Needs Assessment Resource Manual: A Guide for State Nutrition Education Networks

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Prepared for:

U.S. Department of Agriculture
Food and Consumer Service
Alexandria, VA
Contract No. FCS: 53-3198-6-30

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April 1997

Table of Contents

CHAPTER I

Background and Overview

A. Background

One activity that reflects the U.S. Department of Agriculture's (USDA) commitment to nutrition promotion is the development of State nutrition networks. Since October 1995, USDA's Food and Consumer Service (FCS) has awarded cooperative agreements to 22 States to create nutrition networks that would develop innovative, large-scale, and sustainable approaches to providing nutrition education to low-income families that participate or are eligible to participate in the Food Stamp Program (FSP). Twelve States entered into agreements with FCS in 1995. In 1996, ten more States signed agreements.

These agreements fund State-level nutrition education networks of State and local government agencies, nonprofit organizations, and representatives of private industry. The purpose of the networks is to coordinate the delivery of nutrition education messages to the low-income population eligible for food stamps. In the past, some people participating in the FSP received nutrition education through individual counseling or classes. Now, FCS is promoting a new approach, designed to reach many more FSP participants and to bring about positive changes in behavior more effectively. The cooperative agreements provide States with resources to recruit network members, develop network membership, and create a nutrition education plan that is linked to social marketing techniques.

B. Purpose of This Guide

Although networks indicate that they are committed to using a social marketing approach to nutrition education, many are not entirely familiar with the approach. Often the term "social

marketing" is used to mean advertising or mass media programs designed to change behavior. While such programs can be important components of the social marketing process, other components, including rigorous planning and research, strategy development, program development and implementation, tracking, and evaluation are equally important. Health Systems Research, Inc. (HSR), as part of its contractual agreement with the FCS, is developing three manuals to assist networks with their social marketing activities.

This manual addresses the tasks involved with "needs assessment," and provides specific suggestions for conducting each task. The needs assessment process involves the planning, research, and initial strategy development required by a social marketing approach. Information on this needs assessment process should also be helpful to networks as they develop their Nutrition Education Plans (NEPs) to submit to the Food Stamp Program (FSP), since NEP reviewers look for evidence that networks have based their plans for nutrition education activities on a needs assessment. Similarly, USDA's Nutrition Education and Training Program (NET) requires that networks conduct needs assessments. A 1994 publication, *Needs Assessment Guide for the Nutrition Education and Training Program* provides guidance on needs assessment, for the NET Program.

This guide is not designed to present an exhaustive discussion of the process of needs assessment. Rather, it is tailored to serve the needs of nutrition networks, so it takes into account time, staff, and funding limitations. The focus is on practical methods that can be used, activities that can be conducted, and goals that can be accomplished by State nutrition education networks. The guide also contains a list of data sources and references that may be of use when networks conduct needs assessments.

C. Organization

The needs assessment process comprises the first part of the social marketing approach and involves planning, formative research, and some aspects of strategy development. This guide addresses these topics, beginning with an overview of the needs assessment process, and then continuing with a discussion of the following steps in the process:

- The initial planning phase, with a discussion of the tasks of identifying and using existing data (including relevant sources);
- The formative research phases; and
- The beginning of the strategy development phase, with a review and analysis of research findings.

Companion guides will cover further strategy development, program development and implementation, and tracking and evaluation.

CHAPTER II

The Needs Assessment Process

A. Overview of the Process

Needs assessment in a social marketing context is a process used to determine the needs of individuals or a group of individuals in order to design a program that will respond effectively to those needs and bring about desired changes in behavior. State nutrition education networks must conduct needs assessments to ensure that they develop and deliver nutrition education messages in an effective manner that is appropriate to the low-income target audience.

It is important to distinguish the needs assessment process used in social marketing from community needs assessment. In both instances, there is a systematic analysis of the extent to which defined problems—in this case, nutrition-related problems—exist in a given population. In community needs assessment, this information, along with information about the availability of nutrition-related services, is used to determine how effectively problems are being addressed and to design improved nutrition services.

In social marketing, which is consumer-focused, the needs assessment goes beyond the traditional public health approach that relies primarily on epidemiological data, and considers measures of values, beliefs, concerns, and practices of clients. The results of the assessment can provide not only information about the prevalence and incidence of nutrition-related behaviors, but also perspectives on why people behave in certain manners.

Needs assessment can provide the network with insights about the information channels that can reach people effectively, and with information about the types of messages that are likely to be

well received. Knowledge about these factors is key to the development of effective nutrition education programs.

In the needs assessment process, it is also important for the network to consider whose needs to address. In addition to learning about clients' needs, networks may also wish to address the needs of service providers in order to offer appropriate training to make the providers more effective. In some instances, the network may also assess the needs of its members in order to make network activities relevant and effective and to keep members involved.

Some network members may be eager to plan a set of nutrition education activities or interventions immediately or to replicate current activities, but in order to build a foundation on which a successful social marketing program can be sustained, the network must invest some time and funds for careful planning, research, and strategy development before program implementation.

Needs Assessment for Developing Systems of Care and for Promoting Behavioral Change

The term "needs assessment" is used commonly in a public health context to refer to a set of activities associated with planning and implementing systems of care. The focus is on identifying the need for specific services in order to develop a system of services that is responsive to a population's needs. In the social marketing context, needs assessment activities are undertaken by professionals whose broad goal is not only to provide services for a particular population, but also to bring about positive changes in the population's behavior.

Many data sources provide useful information for either type of needs assessment. Appendix A lists potential sources of secondary data from national surveys. USDA's Diet and Health Knowledge Survey, for example, is conducted as a telephone follow-up to the Continuing Survey of Food Intakes by Individuals. The two surveys provide information about food consumption practices and about attitudes toward diet, health, and food safety. Other national surveys listed in Appendix A also contain valuable data that can be used for community needs assessments to develop systems of care or for needs assessments conducted as part of social marketing efforts.

B. Setting Goals

State nutrition education networks have already accomplished some of the tasks in the initial stages of needs assessment. In most cases, networks convened a group representing a wide range of parties in the nutrition community and in related disciplines. Network membership must be broad enough so that all relevant parties are included, but a very large and diverse group may have difficulty reaching decisions. In many States, one early task will be to develop a mechanism for effective decisionmaking within the group.

Nutrition education networks have a mandate to improve the nutritional status of low-income consumers. This is the broad goal that should guide the needs assessment process. The challenge, during the early planning stages, is for networks to do enough planning so that the needs assessment will be focused, but not to do so much planning that conclusions are reached before there is evidence to support them. Put another way, this is a time to refine goals, but not to develop specific objectives that describe the steps that must be taken to accomplish the goals. For example, a nutrition education network may be aware that high fat diets are a problem for a particular segment of the low-income population. On the basis of that knowledge, it may be reasonable for the network to establish a goal of reducing fat in the diets of these individuals. It would likely be premature, however, for the network to decide on strategies to accomplish this, without information about what the population currently eats, why people choose certain foods, whether they are interested in changing their diets, and what might cause them to make changes.

The extent to which goals can be refined during the planning stages depends, in large part, on the level of experience and knowledge the network members possess from the start. Even if members do have extensive knowledge of nutrition-related problems in the community, that is not a sufficient basis on which to develop a strategy. Since the social marketing process is consumer-driven, the network will need other types of information. Thus, while it is not too early to refine goals during the initial phase of the planning process, it is too early to develop strategies or to decide on messages that will be used for programs.

C. Designing the Needs Assessment

Ideally, needs assessments will provide information to help network members design effective programs. In other words, the information gained from the needs assessment is used as the basis for designing activities that will appeal to the population. The needs assessment should not be undertaken to justify activities that have already been planned.

Before conducting a needs assessment, network members should agree on its primary purpose. Another essential factor to consider is the level of resources available. It is always tempting to design a broad needs assessment that provides a great deal of information about the population. There is sometimes the perception that since data are useful, more data will be even more useful. Nutrition education networks have neither the staff nor the funding to conduct extensive data collection efforts. Also, data analysis will be easier and more effective if the network considers only relevant data. The better defined a needs assessment is, the more likely it is to be useful. Therefore, it is important to determine the scope and boundaries of the effort before data collection begins.

Some networks may find it useful to prepare a written research plan to guide the process, which should state the goals and objectives for the process. The plan should also specify the tasks to be completed and specify who is responsible for each task and when the task is expected to be completed. A sample needs assessment plan from the California Nutrition Education Network is presented in Appendix B.

Network members must also decide who will conduct the needs assessment. In some States, network members or a committee composed of network members may take on this task; in other States, networks may hire outside consultants. The approach taken depends, to a certain extent, on the structure and composition of the network. The needs assessment process is complex and time consuming, and some networks may not have the internal resources or expertise to conduct it. Also, some networks may conclude that outside consultants can provide a more objective assessment of needs, because they do not have a particular interest or orientation. If networks do decide to use an outside consultant, however, network members

should stay involved in the process, since they have a good sense of what information is available and whom to contact in the State. And, if outside consultants are used to conduct the needs assessment, the network must be very clear about the expected tasks and product of the assessment.

Whichever approach is taken, it is important to keep network members engaged during the needs assessment process. A sample Request for Proposals for a needs assessment, written by the Minnesota Food and Nutrition Network, is included as Appendix C.

CHAPTER III

Review of Existing Data

A. Types of Data

Needs assessment is a data-driven process. Data are used to identify a target audience and to provide as complete a profile as possible about the target audience so that programs can be tailored to suit that audience.

Two types of data are used in the needs assessment process: Primary data, which are collected for a particular needs assessment initiative; and secondary data, which already exist. Since primary data collection requires substantial investments of time and resources, it makes sense to examine available secondary data first. Once existing information has been reviewed, the network can determine where gaps exist and can decide which primary data collection methods are most appropriate and feasible.

There are several types of information that can be used to identify and describe a target population:

- Information on characteristics of the population such as gender, age, racial or ethnic origin, place of residence, family composition, income, education, or occupation.
- Nutrition-related information, including indicators of nutritional status, measures of food consumption or dietary habits, data on the availability of different foods or types of foods, and data on food purchasing habits.
- Information on the availability of nutrition-related services, such as nutrition counseling or food assistance programs.

- **Information about attitudes, beliefs, opinions, and values** related to nutritional and food purchasing practices.

- **Information about lifestyle** such as where people get information, what groups they are affiliated or identify with, and whether they already participate in nutrition or health-related activities.

The bulk of existing data is likely to provide information on population characteristics and on nutrition-related conditions and practices. And, for the most part, the data will have been collected using quantitative methodologies. Since the social marketing approach for nutrition education has become more widely used over the past several years, however, some qualitative data that help explain the reasons for peoples' behavior may be available. (Additional information about peoples' attitudes, beliefs, lifestyles, and behaviors can be gleaned from primary data collection efforts during the formative research phase of the needs assessment process, which is discussed in the next chapter.)

B. Conducting a Focused Secondary Data Collection Effort

Secondary data collection and review should be effective, efficient, and not slow down the needs assessment process. Collecting information that is not used adds to the cost of the needs assessment and does not produce results. Therefore, an important task for the network is to limit the effort and not collect more data than is needed or will be used.

The network must first consider the goals that it has established. Some networks have established very broad goals while others have already conducted a preliminary examination of existing data, in order to narrow the focus of their projects. In order to simplify secondary data collection efforts, networks with very broad goals may want to meet and use the collective knowledge and interests of members to refine the goals. All networks should consider whether they can further narrow their goals before data collection begins.

At this stage, some networks may even be able to identify target audiences. For example, all networks are charged with providing nutrition education for low-income consumers participating in the FSP. The nutrition education network in Iowa has used available

information about population characteristics to do some additional targeting and found that Iowa's population is predominantly rural, white, and elderly. Therefore, the network will concentrate efforts on elderly Food Stamp recipients living in rural areas. Similarly, Missouri's early decision to focus on children was based on statistics showing that a large portion of the State's Food Stamp recipients are children.

Networks will find it useful to outline a final report for the secondary data collection and review effort before any data are gathered. This outline will help ensure that there is a purpose for examining each data element. For example, since networks are targeting consumers participating in the FSP, data for the low-income population or for families and individuals participating in the food stamp program should be examined, but there is no need to review such data for the whole population. Similarly, the network only needs to examine information about the dietary habits of low-income consumers, even though data on the habits of other consumers may prove interesting. Information on such characteristics as family composition, education, or occupation may provide more details about a population, but if the details are not directly related to the goals established by the network, the data should not be reviewed.

In States where a target population has already been identified, the secondary data collection effort can be much more limited and efficient; however, networks should only choose populations at this stage of the needs assessment process if there is convincing evidence to support the choice, and if there is consensus among network members.

C. Secondary Data Sources

A variety of sources can provide secondary data for needs assessment. The more population-specific data are, the more useful they are likely to be. For example, State-level data will likely be of greater use than national data, and if data for a particular community are available they will provide the most accurate and complete picture of the population. Unfortunately, less information is likely to be available on the local level than on the State or national levels. States collect some data on a routine basis, but national surveys are often the only source for particular types of information.

A review of secondary data should examine not only the actual data that are available from large surveys, but also smaller studies that have been conducted with that data. For example, data from the USDA's Continuing Surveys of Food Intakes by Individuals and from the Department of Health and Human Service's National Health and Nutrition Examination Survey have been analyzed to provide more specific information on the consumption of fruits and vegetables by children and adults.

Ideally, relevant information from national surveys can be used to guide State- and local-level efforts and can be supplemented with population-specific information from primary data collection efforts later in the needs assessment process. For example, a review of secondary data by staff at the Washington Heights-Inwood Healthy Heart Program in New York City showed that while the consumption of low-fat milk has been increasing and whole milk consumption has been decreasing nationwide, these trends were not occurring among the Hispanic population. Data from smaller studies in California and Texas showed heavy use of whole milk by Hispanic populations. Building on this information, a subsequent study of Hispanic children was conducted in the Washington Heights-Inwood community. It showed that whole milk was the single largest source of saturated fat in the children's diets (Weschler, et al., 1995).

On the State level, various agencies, including offices of vital statistics that are usually located in the health department, collect data that may be of use. In many cases, State offices forward the data to agencies such as the National Center for Health Statistics, which compiles it with data from other States. Network members should be aware that the most current data are probably available from State offices, though in some cases, data may be available in a form that is more readily usable from national agencies.

Other organizations compile State-specific information as well. For example, an annual publication, *Kids Count Data Book*, from the Annie E. Casey Foundation contains data on a number of socio-economic and health-related indicators (1994). Some State advocacy groups, particularly groups working on issues that affect children, publish reports with county-specific statistics. The Children's Defense Fund has also published a useful guide, *Information for*

Action, An Advocates's Guide to Using Maternal and Child Health Data (Braveman and Bennet, 1993).

Data from food assistance and health-related program records can also be useful for the secondary data collection effort. For example, State Women, Infants and Children (WIC) programs maintain a minimum data set that is used as the basis for the biannual WIC Participant Characteristics Study mandated by Congress. Also, State Maternal and Child Health programs are required to conduct needs assessments every five years for the populations they serve and submit those assessments with their block grant applications.

The collection of data on food sufficiency is a relatively recent activity. On a national level, some data are available from the National Health and Nutrition Examination Survey, conducted by the Department of Health and Human Services. Other information should be available soon from questions included in the Census Bureau's Current Population Survey. On the State and local levels, data to document food sufficiency may be available from statistics kept by food pantries, soup kitchens, and food banks.

Potential sources of secondary data from national surveys are described in Appendix A. The description for each data source indicates what type of potentially useful data it contains and whether the data are for national, State, or local populations. Information about how to obtain the data is also included.

It is important to note that many data sources have Internet web site addresses. These sites represent a relatively new, but particularly useful channel for information. In some cases, data formerly available from publications that are difficult and expensive to order can now be obtained immediately and free of charge via computer. In light of this opportunity, all nutrition education networks should ensure that they have access to the Internet and that they have the expertise to use this resource.

CHAPTER IV

Primary Data Collection

A. The Purpose of Primary Data Collection

Primary data collection can be conducted to provide data to fill the gaps identified during the review of secondary data. Much of the primary data collection involves methods that are focused on gathering data to better understand consumers. Specifically, nutrition education networks will want to obtain information about consumers' attitudes towards and beliefs about certain nutritional practices, about their willingness or readiness to make changes in their dietary habits, about what factors influence the nutrition-related decisions they make, and about what types of messages are likely to produce positive responses. Generally, secondary sources provide quantitative data for needs assessment, while primary data collection efforts are designed to produce qualitative data.

Data can also be collected to reveal more about the needs of the individuals who will actually deliver nutrition education services. For example, in addition to assessing the needs of elderly people who receive care through the Home Care Aide Program, the Iowa Nutrition Education Network plans to develop surveys to determine the nutrition education needs of the aides who provide these nutrition education services to the elderly. The network's intent is to respond to the aides' training needs and, thus, to make them more effective agents for improving their clients' behavior.

In planning for the primary data collection effort many of the same principles discussed in Chapter III apply. Since resources are limited, the networks must be as specific as possible about the purpose of the research; in fact, networks can use information from the secondary data collection effort to further define the purpose of the research. For example, a 1995 review

of adults' fruit and vegetable intake that used data from the Continuing Surveys of Food Intakes by Individuals concluded that most Americans fall short of minimum recommendations and suggested that research to identify the barriers to eating fruits and vegetables was needed (Krebs-Smith, et al., 1995).

Since it is likely that networks will have neither the time nor the funds to collect all the data that network members believe would be useful, members need to agree on the priorities for primary data collection and outline the anticipated product of the research.

B. Research Methods

Research methods commonly used in social marketing include in-depth interviews, key-informant interviews, focus groups, and surveys, and these methods are also appropriate for needs assessment:

- In-depth and key-informant interviews are conducted with representatives of a population, or with people who are knowledgeable about the population and who may be able to provide a different perspective on the needs of particular groups. The interviews should be conducted in person and should be structured, but with flexibility for discussion. Because interviewees have their own biases, the interviews should not be used as the sole source of information about a community or a population, but they may provide information that is not otherwise available.

- Focus groups bring together small groups of people to discuss particular topics. The purpose of the focus group is to provide more in-depth understanding about the needs, attitudes, opinions, experiences, or expectations of a population. Focus groups rely on group interaction to help bring out ideas and reactions.

- Surveys can be used to collect specific information at a given point in time from a large group of people. Generally efforts are made to ensure that those who participate in the survey are representative of a broader population. Data can be collected using written survey instruments, telephone interviews, or face-to-face interviews.

The method or methods chosen for a particular needs assessment depend on the purpose of the assessment and on the resources available to conduct the research. As with other aspects of the

needs assessment, the key is not to "over-collect" data. While it may be tempting to design a large quantitative survey, such research can be time consuming and costly to conduct.

A combination of methods can be helpful. For example, a needs assessment conducted to develop a school health program at the Claxton Elementary School in Asheville, North Carolina, involved three different activities: a health behavior survey for children, focus groups conducted with teachers and parents who discussed perceived problems and solutions, and a survey of parents on perceptions of health problems (Landis and Janes, 1995).

Another program, Project LEAN, which is a national social marketing program to reduce dietary fat consumption, developed messages on the basis of trend data from the Food Marketing Institute's surveys of household food shoppers and findings from focus groups (Samuels, 1993).

The Lowfat Milk Program, a social marketing program conducted by the Washington Heights-Inwood Healthy Heart Program to promote low-fat milk consumption in an inner-city Hispanic community, was based on a review of secondary data and on information provided by a study of food consumption patterns among children in the community. Program staff interviewed store owners and conducted a survey of food stores and schools to determine the availability of low-fat milk. Researchers also conducted informal interviews with community residents (Weschler and Wernick, 1992).

1. Interviews

As a technique, individual interviews are not as widely used as focus groups in formative research, but there are special circumstances that may make them more appropriate. For example, if the subject matter is particularly complex, researchers may want to gather opinions from individuals who are particularly knowledgeable. Also, researchers will want to use one-on-one interviews if the subject is so sensitive that researchers believe that individuals participating in a group setting are not likely to express their opinions fully. Similarly, if peer pressure might inhibit responses from group members, researchers may find individual

interviews more effective. In most instances, however, the topics that nutrition education networks are interested in exploring are not so complex or sensitive that they cannot be discussed effectively in a group setting.

2. Focus Groups

The use of focus groups has many advantages for nutrition education networks. They can provide data in a short period of time. They also provide an opportunity to elicit opinions from people who might not be willing to participate in more conventional surveys. And, they provide the type of data that is not likely to be available from other sources.

There are a number of decisions to make in planning for focus groups. The network must first determine the composition of the groups and the number of groups needed. Other practical considerations in planning for focus groups are the size of the group, the length of time the group will meet, and the setting for the group. Network members may decide to conduct focus groups on their own or to hire professionals who specialize in this area. In either case, members should be familiar with the process for conducting focus groups. While a detailed discussion of each aspect of the process is beyond the scope of this guide, a discussion of the basic process follows: (More detailed references are listed at the end of the guide)

- Define the target audience,
- Segment the population for focus groups,
- Prepare for the focus group, and
- Analyze and report the results.

a. Define the Target Audience

One early task is to define the target audience. Networks should consider identifying both a primary target audience (the group whose behavior the program is designed to change), and secondary target audiences (those with influence on the primary audience or those who must do something in order to help cause the change in the primary target audience).

For example, the goal of the Claxton Elementary School Health Program was to change children's behavior. While children were identified as the primary target audience, researchers recognized that their parents and teachers were important secondary audiences (Landis and Janes, 1995). One goal of the Lowfat Milk Program in the Washington Heights-Inwood community was to change the milk consumption preference of children, but mothers of children between the ages of 2 and 12 years were selected as the primary target audience, because they usually purchase the family's food. (Wechsler and Wernick, 1992).

The Healthy Infant Outcome Project, a program to improve the birth weights of infants born to a group of low-income women in Minnesota, was designed to change the behavior of pregnant women, but researchers recognized that health service providers were an important secondary audience (Brown, et al., 1992). The nutrition education network in Virginia plans to conduct focus groups with WIC staff and Expanded Food and Nutrition Education Program (EFNEP) paraprofessionals who provide nutrition education and with volunteers at a food bank.

b. Segmentation of the Population for Focus Groups

Since focus groups are generally conducted among homogeneous target populations, one important early activity in planning for focus groups is to further segment the target group. In doing, networks should consider which factors are relevant to the research. Age is one factor that may influence responses and interactions among group members. For example, as part of Minnesota's Healthy Infant Outcome Project, the target audience—low-income pregnant women—was segmented into teenagers and adults. This distinction was made to account for differences in lifestyle behaviors and perceptions about pregnancy (Brown, et al., 1992).

Another factor that may be important to consider in segmenting the target audience is the socio-economic status of participants. For example, the target audience for the Healthy Infant Outcome Project was limited to women who received prenatal care in public health clinics. This allowed researchers to control, in part, for variations in care that might occur among a group of women receiving care in different settings (Brown, et al., 1992).

Focus groups should be structured so that some members do not intimidate others. For example, if some participants are more literate or more articulate others may not speak up. Different levels of experience may pose problems as well. A group that consists of new mothers and mothers with older families may not produce the desired results, if the new mothers defer to those with more experience.

Cultural differences can also have an impact on behaviors and if participants of different cultures are mixed the opportunity to explore those impacts more fully may be missed. Similarly, there may be significant differences between men and women that inhibit discussion.

The number of focus groups needed depends, in part, on the composition of the groups and that should be determined by the subject matter that will be discussed. If possible, the network should conduct at least two groups for each major target population segment. This underscores the need to be certain that identified segments are large enough and important enough to justify the expenditure of resources. Depending on the subject matter, networks may also want to conduct the groups in different geographic regions.

A simple matrix can be used to describe the composition of focus groups. For example, group participants may be divided by whether they live in urban or rural areas and whether they are elderly or nonelderly. This would result in four categories: 1) elderly people living in urban areas, 2) nonelderly people living in urban areas, 3) elderly people living in rural areas, and 4) nonelderly people living in rural areas. If two focus groups were convened for each segment, a total of eight groups would be conducted. If possible, some flexibility should be built into the process so that if groups that were expected to be similar provide very different results, another group can be convened.

c. Preparing for the Focus Group

While focus groups are meant to feel informal when they are conducted, they must be well organized and structured to be effective. Generally, focus groups last about one-and-a-half hours, and they are taped so responses can be analyzed later.

A very important step in preparing for focus groups is to prepare a topic guide—a list of topics or question areas that are to be covered in the focus group. To prepare the guide, networks will find it useful to develop objectives and then to write questions that will elicit specific information related to each objective. (Open-ended questions with follow-up questions are recommended.) Regardless of who conducts the focus groups, network members should be involved with the preparation of the guide, which can serve as a summary statement of the issues to be covered in the focus group. To be effective, the guide should be tailored to cover just the issues of greatest interest.

The Healthy Infant Outcome Project established five focus group objectives related to eating and weight gain during pregnancy and a series of questions that would elicit responses from group members about those objectives (Brown, et al., 1992) Staff with the National Cancer Institute's 5-A-Day research program, designed to promote the increased consumption of fruits and vegetables by children, developed discussion guides to cover three different areas: the environment, behavior, and personal characteristics. Questions in the environmental area dealt with restaurants, fast-food establishments, home, and schools. Researchers also asked behavioral questions about food preparation skills and practices and about requests from children for fruits and vegetables. In addition, researchers asked questions related to personal characteristics, which examined personal tastes and preferences (Kirby, et al., 1995).

d. Analyzing and Reporting Results

Once focus groups have been conducted, the network must analyze and report the results. Focus groups are taped, and the tape transcription should be used for the analysis. Researchers should then group their findings according to the key issues (for example the issues identified in the topic guide), and identify ideas or opinions related to each issue. A synthesis of the group discussion should follow, with researchers identifying the constant themes that emerge in each topic area and themes that cut across topic areas. Researchers will find it is useful to include some discussion about the reasons the themes emerged, and to provide quotes from respondents to support the analyses.

The focus group report should describe the general purpose of the research and the specific informational objectives. The rationale for choosing the focus group methodology should be discussed and should include an explanation of the uses and limitations of the focus group results. Findings, conclusions, and recommendations should follow. The topic guide and any other materials used to prepare for or conduct the focus group should also be provided.

3. Surveys

While most nutrition education networks may not be equipped to conduct large surveys, the methodology should not be discounted. Surveys can provide data that would not be available using other methods. In some cases, information from focus groups can help inform researchers of salient issues to examine with surveys. As a matter of fact, researchers sometimes conduct focus groups first to help design survey instruments.

National surveys, or parts of national surveys, may serve as a model for primary data collection efforts among particular groups in States. For example, as part of the needs assessment for the Claxton Elementary School Health Program, children in grades three through five were asked to complete a health behavior survey. Many of the questions were taken from the Centers for Disease Control and Prevention's Youth Risk Behavior Survey. The questions were adapted to a second grade reading level (Landis and Janes, 1995).

Networks can also use surveys to collect information on the attitudes and beliefs of service providers and other secondary target audiences. For example, researchers from the Healthy Infant Outcome Project met with health care providers and developed a questionnaire to learn more about providers' opinions in the areas of prenatal diet and weight gain, and to identify potential barriers to carrying out planned interventions (Brown, et al., 1992). The Iowa nutrition education network plans to survey aides who provide homemaking services to elderly participants of the Home Care Aide Program. Information obtained from the survey will be used to develop training workshops for the aides.

Other types of small surveys, including those that rely on observation, have been used in communities to determine the availability of certain food products. Researchers in California measured shelf space occupied by low-fat and high-fiber products in grocery stores to characterize the community nutrition environment. They also conducted telephone surveys to measure the dietary habits of individuals in the community (Cheadle, et al., 1991). Researchers also surveyed small grocery stores, or *bodegas*, in the Washington Heights-Inwood community in New York City to measure the availability of low-fat milk (Weschler, et al., 1995).

As this discussion indicates, there are a number of effective methodologies that can be used to collect primary data during the formative research phase. When used in combination, such methods can provide information about several different aspects of the issues nutrition education networks want to address.

CHAPTER V

Strategy Development

Strategy development is the end-point for needs assessment, when research findings are translated into strategy. Networks now can use the results of primary and secondary data collection efforts to make some decisions about the direction the social marketing program will take.

At this point in the process, nutrition education networks will have to come to final agreement on the overall goals or mission of the project and make decisions about which segments of the population to reach and about the best strategies for getting each segment to change must be made. The network must establish specific, measurable objectives and a detailed work plan that will guide the development, implementation, and tracking of the social marketing program.

These activities will be discussed at greater length in the companion guide on social marketing, but before the specifics of each task are examined, it is important to stress that there should always be a direct link between the information provided by the data collection efforts and the activities designed.

Results from focus groups for Project LEAN, for example, suggested that motivation was key to reducing the amount of fat in respondents' diets. People knew about sources of fat, but the research showed that convenience, lifelong habits, and taste were major factors that influenced respondents' willingness to make dietary changes. On the basis of this information, Project LEAN messages were developed to be *both* motivational and informational. These messages were designed not only to provide specific guidance for dietary change, but also to heighten public awareness (Samuels, 1993).

Results from research conducted by the National Cancer Institute as part of its 5-A-Day program showed that families in lower socio-economic groups appeared to have few fresh fruits and vegetables in their homes, and that parents did not frequently provide fruits and vegetables in precut forms for their children. Also, the families ate at fast-food restaurant more frequently than other families, but children reported ordering few fruits and vegetables at the restaurants. Possible interventions suggested for this group included emphasizing the importance of having fresh fruits and vegetables available at home, introducing methods for parents to provide fruits and vegetables in the precut form preferred by children, and emphasizing possible fruit and vegetable choices at fast food restaurants (Kirby, et al., 1992).

Focus group results from the Healthy Infant Outcome Project were translated into nine design recommendations for a weight gain intervention project targeted to low-income women who receive prenatal care at public health clinics. For example, researchers concluded that diet and weight gain information should be presented by women who have had children and that mothers, boyfriends, or husbands should be included in the project. The researchers recommended that dietary and weight gain messages be directed toward the goal of having a healthy baby and suggested that concerns about weight gain during pregnancy and weight loss later on be addressed (Brown, et al., 1992).

During the course of their research for the Lowfat Milk Program, staff at the Washington Heights-Inwood Healthy Heart Program learned that many women in the Hispanic community believed that low-fat milk was made by adding water to whole milk. (This is done in some Latin American countries to reduce the cost of milk, so thicker whole milk was viewed as better milk by the women.) Therefore, when one-page flyers were produced for the Lowfat Milk Program, they included the statement, “Lowfat milk is made by taking the fat out of whole milk. No water or anything else is added to lowfat milk.” (Weschler and Wernick, 1992)

Research findings are not always conclusive, and there may be instances when findings are not interpreted in the same way by all network members. In reviewing data from the needs assessment, network members may identify a number of needs. If this occurs, the network will have to set priorities, since an important part of strategy development is to define the primary

problem or issue of concern on which the social marketing activities will be based. Even if all needs cannot be addressed immediately, however, the network can use the results from the first assessment for long-range planning. The results can also serve as the basis for conducting more refined assessments later. Needs assessment should not be a one-time activity; rather, new data about the population should be considered as social marketing programs are implemented. New information may provide insights that can be used to modify the program and make it more effective or the information may suggest a logical direction for subsequent programs.

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Appendix A: Potential Sources of Secondary Data from National Surveys

Appendix B: Sample California Needs Assessment Plan

Appendix C: Minnesota Request For Proposal

Appendix A: Potential Sources of Secondary Data from National Surveys			
Data Source	**Potentially Useful Data**	**Scope**	**Contact for Data**
National Health and Nutrition Examination Survey (NHANES) Department of Health and Human Services, Public Health Service, Centers for Disease Control, National Center for Health Statistics	Population ages 2 months and older Data for special population groups: children elderly African American Mexican American Topics: high blood pressure high blood cholesterol obesity osteoporosis growth and development blood lead anemia food sufficiency dietary intake	Nationally representative Seven surveys conducted since 1960.	For general information, contact the National Center for Health Statistics, 3700 East-West Highway, Hyattsville, MD 20782. Tel: (301) 436-7068 For NHANES data dissemination, call (301) 436-8500. For NHANES Statistics Office, call (301) 436-7068. Survey information at *http://www.cdc.gov/nchswww/nhanes.html* Summary information is available in the Centers for Disease Control's *Morbidity and Mortality Weekly Report* Tel: (404) 639-2100 Findings in the NCHS publication *Vital and Health Statistics* series 1 and 2

Appendix A: Potential Sources of Secondary Data from National Surveys (cont.)			
Data Source	**Potentially Useful Data**	**Scope**	**Contact for Data**
Hispanic Health and Nutrition Examination Survey (Hispanic HANES) Department of Health and Human Services, Public Health Service, Centers for Disease Control, National Center for Health Statistics	Population ages 2 months and older Population sub-groups include Mexican Americans in the Southwest Cubans in Miami Puerto Ricans in New York City area Same topics as NHANES	Regionally representative One-time survey conducted in 1982-84.	National Center for Health Statistics, 3700 East-West Highway, Hyattsville, MD 20782 Tel: (301) 436-7068 Survey information at *http://www.cdc.gov/nchswww/nhanes.htm*

Appendix A: Potential Sources of Secondary Data from National Surveys (cont.)			
Data Source	**Potentially Useful Data**	**Scope**	**Contact for Data**
Continuing Survey of Food Intakes by Individuals (CSFII) U.S. Department of Agriculture, Agricultural Research Service	Population subgroups: children elderly low-income Data reported by kinds/amounts of food consumed nutrient intake poverty levels participation in food assistance programs food expenditures and shopping practices region rural/urban location racial/ethnic group gender	Nationally representative CSFII 1994-96 is the third in a series of continuing surveys conducted since 1985.	For survey data contact the Survey Specialist/Nutritionist, Food Surveys Research Group, Beltsville Human Nutrition Research Center, Agricultural Research Service, USDA, 4700 River Road, Riverdale, MD 20737. Tel: (301) 734-8457 Survey information, results, data tables, and highlights at *http://www.barc.usda.gov/bhnrc/foodsurvey/home.htm* Micro data available for purchase from the National Technical Information Service, Department of Commerce, Springfield, VA. Tel: (301) 487-4650

Appendix A: Potential Sources of Secondary Data from National Surveys (cont.)			
Data Source	**Potentially Useful Data**	**Scope**	**Contact for Data**
Diet and Health Knowledge Survey (DHKS) U.S. Department of Agriculture, Agricultural Research Service	Population ages 20 years and older Data reported include knowledge and attitudes toward diet, health, and food safety	Nationally representative Survey conducted as a telephone follow-up to the Continuing Survey of Food Intakes by Individuals.	For survey data contact the Survey Specialist/Nutritionist, Food Surveys Research Group, Beltsville Human Nutrition Research Center, Agricultural Research Service, USDA, 4700 River Road, Riverdale, MD 20737. Tel: (301) 734-8457 1989-91 survey information at *http://www.barc.usda.gov/bhnrc/foodsurvey/csfii89.htm*
Pediatric Nutrition Surveillance System (PedNSS) Department of Health and Human Services, Public Health Service, Centers for Disease Control, National Center for Chronic Disease Prevention and Health Promotion	Population includes low-income, high-risk children participants in publicly funded prenatal nutrition and food assistance programs Topics: low birth weight pediatric nutrition	Nationally representative Conducted continuously since 1973.	Division of Nutrition, National Center for Chronic Disease Prevention and Health Promotion Tel: (404) 488-4344 Survey information at *http://www.cdc.gov/nccdphp/mathlth.htm*

Appendix A: Potential Sources of Secondary Data from National Surveys (cont.)			
Data Source	**Potentially Useful Data**	**Scope**	**Contact for Data**
Behavioral Risk Factor Surveillance Survey Department of Health and Human Services, Public Health Service, Centers for Disease Control, National Center for Chronic Disease Prevention and Health Promotion	Topics: weight control hypertension alcohol consumption Includes State-specific questions	Nationally representative Conducted continuously for past 11 years.	National Center for Chronic Disease Prevention and Health Promotion Survey information at *http://www.cdc.gov/nccdphp/surveil.htm*
National Health Interview Survey (NHIS) Department of Health and Human Services, Public Health Service, Centers for Disease Control, National Center for Health Statistics	Data topics include respondent-assessed health status Data reported by geographic location income level racial/ethnic characteristics 1992 survey includes the Youth Risk Behavior Survey Population of school-based youths Topics: weight control hypertension alcohol consumption	Nationally representative Conducted continuously since 1957.	National Center for Health Statistics, 3700 East-West Highway, Hyattsville, MD 20782 Tel: (301) 436-8500 Survey information at *http://www.cdc.gov/nchswww/nhis.htm* Findings published in the NCHS publications *Vital and Health Statistics* series 10 and *Advance Data from Vital and Health Statistics*.

Appendix A: Potential Sources of Secondary Data from National Surveys (cont.)			
Data Source	**Potentially Useful Data**	**Scope**	**Contact for Data**
National Survey of Family Growth (NSFG) Department of Health and Human Services, Public Health Service, Centers for Disease Control, National Center for Health Statistics	Population includes women of childbearing age (15-44) Topics: family size maternal and child health infertility low birth weight periconceptional behaviors	Nationally representative Survey conducted in 1973, 1976, 1982, 1988, 1990.	National Center for Health Statistics, 3700 East-West Highway, Hyattsville, MD 20782 Tel: (301) 436-8500 Information at *http://www.cdc.gov/nchswww/nsfg.htm* Data evaluated in Wilcox, L. S., and J. S. Marks. *From Data to Action: CDC's Public Health Surveillance for Women, Infants, and Children*. Washington, DC: U.S. Department of Health and Human Services. Findings published in the NCHS publications *Vital and Health Statistics* series 23 and *Advance Data from Vital and Health Statistics*.

Appendix A: Potential Sources of Secondary Data from National Surveys (cont.)			
Data Source	**Potentially Useful Data**	**Scope**	**Contact for Data**
Pregnancy Nutrition Surveillance System (PNSS) Department of Health and Human Services, Public Health Service, Centers for Disease Control, National Center for Chronic Disease Prevention and Health Promotion	Population includes high-risk pregnant women participating in publicly funded prenatal nutrition and food assistance programs Topics: low birth weight pregnancy nutrition	Nationally representative Conducted continuously since 1988.	Division of Nutrition, National Center for Chronic Disease Prevention and Health Promotion Tel: (404) 488-4344 Survey information at *http://www.cdc.gov/nccdphp/mathlth.htm*
National Vital Statistics System (NVSS) Department of Health and Human Services, Public Health Service, Centers for Disease Control, National Center for Health Statistics	Topics: births deaths fetal deaths Data reported by geographic location	Nationally representative with State, county, and local information	National Center for Health Statistics, 3700 East-West Highway, Hyattsville, MD 20782 Tel: (301) 436-8500 Information at *http://www.cdc.gove/nchswww/nvss.htm* Findings published in the *Monthly Vital Statistics Report*, *Vital Statistics of the United States* annual volumes, and *Vital and Health Statistics* series 20 and 21. Data available on public use data tapes and CD-ROMs.

Appendix A: Potential Sources of Secondary Data from National Surveys (cont.)			
Data Source	**Potentially Useful Data**	**Scope**	**Contact for Data**
National Maternal and Infant Health Survey (NMIHS) Department of Health and Human Services, Public Health Service, Centers for Disease Control, National Center for Health Statistics	Population includes women with infants Topics: low birth weight pediatric nutrition periconceptional behaviors pregnancy nutrition Data reported by income level racial/ethnic geographic location health status of mother and infant	Nationally representative Conducted in 1988 and 1992.	National Center for Health Statistics, 3700 East-West Highway, Hyattsville, MD 20782 Tel: (301) 436-8500 Information at *http://www.cdc.gov/nchswww/nvss.htm* Early findings published in the NCHS publication *Vital and Health Statistics* series 22, later findings in series 21.

Appendix A: Potential Sources of Secondary Data from National Surveys (cont.)			
Data Source	**Potentially Useful Data**	**Scope**	**Contact for Data**
Current Population Survey (CPS) U.S. Department of Commerce, Bureau of the Census	Data: income levels education levels racial/ethnic characteristics age family/household size geographic location marital status rural/urban population nutrition habits use of public assistance occupation sources of income Health-related variables are included annually in the March supplement of the CPS.	Nationally representative with regional and State information	For data, contacts, and information, contact the Customer Services, Bureau of the Census, Washington, DC 20233. Tel: (301) 457-4100 Fax: (301) 457-4714 Orders may be faxed to (301) 457-3842. Information and data available at *http://www.census.gov* Publications available at *http://www.census.gov/prod/www* Data products available at *http://www.census.gov/mp/www/censtore.html*

Appendix A: Potential Sources of Secondary Data from National Surveys (cont.)			
Data Source	**Potentially Useful Data**	**Scope**	**Contact for Data**
Decennial Census U.S. Department of Commerce, Bureau of the Census	Data: births deaths income levels education levels racial/ethnic characteristics age family/household size geographic location marital status rural/urban population	Nationally representative with State, county, and local information Survey last conducted in 1990.	For Census data, contacts, and information, contact the Customer Services, Bureau of the Census, Washington, DC 20233. Tel: (301) 457-4100 Fax: (301) 457-4714 Orders may be faxed to (301) 457-3842 Census information and data available at *http://www.census.gov* Publications available at *http://www.census.gov/prod/www* Data products available at *http://www.census.gov/mp/www/censtore.html*