says, or do you only like to eat them at certain times like when you're with your friends or your family?
34. Do you think that most people in your ethnic group are underweight, just the right weight, or overweight? Do you think that some people are just naturally thin and others are more prone to being heavier? How do you feel about this issue?
35. Do you feel comfortable playing sports with people of different ethnic background? Why or why not? Do your parents and family mind if you do? Why or why not?

Environment

36. What places are there in your community to play sports or do physical activities? Do you always feel safe and comfortable in these places? Why or why not? What would make you feel safe and make you (and your parents) feel OK about playing in these areas?

Health Awareness

37. Do you feel that you are healthy? Why or why not?

Appendix E – Sample Focus Group

Eating Patterns

1. Do you eat breakfast, lunch, and dinner on a regular basis?
2. Do you skip breakfast? Lunch? Dinner?
3. What is your favorite meal of the day?
4. What foods do you eat at school?
5. Do you buy your lunch?
6. Do you bring your lunch to school? If so, what kind of food do you bring?
7. What are your favorite snacks?
8. Who usually cooks at home? Do you help?
9. How many meals do you prepare for yourself? What kinds of meals or snacks do you usually prepare?
10. Which kind of chicken do you usually eat - fried baked, broiled?
11. What kind of potatoes do you usually eat - baked, boiled, french fries, hash browns?
12. Have you ever tried low-fat, light, or low-calorie foods? Why or why not?
13. How many times each week you go to fast food restaurants? Do you go by yourself, or with family or friends?
14. What are your favorite fast foods? Favorite fast food restaurants?
15. Do you eat alone much? How often?
16. Do you like the food at school?
17. Do you eat sweets (candy bars, cookies) when you feel stressed out or angry? How do you feel after you have eaten them?

Physical Activity

18. What things do you do for fun?
19. How many hours of TV do you watch each day?
20. What shows do you watch?
21. What radio stations do you listen to?
22. When you hear the term “exercise,” what comes to mind? What does exercise mean to you?
23. Do you need physical exercise equipment to be physically fit? Why or why not?
24. What kinds of physical activities do you do for fun?
25. What sorts of physical activities do you do in the summer?
26. What sorts of physical activities do you do in the winter?
27. Do you participate in PE at school on a regular basis? Do you like PE?
28. What activities do you like the most, the least?
29. To lose body fat, is it better to run, do aerobics, or both?
30. Do your eating patterns affect your physical activity level?
31. Are girls who are good athletes respected by their peers, family, teachers?
32. How do you get to and from school?
33. What chores do you do every day or every week? Do you have to be physically active to do any of these?
34. Do you hang out in the park with your friends? What kinds of activities do you do?
35. Do you belong to any youth groups such as scouts, church groups, recreational centers, or social clubs?

Body Image and Self Esteem

36. Does your size or how much you weigh affect the way you feel about yourself?
37. Does it affect your eating habits?
38. Does it affect your activity level?
39. Does it affect the kind of clothes you choose to wear?
40. How do you think other people see you in terms of your size? Do you care what they think?
41. Does working out make you look better, worse, or the same?
42. Would you feel better about yourself if you were physically fit?

Family Influence

43. How do you parents feel about you buying snacks?
44. Do you ever argue with your parents over what you should eat?
45. Does your family have a microwave?
46. Do you eat frozen foods cooked in the microwave very often?
47. Is there always enough food at home to eat?

Peer Influence

48. What kind of foods do your friends think are cool?

Culture

49. What are some of the foods associated with you ethnic group?
50. Do you like most of these foods? Do you like them more or less or the same as “regular” American foods?

Environment

51. Where do you buy food (groceries and snacks) in your neighborhood?
52. Where do you go in your neighborhood to play? Do you feel safe there?
53. Are there mostly single family dwellings, duplexes, or apartments in your community?
54. Do many homes (especially single family homes) have backyards?
55. What kinds of jobs are available in your neighborhood? For adults? For kids?
56. Is there much public housing in your community? Do you feel safe in these areas? Why or why not?
57. Do there seem to be many unemployed adults in your community? What do they do during the day?
58. Can you estimate the percentage of families in your community who have cars?

Health Awareness

59. What does it mean to eat healthy?
60. Do you ever think about being healthy? If so, what do you think about?
61. Do you think you have to give up all the things you like to be healthy?
62. What health concerns or problems are facing you and your family?
63. What things do you think you and your family could do to be healthier?

Appendix F – Sample Questions for Community Mapping

1. What kinds of food stores are in your community?
2. How far does your family have to travel to get to a grocery store, especially the store you usually shop at?
3. Which stores do you usually shop at for food? Large chain grocery stores? Large discount grocery stores (where they mostly have canned goods)? Small grocery markets? Small convenience and liquor stores?
4. Are there ever farmers' markets in your community? How far away is the nearest farmers' market, and how often is it held?
5. What fast food restaurants are in your community? What other types of restaurants are there?
6. What kinds of recreational facilities (PE centers, sports clubs) are in your community? How far are they from where you live and/or go to school?
7. Are there public parks in your community?
8. What kinds of health care facilities are in your community? How far are they from where you live and/or go to school?
9. What areas in your community do you feel most safe in? What areas least safe? Do you feel safe going to parks and recreational centers?
10. Are any of the following in your neighborhood? If so, to what degree are they present? Drug dealing? Gangs? Other violence? Unsafe motorists?
11. Are there adequate stop signs, traffic lights, and speed bumps in your community to stop motorists from driving too fast?
12. Are there adequate street lights in your community?
13. What kinds of churches are in your community?
14. What kinds of billboard advertisements are in your community? Are there mostly ads for liquor, cigarettes, fast foods, other items? Which of these do you think are positive, negative, or neutral?
15. How visible are the police and law enforcement in your neighborhood? In the larger community? Do you think the presence of police is a good sign? Why or why not?
16. What types of transportation are found in your community (cars, buses, taxis, motorcycles, bicycles, etc.)? Do the buses run frequently and on schedule in your neighborhood?
17. Is there a shopping mall in your community? What kind of impact does it have on the community? Explain why.

Appendix G – Post-Program Follow-Up Questions

1. What is the average level of literacy of the youth in your target population?
2. How well do they understand and communicate in standard English?
3. Were the survey questions read out loud, or did the youth have to read them on their own? How did you know that they were answering the questions truthfully?
4. How in-depth do you feel your survey helped to identify the needs of youth in your target population in terms of:
 - a. knowledge (known factual information)
 - b. behavior (the actual day-to-day habits of eating and physical activity)
 - c. attitudes about these issues
 - d. motivation - what excites the youth, bores them, angers them
 - e. external influences on their nutrition and physical activity behavior
 - i. peer pressure
 - ii. family
 - iii. holidays and festive occasions
 - iv. celebrity role models
 - v. local and community role models
 - vi. available foods and stores in their community
5. Did you observe any gender differences in behaviors and attitudes? If so, which ones? Were any of these differences related to specific cultural/ethnic beliefs and practices?
6. Did you ask any of the target youth how they felt or what was going on in their head when they ate a lot of junk food (especially during one sitting), perhaps as they watched TV or “pigged out”? Were they necessarily always hungry when they did this? Before participating in the CANFit program, did they ever stop to think if it was good for them? Did any of them feel a sense of frustration that they were willing to talk about? If yes, about what?
7. Were you able to gauge the influence of “Americanization” or acculturation on the youth? (This is a sensitive issue, but one which can help generate important information for developing the initial needs assessment, as well as for making ongoing program refinements. This question must be asked carefully phrased in such a way to say that neither traditional customs nor mainstream American behavior are better or worse than the other, even though certain eating and physical activity behaviors may be healthier.)
8. What cultural factors did you seek to understand or inquire about in your survey?
9. What are 3-5 things that you think are examples of specific cultural/ethnic beliefs and behaviors associated with your target population?
10. What other cultural factors do you think could have been included in your needs assessment? Why did you omit these?
11. Do you think that some youth would be offended if you brought up cultural and ethnic issues? Why or why not?
12. In the focus groups, or free-for-all discussions, did anyone mention traditional foods eaten at home or traditional food preparation (for example, influences and practices or beliefs of elders, such as grandparents)? If so, did discussion of these topics seem to embarrass or upset anyone? Did any of the youth try to hide their feelings about these issues?
13. Did you talk about body image, size, and weight? In talking about body size, who did the young people look to as a standard? Was it a model or athlete or entertainer, or perhaps a person from their community? There may have been a range of opinions. What were

- they? Were the role models of fit and healthy individuals usually of the same or different ethnic backgrounds?
14. Did the youth talk in terms of what they thought was the norm for their ethnic group or their peer group? For example, was there a difference in the SES background of girls who seemed satisfied with being slightly overweight versus those very much concerned with becoming thin?
 15. Did the youth think that most people (youth) in their ethnic/cultural group were basically physically fit? Did they think that those in their ethnic group were generally good in sports, or perhaps more inclined to do better in school? Why did they think this?
 16. What gender differences did you find in beliefs and behaviors associated with physical activity, and how were these related to specific ethnic/cultural factors?

Appendix H – Tables

Tables 1-5 provide information useful in the planning stages of the needs assessment, including youth-specific and ethnic-specific data. Project coordinators should refer to these tables when constructing their surveys and focus groups.

Table 1 lists the major information categories that should be addressed in all CANFit needs assessments and provides examples in each category that characterize general youth behavior, ethnic-specific behavior, and cultural beliefs and attitudes related to nutrition and physical activity.

Table 2 details some of the main nutrition- and physical activity-related diseases found in ethnic groups in the United States.

Table 3 shows the relative likelihood that certain ethnic groups in the U.S. will develop nutrition and physical activity related diseases.

Table 4 describes the demographics and cultural values of the four main U.S. ethnic groups.

Table 5 summarizes the findings from CANFit grantee projects. It includes data on the knowledge, attitudes, behaviors, environmental factors, and cultural factors influencing nutrition and physical activity among various groups of low-income multi-ethnic youth. While certainly not exhaustive, the chart illustrates the categories of ethnically and culturally relevant information that can be gathered by project administrators seeking to develop an ethnic-specific nutrition and physical activity needs assessment of their target adolescent group. However, it must be recognized that the information in this chart reveals trends that may not always hold true for every individual within a community or even for all communities of or similar ethnic and socioeconomic backgrounds. Project leaders must be careful to not use these patterns to stereotype adolescents in their target groups.

Table 1. Categories of Needs Assessment Information

	General Youth Knowledge and Behavior	Ethnic-Specific Knowledge and Behavior	Cultural Beliefs
Eating Patterns	Milk and beverage consumption, lactose intolerance, skipping meals, weight loss efforts, number of servings of: vegetables and fruits, fast foods, high-fat, high salt foods, regular meals	Milk and beverage consumption, lactose intolerance, frequency of fast foods vs. traditional foods, traditional high-fat, high-salt foods; ethnic breakfast and dinner foods	Is milk associated with sickness? Is it alright to overeat if everyone else is? Are dietary habits considered inevitable and too fixed to be changed?
Access to Foods	Large vs. small grocery stores; liquor stores, fast food restaurants; source of snacks (stores, school cafeteria, beanery, home, friends)	Ethnic grocery stores (for ethnic foods and/or snacks); ethnic restaurants (family or fast-food); source of snacks (stores, school cafeteria, beanery, home, friends); how often kids eat with family	Are foods sold in stores considered healthy simply because they are there?
Nutrition Knowledge	Food Guide Pyramid and major food groups; nutrition-related diseases of American ethnic minorities; sources of nutrition knowledge (school, TV, friends)	Placement of traditional ethnic foods (often food combinations) on food chart; nutrition-related diseases prevalent in target ethnic groups; dieting vs. watching what you eat	Are certain foods associated with healing and body strength (e.g. soup for the Chinese is said to have medicinal value and to prevent colds)? Do certain foods symbolize ethnic pride?
Physical Activity Patterns	Amount of time per week for PE and extracurricular sports; walking to school/stores/on errands; climbing stairs; dancing; gender-related differences in physical activity	Family and ethnic approval vs. disapproval of certain physical activities (e.g. females dancing, walking, engaging in sports); gender-related differences in physical activity along ethnic lines	Why do family members disapprove of physical activity for their kids? What family and ethnic myths inform these views?
Physical Activity Knowledge	Types of fitness activities and fitness (cardiovascular, muscular, flexibility); physical fitness-related diseases of Americans in general	Relationship between physical fitness and diseases in target ethnic group	Is PE considered a detriment to learning and doing well in school? Conversely, are ethnic groups stereotyped for their higher proportion of professional athletes considered more physically fit?
Safety of Places in the Community	Youth gangs, threats from older youth, muggings, rape, illegal drugs, drug trafficking, prostitution, crime in general	Youth gangs, threats from older youth, muggings, rape, illegal drugs, drug trafficking, prostitution, crime in general	Does imminent threat of danger from members of the same ethnic group in community affect self-image and self-esteem of adolescents? What is the impact of deep-seated fears of violence and crime?

	General Youth Knowledge and Behavior	Ethnic-Specific Knowledge and Behavior	Cultural Beliefs
Body Image	Self-perceived images of overweight vs. underweight vs. just right; role models considered to have ideal body	Self-perceived images of overweight vs. underweight vs. just right based on norms of ethnic group; ethnic vs. American popular role models considered to have ideal body	Are there conflicts between larger body size and media images of thin as norm? Is thinness associated with drugs, AIDS, malnutrition, poverty, being “unethnic?”
Health Awareness	Adolescent sense of immortality; future-oriented health concerns; self-evaluation in relation to body image	Eat and enjoy life; understanding of relationship among food, physical activity, and disease	Are there attitudes of live and let live vs. knowledge of relationship of nutrition and fitness to ethnic disease?
Level of Acculturation	Foods and lifestyles associated with being an American; fluency in standard English; self-perceived and family-perceived notions of being American	Traditional food vs. fast foods and/or American foods; competence in standard English; shame or embarrassment associated with ethnic foods and lifestyle behaviors	Are traditional family or American values emphasized most?
Peer Influence	Taste, cost, being cool, kid foods, peer acceptance	Taste, cost, being cool, kid foods, peer acceptance, meal foods and snacks eaten by family (siblings), friends	Does ethnic or American identity predominate, and under what circumstances? Are there cultural symbolic associations of higher vs. lower status foods?

Table 2. Nutrition and Physical Activity-Related Diseases Prevalent in U.S. Ethnic Groups

Disease	Associated Conditions	Nutritional Factors	Physical Activity Factors	Youth Risk Factors	At-Risk Groups
Type II Diabetes (Non-Insulin Dependent Diabetes Mellitus)	Heart disease, hypertension, stroke	High fat (especially saturated fats); refined carbohydrates; high calorie meals	Lack of physical activity resulting in excess fat; regular physical activity reduces risk	Overweight, obesity, overeating, lack of vitamin E	African Americans, American Indians, Filipinos, Samoans, South Asians
Heart Disease	Hypertension, sometimes diabetes	High fat (especially saturated fats); refined carbohydrates; high calorie meals	Lack of physical activity contributing to poor cardiovascular fitness and overweight; regular physical activity reduces risk of death	Overweight, obesity, overeating, excess consumption of red meat, lack of vitamin E	African Americans, American Indians, Filipinos, Samoans, South Asians
Hypertension		Excess salt	Lack of physical activity; regular physical activity prevents or delays onset and decreases blood pressure in hypertensive people	Overweight, obesity, overeating, excess consumption of table salt, stress	African Americans, American Indians, Filipinos, Samoans, South Asians
Stroke		High cholesterol-containing foods; excess salt		Obesity; elevated cholesterol and blood pressure; cigarette smoking	African Americans, American Indians, Filipinos, Samoans, South Asians
Tooth Decay and Gum Disease		Excess sweets, refined carbohydrates, and sugar; inadequate vitamin C and vitamin A (fresh fruit, green leafy vegetables, whole grain bread)		Excess consumption of sweets and candy; insufficient brushing with fluoride-containing toothpaste; insufficient flossing; inadequate dental care	

Iron Deficiency (Anemia)		Lack of eggs, fish, poultry, organ meats, green leafy vegetables, and vitamin C		Low consumption of meat and vitamin C foods	African American female adolescents
Disease	Associated Conditions	Nutritional Factors	Physical Activity Factors	Youth Risk Factors	At-Risk Groups
Vitamin A Deficiency		Lack of beta carotene-containing foods			Latinos, African Americans
Stunted Growth		Inadequate dietary protein		Inadequate nourishment	
Leg Cramps	Sometimes cardiovascular symptoms, diabetes	Lack of dietary calcium, vitamin B complex, and magnesium; inadequate protein	Inadequate physical activity	Smoking	
Fatigue		Deficiencies in vitamin B complex, vitamin C, vitamin D, and iron	Lack of adequate physical activity	Overweight, obesity, overeating	
Constipation		Lack of fiber-containing foods	Lack of adequate physical activity		
Cataracts		Excess milk, insufficient vitamin C, calcium, and riboflavin		Excess consumption of milk combined with lactose intolerance; stress	
Lead Poisoning				Use of lead-containing utensils and cookware	American Indians, Latinos, African Americans, poor and rural groups
Hypoglycemia and Mental Health		Excess sugar, refined carbohydrates, and caffeine; inadequate protein; excess fats can also contribute	Physical activity may reduce symptoms of anxiety and depression, possibly decrease risk for developing depression		

Overall Mortality	Chronic degenerative diseases, infectious diseases	Lack of balanced diet over the lifetime	Regular physical activity associated with greater longevity	Poor nutrition, sedentary lifestyle, and stress	
--------------------------	--	---	---	---	--

Table 3. Relative At-Risk Levels of Nutrition and Physical Activity-Related Diseases for U.S. Ethnic Groups

	Very High Risk	High Risk	Medium Risk	Low or Unknown Risk
African American	Hypertension Stroke	Diabetes Heart Disease Colon Cancer Anemia	Dental Caries	Osteoporosis
American Indian	Diabetes	Hypertension Heart Disease Stroke	Colon Cancer Anemia Dental Caries	Osteoporosis
Latino		Diabetes Hypertension Heart Disease	Osteoporosis Colon Cancer Anemia Dental Caries	Stroke
Chinese American and Korean American	Osteoporosis		Diabetes Hypertension Heart Disease Dental Caries	Stroke Colon Cancer Anemia
Southeast Asian American	Osteoporosis		Diabetes Hypertension Heart Disease	Stroke Colon Cancer Anemia Dental Caries
Filipino American		Diabetes Hypertension Heart Disease	Osteoporosis Dental Caries	Stroke Colon Cancer Anemia
South Asian (Indian) American		Diabetes Hypertension Heart Disease Stroke	Colon Cancer Anemia Dental Caries	Osteoporosis
South Pacific Islander	Diabetes	Hypertension Heart Disease	Dental Caries	Stroke Osteoporosis Colon Cancer Anemia

Table 4. Cultural Patterns of U.S. Ethnic Groups

	Demographics	Family	Language Barriers	Primary Values	Primary Religion	Health Beliefs and Behaviors	Other Issues
African American	<ul style="list-style-type: none"> • Population 34.6 million • 12.3% of US population • Almost all US born • Over 50% live in urban areas 	Often matriarchal; kinship important	Non-standard English sometimes causes barriers	Church, God	Christianity, some Islam	Illness and healing attributed to God and higher power; use family before seeking formal health care; medical doctors credible, although some mistrust of medical establishment; taboos around menstruation	Gangs, violence, drugs, unsafe communities
American Indian	<ul style="list-style-type: none"> • Population 2.5 million • 0.9% of US population • Almost all US born • 50% live in urban areas, 1/3 live on reservations 	Matriarchal/patriarchal; extended family important, but nuclear family sets cultural values	Some language barriers in access to health knowledge	Tribal values; respect for elders; males - having a family; females - being loved; harmony with humans, land, and spirit world	Traditional tribal religions, Christianity	Illness due to disharmony with nature or ghosts; healing due to harmony between land and spirit, and benevolence of ancestors and tribal deities	Very high levels of alcohol and drug abuse, suicide, depression, and apathy

<p>Latino (<i>Mexican Americans, Puerto Ricans, Cuban Americans Central and South Americans</i>)</p>	<ul style="list-style-type: none"> • Population 35.3 million • 12.5% of US population • Over 70% US born • 87% live in urban areas 	<p>Eldest male head of household; close kinship ties, both in nuclear and extended family</p>	<p>Language barriers in all facets of society</p>	<p>Diplomacy and courtesy; emotional expressiveness in personal relationships</p>	<p>Predominantly Roman Catholic; some Protestant faiths</p>	<p>Intertwined with folk religion; family folk healers credible and sought first; distrustful of non-Latino medical providers; cost often determines health services used; priests sometimes consulted</p>	<p>Gangs, violence, drugs, unsafe communities</p>
	<p>Demographics</p>	<p>Family</p>	<p>Language Barriers</p>	<p>Primary Values</p>	<p>Primary Religion</p>	<p>Health Beliefs and Behaviors</p>	<p>Other Issues</p>
<p>Asian/ Pacific Islander (<i>Chinese; Filipino; Japanese; Korean; Southeast Asian - Vietnamese, Cambodian, Laotian, Hmong, Thai; Pacific Islander - Hawaiian, Samoan, Tongan, Fijian, Micronesian</i>)</p>	<ul style="list-style-type: none"> • Population 10.6 million • 3.7% of US population • 75% are immigrants • Majority live in urban or suburban areas 	<p>Male traditionally head of household; strong kinship ties</p>	<p>Variable competency in standard English</p>	<p>Emotional control, scholarly accomplishments (Asian)</p> <p>Family social activities (Pacific Islanders)</p>	<p>Diverse - Buddhism, Taoism, Confucism, Islam, Christianity</p> <p>Catholicism (Filipino)</p> <p>Mormon (Samoan)</p>	<p>Illness associated with disharmony with nature, including natural forces (wind and fire); traditional practitioners and ethnic medical doctors credible; may use folk remedies and consult traditional healers first; consult Western trained medical practitioners who are from same ethnic group; fear and shame associated with dependency; emphasis on personal, interpersonal, and environmental harmony</p>	<p>Gangs, crime, youth violence, unsafe neighborhoods</p>

Table 5. Summary of Nutrition and Physical Activity Data from CANFit Grantees

	African American (mostly female)	Chinese American	Filipino American	Southeast Asian American	Korean American	American Indian	Latino (urban)	Latino (rural)
Nutrition Knowledge & Behavior	Poor knowledge about dangers of salt, fat, cholesterol; nutrition not a priority; most had not heard of Food Pyramid; many girls skipped breakfast; most not motivated to follow good nutrition	Relatively high; knew specific information about Food Pyramid; behavior influenced by parents	Fattening foods preferred; large meals eaten in evening; kids had poor nutritional knowledge; ate junk food	80% ate 3+ meal/wk with family; 72% had white over brown bread; 81% had cereal with milk over bacon and eggs; 56% had fast foods 2x/wk; 59% did not know number of fruit and vegetable servings; healthy = looking slim and skinny	Drank 1.8 cups of soda/day, 1.8 cups of milk/day; 1/4 kids ate less than 1 servings of vegetables/day	Poor knowledge levels; no awareness of difference between baked potato and french fries; most felt they did not have to worry about diabetes and heart disease; feared being ridiculed for eating salad (new food); rarely eat vegetables; some drank coffee	Ate fast foods 2-5/wk; 70% skipped breakfast; 60% ate 1 fruit/day; 56% ate 1 vegetable /day; 21-53% had no milk; 45% had whole milk; 77% drank coffee; 72% did not like school lunches; nutrition = everything without flavor; low-fat = low flavor and foods for sick and old people	55% drank milk - regular milk at home, chocolate milk away; cereal first food in morning; eggs only protein food eaten by 50%; younger kids liked fruits and vegetables; youth not used to eating plain cheese (in school cafeteria foods)
Traditional Ethnic Foods	Fried chicken, chitterlings, vegetables cooked with lard or bacon grease, high-fat, high-salt foods, sweets	Rice, vegetables, fish, soup, small amounts of meat; 85% youth ate traditional ethnic foods	Adobo, pancit, apritada, Filipino fruit salad, sauteed vegetables, ube cake		Ate one traditional Korean meal daily	Fried bread, fried foods, foods cooked in lard	Yogurt, mixed meat dishes, legumes, flour tortillas, vegetables, potatoes, margarine, oil, sweets, sopa	Menudo, carne asada, sopa, rice chicarrones

	African American (mostly female)	Chinese American	Filipino American	Southeast Asian American	Korean American	American Indian	Latino (urban)	Latino (rural)
Overall Favorite Foods	High-fat, high-sugar, high-salt foods	Rice for breakfast; dim sum, noodles, french fries, fried chicken	Processed and junk food, candy, soda, Kool-Aid, lemonade; ate high-fat foods in traditional restaurants			Beans with manteca (bacon fat) or lard, croissants, butter rolls	Girls - fruits and vegetables; boys - hamburger; both - pizza, tacos	Burgers, fries, soda
Favorite Fast Foods	Arbys Burger King Carl's Jr. Del Taco	McDonald's KFC Burger King Round Table	McDonald's	McDonald's		Access somewhat limited by no transportation		McDonald's Taco Bell Burger King
Favorite Snacks	Soda, chips, candy	Chips, ice cream, cookies, pizzas, fruit, Chinese crackers; candy eaten 2-3x/wk	Sweets, chips, chocolate milk, salty snacks, salty sauces	Chips/potato chips, ice cream, french fries, candy; boys drank more soda	Donuts, cookies, chips	Chips	Soda, chips, candy, pizza, popcorn, cereal, fruit, cheese and crackers, bagel and cream cheese, pretzels, sandwiches, cookies	Fruit, chips, candy, pizza
Determinants of Snack Choices	Followed choices of guardians	Taste, cost, parental guidance				Family and traditional practices influenced taste preferences for high-fat foods	Convenience	

	African American (mostly female)	Chinese American	Filipino American	Southeast Asian American	Korean American	American Indian	Latino (urban)	Latino (rural)
Stores for Food	Small convenience store	Liquor stores, corner stores	Small and large stores	School, small markets near home	School, convenience stores	School or small market near home	Convenience stores	Small markets
Physical Activity Knowledge	Unaware of benefits of exercise	Understood links between heart disease and physical inactivity		Possessed general but not specific knowledge of fitness				
Physical Activity Patterns	Majority did not exercise; activities - dance, walk, run, roller-skate, roller-blade	Played sports during PE and sometimes after school	Some youth got muscle cramps when exercising and swimming	76% exercised 3x/wk; played basketball, volleyball	45% exercised 3-4x/wk to lose weight	Males/females separated in exercise classes; BMI not correlated	Walking, roller skating, basketball	50% were sedentary; 30% exercised less than 3 days/wk; soccer, biking, baseball, basketball, La Quebradita (traditional Mexican dance)
Attitudes Towards Physical Activity	Thought physical activity affects appearance; family had strongest influence on sports activity	Most not inclined to play sports; boys did not like dancing	Boys did not want to excel in sports; girls did not want to sweat; did limited PE in school; friends influenced sports participation	Lack of exercise was 10th concern; friends had strongest influence on physical activity	Friends and family had same degree of influence on physical activity participation	Only males wanted fitness classes; girls did not want to sweat and did not want to walk if it were seen as exercise	Thought girls should not exercise, especially when pregnant; girls did not have athletic role models	Parents generally approved of girls doing traditional dance

	African American (mostly female)	Chinese American	Filipino American	Southeast Asian American	Korean American	American Indian	Latino (urban)	Latino (rural)
Body Size Image	Mean BMI for girls higher than whites	Most lean; parents forced some overweight youth to exercise	36% had distorted body image; many youth were overweight	Body image was 1 of top 10 concerns (#3 for girls); 52% of boys/girls were satisfied with weight	43% wanted to lose weight; 38% thought they were overweight	Many youth overweight and obese	44% overweight youth perceived themselves as normal	13% girls and 6% boys thought they are overweight
Weight Loss/Dieting	Girls skipped meals to lose weight; 40% skipped breakfast; girls thought weight training would make them “buff;” eat to lose weight, not for health; preferred to watch what they ate or skip meals rather than diet	Girls more interested than boys in losing weight	Difficult to find low-fat, low-salt foods in restaurants; eat-what-you-like attitude	Dieting meant eating less or not at all to look skinny	2/3 skipped meals; 16% wanted to lose weight (girls more than boys)	Most youth unconcerned about dieting; preferred to focus on having smaller proportions rather than counting calories and fat quantity	63% of boys and 43% of girls want to lose weight	Many skipped breakfast

Gender Differences	Girls more sedentary (TV, phone); faced discrimination in PE class	Boys did not mind playing sports, girls do not like sports	Parents hesitant about children playing sports, even less inclined to let girls play sports	Body image more important for girls; girls wanted to lose weight more than boys;	Girls wanted to lose weight more than boys; body image more important for girls	Girls resistant to physical activity	Parents opposed to girls dancing	Fathers generally objected to girls dancing
	African American (mostly female)	Chinese American	Filipino American	Southeast Asian American	Korean American	American Indian	Latino (urban)	Latino (rural)
Family Influence	Parental responsibility can be weak; junk foods eaten less when mothers intervened with daughters; domestic violence in some families	Strong families; youth learn from parents that sweets and snacks are kid foods; vegetables and soup are healthy for success in life	Parents often do not have time to cook or guide children's nutritional intake	Generally ate food parents chose for them	Families generally cohesive	Families/tribal elders resistant to change; parents concerned CANFit program would abruptly end	10-23% parents worried about their children	Parents complained of TV ads for beer, soda, sweet cereals
Literacy Level	Average is lower than American norm	Generally good; capable of taking written surveys; many were articulate in interviews	Variable; some content to be "under-achievers"	Variable		Variable; cognitive skills can be compromised by fetal alcoholism and early childhood diseases; oral questionnaires preferred	Variable, sometimes lower because of language barriers	Language barriers

Acculturation	Variable; girls attributed illness to “bad air”	Many are relatively acculturated even though traditional customs are still retained	Still retain many traditional customs	Emulate Western ideals; associated healthy image with blond or brown haired white person, well built models, or athletes	Consumption of traditional foods decreases in US; fat, refined carbohydrates, serum cholesterol levels increase	Children face pressure from two conflicting cultures	Semi-acculturated	Relatively unacculturated except for fast foods and dress
.	African American (mostly female)	Chinese American	Filipino American	Southeast Asian American	Korean American	American Indian	Latino (urban)	Latino (rural)
Social Environment	Gangs, crime, violence, drugs	Gangs in some areas make neighborhoods dangerous	Lack of healthy role models; youth gang violence, smoking, AIDS	Sex, drugs, alcohol, violence, more important issues than health; family problems and alcohol (girls); smoking, alcohol, drugs (boys); also body image		Alcoholism, lead poisoning, substandard housing, crowded living spaces, transportation problems getting to physical activity facilities	Gang violence, crime, drugs in some communities	Unsafe parks in housing projects

REFERENCES

- Balentine, M., Stitt, K., Bonner, J., Clark, L. 1991. Self-reported eating disorders of black, low-income adolescents: Behavior, body weight, and methods of dieting. *Journal of School Health* 61(9): 392-396.
- Becker, D.M., Hill, D.R., Jackson, J.S., et al., editors. 1992. *Health Behavior Research in Minority Populations: Access, Design, and Implementation*. U.S. Department of Health and Human Services (NIH Publication No. 92-2965). Washington, D.C.
- Berman, S.J. Oct. 28, 1996. Review of Adolescent Physical Activity, Nutrition, and Acculturation Surveys: A Report on the State of the Art (unpublished).
- Bowen, D.J., Tomoyasu, N., Cauce, A.M. 1991. The triple threat: A discussion of gender, class, and race differences in weight. *Women and Health* 17: 123-143.
- Bowling, A. 1997. *Measuring Health: A Review of Quality of Life Measurement Scales (second edition)*. Buckingham/Philadelphia: Open University Press.
- California Adolescent Nutrition and Fitness Program. 1995-1997. CANFit Grantee Reports. Berkeley, CA.
- Chapman, G. and Maclean, H. 1993. "Junk Food" and "Healthy Food:" Meanings of Food in Adolescent Women's Culture. *Journal of Nutrition Education* 25(3): 108-113.
- Duerr Evaluation Resources. July 12, 1996. CANFit Nutrition and Physical Fitness Survey Report. Chico, CA.
- Douglas, M. 1984. *Food in the Social Order: Studies of Food and Festivities in Three American Communities*. New York: Russell Sage Foundation.
- Eggert, L.L. 1984. Psychosocial Development in Adolescence. In: *Nutrition in Adolescence*, L.K. Mahan and J.M. Rees, editors. St. Louis: Times Mirror/Mosby.
- Foster, G.M. and Anderson, B.G. 1978. *Medical Anthropology*. New York: Alfred A. Knopf.
- Freedman, A.M. 1990a. Deadly Diet: Amid Ghetto Hunger, Many More Suffer Eating Wrong Foods. *Wall Street Journal* (Western edition), Tuesday, December 18, 1990. Palo Alto, CA.
- Freedman, A.M. 1990b. Habit Forming: Fast-Food Chains Play Central Role in Diet of the Inner-city Poor. *Wall Street Journal* (Western edition), Wednesday, December 19, 1990. Palo Alto, CA.
- Landrine, H., Klonoff, E.A. 1994. The African American Acculturation Scale: Development, Reliability, and Validity. *Journal of Black Psychology* 20: 104-127.

- Mahan, L.K. and Rosenbrough, R.H. 1984. Nutritional requirements and nutritional status assessment in adolescents. In: *Nutrition in Adolescence*, L.K. Mahan and J.M. Rees, editors. St. Louis/Toronto/Santa Clara: Times Mirror/Mosby.
- Majors, R. 1991. Nonverbal behaviors and communication styles among African Americans. In: *Black Psychology (third edition)*, R.L. Jones, editor. Berkeley: Cobb and Henry.
- McElroy, A. and Townsend, P.K. 1989. *Medical Anthropology in Ecological Perspective (second edition)*. Boulder, CO: Westview Press.
- Meredith, C.N. and Dwyer, J.T. 1991. Nutrition and exercise: Effects on adolescent health. *Annual Review of Public Health*, 12: 309-333.
- Modeste, N.N. 1996. *Dictionary of Public Health Promotion and Education: Terms and Concepts*. Thousand Oaks, CA: Sage Publications.
- Nichter, M., Rittenbaugh, C., Nichter, N., et al. 1995. Dieting and “watching” behavior among adolescent females: Report of a multi-method study. *Journal of Adolescent Health*, 17: 153-162.
- Robinson, T.N., Killen, J.D., Litt, I.F., et al. 1996. Ethnicity and body satisfaction: Are Hispanic and Asian girls at increased risk for eating disorders? *Journal of Adolescent Health*, 19: 384-393.
- Rucker, C. E., Cash, T.F. 1991. Body images, body-size perceptions, and eating behaviors among African-American and white college women. *International Journal of Eating Disorders*, 12: 291-299.
- Sallis, J., Strikmiller, P., Harsha, D., et al. 1996. Validation of interviewer- and self-administered physical activity checklists for fifth grade students. *Medicine and Science in Sports and Exercise*, 28: 840-851.
- Streiner, D.L. and Norman, G. R. 1995. *Health Measurement Scales: A Practical Guide to Their Development and Use (second edition)*. Oxford/New York: Oxford University Press.
- U.S. Census Bureau. 2001. Profile of General Demographic Characteristics for the United States: 2000.
- U.S. Dept. of Health and Human Services. 1996. Physical Activity and Health: A Report of the Surgeon General - Executive Summary. U.S. Dept. of Health and Human Services, Centers for Disease Control, National Center for Chronic Disease Prevention and Health Promotion, The President's Council on Physical Fitness and Sports.
- U.S. Dept. of Health and Human Services. 2001. Overweight in Children and Adolescents: The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity.