

Evaluation of Statewide Nutrition Education Networks

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Glossary

Executive Summary

I. Background and Approach

A. Background and Purpose

This report describes the progress and accomplishments of 22 Statewide nutrition education networks funded through cooperative agreements awarded in September 1995 and in September 1996 by the Food and Nutrition Service (FNS). The demonstration sought to establish, in each participating State, a self-sustaining, collaborative Statewide nutrition education network of public and private organizations that would use social marketing concepts to provide nutrition education to adults and children who were participating in or eligible for the Food Stamp Program.

B. Study Approach

Under contract to FNS, Health Systems Research, Inc. (HSR) and its subcontractor, Research Triangle Institute (RTI), conducted a process evaluation that sought to examine those elements that foster the development of nutrition networks. The study team conducted baseline and follow-up site visits, telephone interviews and reviews of written materials produced by the networks. The networks were assessed in terms of their progress as of the fall of 1998.

II. Findings and Conclusions

A. Accomplishments

Sixty percent of the networks had achieved the objectives of their cooperative agreements by the fall of 1998:

- **Establishment of Broad Statewide Networks.** More than 80 percent of States that were awarded cooperative agreements had established broad networks of public and private organizations supporting nutrition education for low-income audiences.
- **Receipt of Nutrition Education Plans.** Seventy-five percent of Round One networks and one-half of Round Two networks submitted and received approval of a nutrition education plan (NEP) as part of the State Food Stamp Program.
- **Leveraging of Resources.** In total, USDA provided roughly \$4 million in funding for the two rounds of cooperative agreements (including the technical assistance associated with the initiative). In 1998, these networks attained more than \$20 million in non-federal funding and identified additional in-kind contributions from non-governmental organizations that further leveraged the resources that networks were able to devote to nutrition education. One network obtained more than \$8 million in new non-federal funding for nutrition education; other smaller networks saw comparable or greater rates of growth.
- **Planning and Development of Social Marketing Activities.** Nearly all networks were able to conduct planning and needs assessment for social marketing activities. As a result, networks are initiating new social marketing activities to reach low-income populations via mass media, targeted newsletters, nutrition education in schools serving low-income populations, and reminders among food retailers and community activities.

Evaluations conducted by the networks themselves indicate the value of these efforts. An evaluation of a pilot campaign in Michigan found that a social marketing effort that included broadcast and print messages was effective in reaching low-income populations. An evaluation in Washington state found that food stamp participants read and used nutrition information sent to them in newsletters. An evaluation in California found that kiosks in supermarkets serving low-income populations increased the purchase of fruits and vegetables.

B. Lessons about Success

Progress has not always been easy and networks faced formidable challenges in forging strong partnerships, in identifying and documenting resources under FSP matching requirements, and in developing social marketing efforts. While the majority of networks succeeded in addressing these challenges, a common feature of the networks that failed was their inability to successfully resolve inter-organizational issues regarding resources.

Important factors that contribute to the success of nutrition networks include: (1) experienced leadership teams, (2) support of senior management, (3) attention to partnership issues, (4) attention to resource management issues, (5) emphasis on complementary modes of social marketing, and (6) emphasis on development and enhancement of community nutrition education programs.

CHAPTER I

Background and Purpose

This report describes the progress and accomplishments of 22 Statewide nutrition education networks funded through cooperative agreements awarded by the Food and Nutrition Service (FNS) as part of a demonstration project in October 1995 and October 1996. These networks were intended to expand the reach and approach of nutrition education for participants in the Food Stamp Program (FSP) through the development of self-sustaining, collaborative Statewide networks of public and private organizations to plan and conduct nutrition education and social marketing to promote the Dietary Guidelines for Americans.

This chapter describes the background of the Statewide nutrition education network cooperative agreement demonstration and the purpose of this study.

A. Study Background

1. USDA Nutrition Programs

The nutrition assistance programs administered by the U.S. Department of Agriculture's (USDA's) Food and Nutrition Service (FNS) have long been the cornerstone of this country's effort to ensure adequate nutrition for the disadvantaged. In recognition of this responsibility, FNS has undertaken efforts to make high-quality nutrition education available to the largest possible number of individuals and families participating in nutrition assistance programs, while at the same time striving to assure that limited resources are used in a cost-effective manner. Historically, FNS has supported nutrition education through individual programs and stand-alone grant initiatives. For example, client education is integrated in the Special Supplemental Nutrition Program for Women, Infants and Children (WIC). Some grant programs have

provided seed money targeted to special audiences (e.g., teenagers) or to certain topics (e.g., breastfeeding). However, nutrition education is not required in most food assistance programs, including the largest of these: USDA's Food Stamp Program which provides food benefits to low income households.

To expand nutrition education efforts to reach Food Stamp participants, the Food Stamp Program, through optional Nutrition Education Plans, works in partnerships with States. State agencies may receive 50-50 Federal matching funds to conduct nutrition education. State Food Stamp Agencies may claim nutrition education activities as a reimbursable administrative expenses, along with certification, benefit issuance, and other administrative tasks.

Administrative activities are funded equally by States and the Federal government. State Food Stamp Agencies build these expenses into their annual State plans and budget projections. The commitment of these funds is contingent on FNS' approval of the plan and budget. If approved, funds which reflect costs to administer the plan are disbursed from FNS to the State Food Stamp Agency. The State Agency then has the authority to distribute funds in a manner consistent with Agency requirements and the approved plan. The approach used by most State Food Stamp Agencies is to subcontract nutrition education activities to Cooperative Extension programs located within their States.

2. The Nutrition Education Cooperative Agreement Demonstration

In order to increase the scope of nutrition education activities and expand the number of participants receiving nutrition education, FNS undertook a demonstration project which awarded two rounds of Nutrition Education Network Cooperative Agreements to 22 States to develop or expand Statewide nutrition education networks.

Aims of the Demonstration. The cooperative agreements were intended to foster the development of integrated, multi-partner State-level nutrition education networks which could bring together State and local government agencies, nonprofit organizations, and representatives of private industry, in order to coordinate the delivery of innovative nutrition

education messages designed specifically for persons receiving or potentially eligible for food stamp benefits. FNS expected that the networks would help:

- Maximize the amount and efficient use of private and public resources;
- Identify specific client information needs and relevant ways of addressing them; and
- Effectively recruit and leverage community organizations to deliver appropriate messages.

Specifically, the objectives of the cooperative agreements were to:

- Support the planning and development of a collaborative nutrition education/promotion campaign for food stamp recipients and eligibles by building a network of public and private organizations that includes the State Food Stamp Agency;
- Promote the Dietary Guidelines for Americans by planning to integrate key messages into State nutrition education/promotion for the target audience;
- Expand the reach and approach of current State nutrition education efforts by incorporating the use of social marketing principles and tools in planning activities; and
- Result in self-sustaining nutrition education efforts by creating State funding packages that include contributions approved for inclusion as allowable costs for reimbursement by the Food Stamp Program.

Social Marketing. The networks were charged with incorporating the principles and tools of social marketing in their planning for nutrition education and promotion efforts. Social marketing is an audience-centered approach that features multiple and reinforcing channels of communication along with public policy and environmental changes to influence behavior. Although social marketing efforts often make use of television, radio ads, videos, and brochures, these materials by themselves do not constitute social marketing. Rather, social marketing entails a comprehensive program in which these materials are employed as part of the tactics to reach a target audience. Social marketing emphasizes the importance of keeping the target audience and network partners involved in needs assessment, message development, and refinement of messages and delivery strategies (Lefebvre and Flora, 1988; Andreason, 1995).

Social marketing techniques include analysis and segmentation of audience needs that influence message development and delivery, use of the media to reach large numbers of people, and an emphasis on ultimately changing behavior. In the context of this effort, social marketing emphasized audience analysis to develop and deliver messages that:

- Promote food choices among program participants consistent with the Dietary Guidelines for Americans;
- Are positive and action-oriented;
- Reach audiences through multiple communication channels in culturally appropriate ways;
- Can be consistently reinforced by families, communities, and the media; and
- Are periodically subjected to evaluations of their effectiveness.

The cooperative agreements provided seed money to hire network coordinators who could devote full time to establishing the network organization and goals, coordinate the preparation of a consumer-centered nutrition education plan (NEP) and recruit partners to contribute resources for implementing the plan. By the end of the cooperative agreements, State nutrition networks were expected to shift their focus to implementing the NEP and become self-sustaining. Table I-1 summarizes the key differences between the cooperative agreements and the network's Food Stamp NEPs.

| Table I-1. Key Features of Cooperative Agreements and Nutrition Education Plans | | |
|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Features | Cooperative Agreements | Nutrition Education Plans |
| Purpose | Set up self-sustaining networks and nutrition plans. | Implement integrated, Statewide nutrition plans approved by FNS. |
| Major Steps | Hire network coordinators. Recruit network members and set up appropriate organization structures. Identify educational and resource needs. Create nutrition plans that reflect network collaboration and integrate current education efforts. Pursue needed resources. Submit Statewide nutrition education and financial plan to FNS. Participate in FNS study of nutrition networks. | Support and coordinate delivery of nutrition education through State and local vehicles. Assess nutrition efforts. Modify nutrition education plans, as needed. Updated FSP NEP amendments annually. |
| Duration | 30 months. | Ongoing. |
| Funding Amount | One-time, up to \$200,000. | Proposed by networks and reviewed as part of FSP nutrition education plans. |
| Funding Source | Food Stamp research and demonstration funds. | Contributions from network partners, along with FSP reimbursement at the 50% rate. |

Implementation of the Cooperative Agreements. The first round of cooperative agreements were issued to 12 States in October 1995 (referred to as Round One cooperators). The primary grantees in each of the 12 States included a mix of seven State public health agencies, four Cooperative Extension programs, and one State Department of Education (as shown in Table I-2). The cooperative agreements were initially intended to run for 18 months, with the expectation that by the end of that time the sponsoring agency would be able to organize the network, conduct its needs assessment, and develop an initial plan of action to apply for Food Stamp administrative funds. The final step in the process would be to actually submit their proposal to the State Food Stamp Program, which would then incorporate the nutrition education activities into the State's Food Stamp Program Plan of Operations.

| Table I-2. Types of Primary Grantees for the Statewide Nutrition Education Network Cooperative Agreements | | |
|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Type of Primary Grantee | 1995 Cooperative Agreements (Round One States) | 1996 Cooperative Agreements (Round Two States) |
| Cooperative Extension Service | Alabama, Minnesota, Virginia, Washington | Colorado, Kansas, Michigan, Nevada, New Jersey, North Carolina, Pennsylvania, South Dakota, Wisconsin |
| Public Health Agency | Arizona, California, Georgia, Iowa, Maine, Missouri, Vermont | Oklahoma |
| Department of Education | Indiana | |

Towards the end of the first year, due to network start-up delays combined with unanticipated time to get regulatory clarifications from FNS regarding matching requirements, additional time was required to complete the objectives of the cooperative agreement. Therefore, Round One cooperators were given the opportunity to apply for an additional 12 months of funding to complete their needs assessment and develop their plans. At the same time as these extensions were being offered, cooperative agreements were awarded in an additional 10 States (Round Two cooperators). Primary grantees in Round Two States included one State public health agency and nine Cooperative Extension agencies. The Round Two agreements were 30 months in duration in order to allow sufficient time for network development and progress toward sustainability.

Technical Assistance. To support the development of nutrition education networks, FNS also provided technical assistance (TA) to cooperators both directly and via a contract that they issued to HSR. In addition, to providing technical assistance, FNS convened training meetings with all of the cooperators to provide information and facilitate communication among network participants in various States. Each of the cooperative agreement States were provided the opportunity for technical assistance in a number of areas relative to the development of the networks. Round One States were provided with an initial site visit and up to 80 hours of TA, which could also include up to two additional site visits. Round Two States were provided with an initial site visit and up to 80 hours of TA with one additional site visit as their limit. States requiring more than 80 hours were accommodated by shifting hours from States not needing

their full 80 hours. Technical assistance provided to the Round One States focused mostly on organizational development, strategic planning, needs assessment, and developing the Food Stamp NEP. Technical assistance to the Round Two States focused more on social marketing practices, needs assessment, and organizational communications (Table I-3).

| Table I-3. Summary of Technical Assistance Provided | | |
|----------------------------------------------------------------|-------------------------------------------------------------------------|------------------------------------------------------------------|
| Type of TA Provided | Round One States | Round Two States |
| Communications | Georgia, Indiana, Minnesota, Vermont | Kansas, Pennsylvania, Wisconsin |
| FSNEP Development | Georgia, California, Maine, Missouri, Vermont, Virginia | Kansas, Nevada, Oklahoma, Pennsylvania, Wisconsin. |
| Needs Assessment | California, Iowa, Maine, Missouri. | Colorado, Kansas, Oklahoma, Nevada, South Dakota |
| Organizational Development | Arizona, Indiana, Iowa, Maine, Minnesota, Vermont, Virginia, Washington | Colorado, Kansas, Nevada, North Carolina, Oklahoma, Pennsylvania |
| Social Marketing | None* | Colorado, Kansas, North Carolina, South Dakota, Wisconsin |
| Strategic Planning | California, Maine, Minnesota, Washington | Nevada, North Carolina |
| Did Not Request TA | Alabama | Michigan, New Jersey |

* The Technical Assistance contract did not allow for provision of assistance in social marketing during the initial year of the contract.

B. Purpose of the Evaluation

This evaluation report was produced under a contract between FNS and HSR and its subcontractor, the Research Triangle Institute (RTI). Under this contract, HSR provided technical assistance to the 22 networks and RTI led an evaluation of the networks ability to meet the cooperative agreement goals.¹ The goal of this evaluation was to assess the progress made by networks in developing organizational structures, recruiting members, conducting a

¹ The evaluation team, while including staff from both RTI and HSR, was led by RTI and constructed to be independent of HSR's technical assistance team. While members of the TA team reviewed this report for accuracy, the conclusions were drawn solely by the evaluation team.

needs assessment for nutrition education efforts, and preparing a plan to obtain continued support for the network as part of the FSP State NEP.

A number of networks successfully completed the original goals, and have moved onto the delivery of nutrition education. In cases where networks are actively engaged in the provision of nutrition education, this report describes these activities in addition to accomplishments associated with planning and network development. As a basis for evaluation, RTI and HSR built upon the conceptual framework shown in Figure 1.1, which illustrates the interchange between grant receipt, staff acquisition, network recruitment, and network maintenance. The networks were expected to continue planning and acquiring resources to deliver nutrition education and to sustain the network.

Specifically, the evaluation was designed to answer the following four study questions:

- Question 1. What processes did the networks use to develop Statewide nutrition education networks?
- Question 2. How effective were the processes employed by networks in the following:
 - Building a network of public and private organizations to support collaborative nutrition education and promotion for food stamp recipients and eligibles?
 - Integrating messages promoting the Dietary Guidelines for Americans into State nutrition education and promotion for food stamp eligible audiences?
 - Expanding the reach and approach of State efforts by incorporating the principles and tools of social marketing? and
 - Developing self-sustaining nutrition education efforts as part of a State's nutrition education plan?
- Question 3. What can FNS do to foster development of Statewide nutrition education networks?
- Question 4. What lessons can be learned about the development of effective Statewide nutrition education networks?

This document reports on the progress made by the nutrition education networks in developing nutrition education programs through the fall of 1998. The interviews for this evaluation were conducted approximately three years after the funding of the Round One cooperators; at that time most of the original cooperative agreements had expired and many of the networks had begun to receive support for their activities as part of an approved nutrition education plan (NEP) funds. The interviews with Round Two cooperators were conducted approximately two years after their award of a cooperative agreement.

It is difficult to assess the ultimate effectiveness of planning without knowing how well networks were able to translate these plans into action. As of this writing, many of the Round Two networks were just beginning to engage in nutrition education that derived from network efforts. Also, many of the networks which had implemented nutrition education activities are likely to expand their activities in coming years. Hence, this report is not able to provide definitive answers to these questions. Rather, this report describes the process of implementing the cooperative agreements, and the progress and challenges the networks faced during the initial years of the demonstration project.

CHAPTER II

Study Approach

The basic approach to this process evaluation was to build on baseline data collected early in the network developmental process, follow-up site visits, telephone interviews with key network members, and review of written materials. The evaluation sought to identify the factors that fostered the development of networks and to describe the barriers to network development experienced by some networks.

This chapter describes (1) the approach used for data collection, (2) the approach to data analysis, and (3) the limitations of the study.

A. Data Collection Approach

Data were collected through a series of steps, including a review of grant applications, interviews with project staff and network staff members, site visits to States, discussions with technical assistance staff, review of quarterly reports and documents, and a set of follow-up calls with States during the fall of 1997 plus follow-up interviews in the fall of 1998. The information that was collected is summarized in Table II-1.

**Table II-1.
Summary of Data Sources for the Evaluation**

| Data Source | Time Periods | | | Type of Information Sought |
|------------------------------------------------------------|-------------------------------------|----------------------|------------------------|-------------------------------------------------------------------|
| | Baseline Jan. 1996/ Feb. 1997 | Interim Fall 1997 | Follow-up Fall 1998 | |
| Interviews with project director | x | x | x | Description of history, strategy, and accomplishments |
| Interviews with network coordinator | x | x | x | Description of plans, information requests |
| Interviews with State FSP network representative | x | | x | Description of current nutrition education and role with network. |
| Other network interviews: Major private sector partners | x | | x | Network member experience and accomplishments |
| Other major partners | x | | x | |
| Review of Applications and Nutrition Education Plans | x | x | x | Planning, strategies, and resources for nutrition education |
| Review of nutrition education materials | | | x | Changes in quantity, focus, targeting, cultural relevance |
| Minutes, reports, newspaper articles, media materials | | | x | Activities and participation of network partners |
| Technical assistance logs | ongoing | | | Nature of technical assistance |
| Progress reports | Quarterly | | | Progress and accomplishments |

B. Data Analysis Approach

This study gathered both factual information and personal opinions of individual network partners. The analysis was completed by assessing information from multiple interviews and written documentation which described the developmental status of each individual network and members' perceptions of the factors that contributed to success and posed challenges. The study sought to identify lessons that were applicable across a number of networks. To do so,

the evaluation focused on factors that appeared to hold true in three or more network settings. Because this study sought to identify best practices that networks could share directly with others, this report includes examples of exemplary practices associated with specific networks (since this will facilitate the ability of networks to be an ongoing resource to one another).

No network was equally effective in all areas. A balanced assessment of the cooperative agreement demonstration must describe the limitations as well as the strengths of the program. Accordingly, the findings section discusses the challenges that networks faced, and the strategies networks used to meet those challenges.

C. Study Limitations

This report characterizes the accomplishments of networks as of the fall of 1998. It is important to recognize that these networks are still developing, and that progress is not necessarily linear (e.g., several networks that appeared inactive earlier developed new energy once staff vacancies were filled). The network development is an evolving process, and it would be unfair to characterize a shortcoming (or an accomplishment) in some area at a particular point in time as a definitive assessment. It is also likely that many of the social marketing activities that have been planned by the networks will be implemented in coming years. Hence, a later look may clarify the picture of networks' contributions toward the social marketing and delivery of nutrition education.

This report seeks to describe the process by which networks developed. Wherever possible, the analysis sought to corroborate findings through several sources and a review of written documents. Nonetheless, the information in this report ultimately was based on the perceptions of the individuals interviewed. Memories fade, perceptions by definition are limited, and participants often have their own idiosyncratic institutional and personal viewpoints. Thus, the interpretations of external evaluators inevitably will be incomplete.

Finally, the study sought to identify best practices that account for the relationship between activities and outcomes. In doing this, the report sought to use examples of best practices that occurred in several networks and in a variety of circumstances. However, correlation does not

necessarily imply causality. Hence, the conclusions the report draws regarding best practices may be viewed more appropriately as useful in generating hypotheses that deserve to be further investigated in more rigorous studies.

CHAPTER III

Network Development

The cooperative agreements enabled the development of Statewide nutrition education networks. The typical network had more than 20 partners, of which more than half were from the private sector. The networks faced challenges in engaging large numbers of for-profit private partners, such as food retailers, though when they did participate, the for-profit partners made important contributions to network activities. Network members were actively involved in the development of network activities, they utilized a consensus model of decision making, and they structured themselves into committees which typically met monthly between quarterly meetings of the entire network.

This chapter describes network development in terms of (1) network participation, (2) network recruitment and expansion, (3) organization structure and governance, and (4) contributors to effective collaboration.

A. Network Participation

Networks had an average of 21 members, roughly half of which were members of the private sector. The number of State-level partners ranged from less than ten to more than 60. Table III-1 lists the organizations most commonly represented in the State networks and shows how many States had representation in their network from those organizations. About half of network members were governmental organizations. In addition to the State Food Stamp Agency that was involved with all networks, the networks most frequently included State Departments of Health (91 percent of networks) and the Cooperative Extension Service (82 percent of networks).

| Table III-1. | | |
|-------------------------------------------------------------------------------------------------------|--------------------------|----------------|
| Number of State Networks with Active Representation from Various Types of Organizations | | |
| Type of Organization | Networks (n = 22) | |
| | Number | Percent |
| Public Sector Organizations: | | |
| State Food Stamp Agency | 22 | 100% |
| State Department of Health | 20 | 91% |
| Cooperative Extension Service | 18 | 82% |
| Department of Education | 15 | 68% |
| University or Medical School Department (other than extension) | 15 | 68% |
| WIC | 15 | 68% |
| Aging Services/Departments on Aging | 9 | 41% |
| Other Public Sector Organizations: (e.g., State Dept. of Agriculture, Dept. of Labor, Head Start) | 7 | 32% |
| Private Sector Organizations: | | |
| Commodity Boards and Councils* | 13 | 59% |
| Professional and Voluntary Association (e.g., American Cancer Society, American Diabetes Association) | 12 | 55% |
| Food Banks | 10 | 45% |
| Other Non-profit Organizations (e.g., churches) | 9 | 41% |
| For-profit Organizations (e.g., supermarkets and food retailers) | 9 | 41% |

*In some States, Agricultural Commodity Boards have been legislatively chartered in such a way that they could be viewed as public organizations.

About two-thirds of networks included the WIC program, the State Departments of Education, and a University or Medical School Department (other than extension). Other public organizations included the Area Agencies on Aging, State Departments of Agriculture, State Departments of Labor, public schools, Head Start programs, and Indian Tribal Councils.

Roughly half of network members were private, non-profit organizations. These included food banks, voluntary organizations (such as the American Cancer Society, or the American Diabetes Association), and agricultural commodity councils such as the Dairy Council.² Other private, non-profit organizations included public schools, health plans and hospitals, and churches or ministries. Nearly all networks included private sector partners, and more than half of networks had 10 or more non-profit organizations participating in the network.

Forty percent of Statewide networks included for-profit organizations, such as supermarket chains, but these were usually limited to a relatively small number of members. The perception of many Network Coordinators is that food retailers were willing to support the nutrition education networks, but they preferred to do so in concrete ways (e.g., in-kind support for social marketing), rather than through participation of staff in network meetings. When they could be involved, these for-profit organizations made important contributions to nutrition education efforts, particularly in support of the development and distribution of nutrition education materials (e.g., CA, GA, MI). Hence, efforts to involve for-profit organizations will continue to receive attention on the part of networks.

In general, organizations represented in the networks were active participants who maintained their involvement during the course of the study. In only a couple of States did the major contributors to the network's activities consist entirely of governmental agencies. In most cases, there was a mixture of involvement from government agencies, local community agencies, private non-profit organizations, and other nutrition-oriented members. This blend indicates that States saw the value of having a variety of organizations represented by the overall membership.

While some networks intentionally decided to start small before expanding, this study found that the networks that started more ambitiously tended to be more successful. For example, there were three networks with less than 10 partners, and none of them received approval for an NEP. In contrast, nearly a quarter of networks had between 30 and 60 partners, and all of

² In some States, agricultural commodity boards were legislatively established in a way that might allow them to be viewed as public sector organizations.

these larger networks developed NEPs that were approved. Similarly, having a large number of cooperating members in the network appeared to contribute to success in identifying matching funds to support the continued operation of the network activities. In almost all cases, the States that raised over \$1 million using NEP and other funds were those with the higher number of active members. Only one State had a comparatively low number of members ($n = 12$) but a high amount of funding (\$3 million). It may be that the more members who are actively involved in the network, the more opportunities there are to gain funding through a variety of sources. In other words, the more people who are involved in the network, the more likely it is that new and innovative sources of funding will be identified and secured. It could also be the case that Network Coordinators who are well-connected to other nutrition-interested professionals in the State, who are highly enthusiastic, and who have experience with marketing and coalition-building are better equipped to achieve high levels of membership. The same qualities of those Coordinators could also account for the success in securing high levels of funding.

With such a varied group of members represented in the networks, it is not surprising that the contributions of network members is varied as well. Two contributions were relatively constant across all members: the sharing of ideas on network issues, and general participation in activities and meetings. Other contributions included:

- membership on subcommittees;
- holding of leadership positions on the network;
- in-kind donations for activities;
- dissemination of information to other organizations and professionals in the State;
- expertise for marketing and fund-raising;
- development of social marketing materials;
- outreach to the target population;
- assistance with formative research such as focus groups or surveys; and

- language translation of nutrition education or social marketing materials.

B. Network Recruitment and Expansion

1. Prior Collaboration Among Network Members

All States experienced some level of collaboration among network members surrounding nutrition or food issues prior to the Nutrition Education Networks. Many of these were formal collaborative relationships based on interagency agreements. In general, network members who had worked together in the past continued to build on those prior relationships while welcoming new partners. Other collaborations were informal working relationships with individuals who knew each other through professional interests and activities. For example, in New Jersey, the Network Coordinator had extensive prior experience collaborating with other organizations on issues relevant to vulnerable populations. Some of those other agencies included municipalities, federations, and foundations. Because of this connection, the Coordinator was aware of the various “agendas” of network partners from the outset, enabling a tight collaboration through understanding. Another State’s Extension and Department of Public Health staff had collaborated together for many years prior to the network formation. They had collaborated on in-service training, training sessions, curriculum evaluations, and WIC initiatives. Their long-standing history of collaboration was cited by a key network member as one reason why the two departments were so capable of working together effectively on the network project.

Although the mission of the Nutrition Education Network was somewhat different from the missions of the other coalitions or groups, many of the same agencies and individuals were represented in both. In some cases, a formal, active, and well-represented nutrition-related coalition had been in place from which the network emerged. For instance, in Maine and California, the network was able to build on the relationships developed by a prior 5-A-Day coalition. In other States, prior collaboration of network members on other nutrition initiatives helped facilitate the development of network partnerships. Members in the Nevada network, for example, had earlier participated in a task force to address hunger issues in their State. In Colorado, the University of Colorado and Colorado State University had formed a coalition in 1988 to foster collaboration in teaching, research, and outreach focused on nutrition. In

addition, the Denver Metro area had a Food Assistance and Nutrition Education Interagency Committee that had been in operation for years prior to the Nutrition Education Network. Some of the members of this group included WIC, Food Stamps, EFNEP, FSNEP, Dairy Council, School Lunch Program, food banks, Head Start, and the Hunger and Food Policy Coalition. Many of the current network members knew each other through their work on this prior committee and were accustomed to convening for meetings, making decisions together, and building strategies for solving problems surrounding the topic of nutrition.

2. Network Expansion

Regardless of whether there were many collaborative relationships among network members in the State prior to the network and whether those relationships were formal or informal, the networks were able to expand in two important ways. The first was by incorporating new and more diverse partners into the already existing set of people who may have worked together in the past. All networks brought in new partners, whether it was through personal contacts or formal marketing. Secondly, more formalized relationships among members and much-needed coordination developed among nutrition educators, food retailers, and State and local agencies.

An important benefit of having a wide and diverse range of network members is the more extensive or expanded recruitment of organizations to participate in network activities. Network members can actively refer people in their own communities to take part in the network nutrition education activities. This study found that this happened quite often among the 22 States. Referrals also resulted from less direct means, such as when network members promoted network activities. An FSNEP Coordinator in one State, for example, invited the Network Coordinator to FSNEP agent meetings periodically to talk about network activities. These discussions provided information to a wider body of people who had direct and consistent contact with the target population. Whether one-on-one or indirectly, it is certain that network members helped spread the word about the network, thereby raising the number of people receiving the message or education.

The network became a vehicle through which States could work toward a common, well-

defined, coordinated goal. Even though it took some States longer to develop and coordinate their networks, all benefitted from the formalized structure that it afforded.

3. Organizational Affiliation

The following section outlines the ways organizations and agencies worked with and under the network structure. The initial discussion begins with the primary grantee (the organization charged to head the Cooperative Agreement by the State Food Stamp Program), then moves to issues of how new networks fit into a State structure with an existing FSNEP.

Organizational Affiliation of the Primary Grantee. Thirteen of the primary grantees who served as the organizational home for the cooperative agreements were State Cooperative Extension agencies; eight were affiliated with State Health Departments; and one was a State Department of Education. The location of an organization as a primary grantee in a Cooperative Extension agency or as a public health organization turned out not to be associated with success or failure of the networks. Both types of organizations appeared to have respective strengths and weaknesses. The public health organizations often had limited experience with USDA reimbursement procedures and therefore needed to learn how to develop budgets under this type of matching program. Conversely, public health organizations often contributed experience with social marketing activities that proved to be an asset to the network. Cooperative Extension programs often had experience with USDA reimbursement procedures that made budget development easier. In addition, Cooperative Extension brought experience working with Food Stamp participants through the EFNEP program as well as experience operating a FSNEP. However, in some of the States in which the Extension Service had an existing FSNEP and was not the primary grantee, there seemed to be less incentive to promote further expansion through the network.

It turned out, however, that the organization affiliation of the primary grantee was not significantly associated with the success of networks in obtaining funding for a Nutrition Education Plan as there were both successes and failures among Cooperative Extension and Public Health Programs.

Rather, it appeared that the determining factor for success of the networks was the manner in which network members built on their respective strengths and faced the challenges of collaboration. In States in which the primary grantee for the cooperative agreement was affiliated with a health department, success was associated with the attention of the network to financial management issues. For example, 80 percent of networks which succeeded in receiving approval for a NEP had developed procedure manuals to help partners address matching issues and had staff dedicated to handling accounting issues associated with reimbursement. In contrast, of the public health agencies which have failed to receive an approved NEP none had devoted this level of attention to financial management issues.

Relationship with Existing FSNEPs. About three-fourths of the cooperative agreements were awarded to States that had already funded a FSNEP through the Cooperative Extension Service. There was considerable variability in how this operated (as summarized in Table III-2).

- In one State, Colorado, the Cooperative Agreement was administered by the Cooperative Extension Service and the network developed a single Statewide plan which sought to coordinate both the extension component and the network components under the leadership of the Statewide network.
- In nine States, the Cooperative Agreement was awarded to the Cooperative Extension Service and the network was operated as a separate component of the FSNEP.
- In one State, Alabama, the Cooperative Agreement was awarded to the Cooperative Extension Service and the network decided to receive continuing funding as part of the FSNEP previously awarded to the Cooperative Extension Service.
- In seven States, the Cooperative Agreement was awarded jointly to an agency associated with the Department of Health or Department of Education and the Cooperative Extension Program. In these cases, the Cooperative Extension Service was operating their own FSNEP but also participated as a member of the Statewide nutrition education network.
- In four cases, Cooperative Agreements were awarded to States that did not have existing FSNEPs (three of these awards were to Cooperative Extension Services and one was to a public health program).

| Table III-2. Relationship Between Statewide Network and Prior FSNEP | | | |
|--------------------------------------------------------------------------------|-----------------------------------|------------------------------|--------------|
| Coordination with Prior FSNEP | Primary Grantee | | Total |
| | Public Health or Education | Cooperative Extension | |
| Prior FSNEP: | | | |
| Network coordinates all FSNEP components | | 1 | 1 |
| Network is [or plans to be] one component of FSNEP | 7 | 9 | 16 |
| Network is integrated into the Extension FSNEP | | 1 | 1 |
| No existing FSNEP | 2 | 2 | 4 |
| Total | 9 | 13 | 22 |

Again, it turned out, however, that prior FSNEP funding was not itself a significant predictor of success or failure in receiving an approved network NEP. Rather, in States that already had an FSNEP, the factor significantly associated with success in receiving an approved NEP was the extent of collaboration among network partners, as evidenced by the development of network activities that involved a collaboration across different types of organizations. In States who had prior FSNEP funding, 92 percent who received an approved network-related NEP (and none who did not) also developed network-related collaboration that involved multiple State partners. While this is not necessarily a causal sequence, it suggests that the willingness of network members to collaborate across common social marketing activities is an important contributor to the success of networks.

C. Organizational Structure and Governance

3. Overall Network Governance

The network committees typically met monthly or every other month. A common pattern was to have monthly committee meetings (often via conference calls) and to convene as an entire network several times a year.

In general, the networks were dependent on the Network Coordinator or the Project Director to provide overall direction and advice. However, most networks did try to establish a decision-making structure to guide the overall activities of the network. The network organizational and decision-making structures fell into three general categories: a steering committee with subcommittees; staff-directed governance and support; and a "committee of the whole."

- **Steering Committee with Subcommittees.** Many of the networks developed a steering committee to provide overall direction to the network and to propose network activities. Most of the steering committees were composed of the Project Director, the Network Coordinator, and chairs of various subcommittees. In some cases, the founding members of the network served as the steering committee. The steering committees were supported by smaller subcommittees, usually built around a specific strategic function, such as message development or fund raising. The steering committees met more frequently than subcommittees on the whole and were often responsible for reviewing subcommittee reports, developing the agendas for the network-wide meetings, and presenting activities for final decisions. The steering committee model was the most common form of governance. Fourteen of the networks had steering committees.
- **Staff-Directed Governance and Support.** In some cases, the Network Coordinator, Project Director, and other paid staff ran day-to-day network activities and made many of the decisions necessary to implement network activities. The network staff would then present issues to the network membership as a whole for discussion and approval. Subcommittees were only formed when needed for short term assignments. The New Jersey and Pennsylvania networks are examples of this governance structure. A total of six networks utilized this staff-directed form of governance.
- **Committee of the Whole.** In a few cases, the network was small enough for the members to meet as a single governing committee and provide direction to paid staff. In these cases, core members of the network would meet on a regular basis to make decisions and provide assignments to staff or volunteers. Networks using this model often formed "workgroups" composed of volunteers to undertake short term assignments. In addition, States that used this model often called upon consultants to implement network activities, such as needs assessment. Two networks used this method of governance.

Regardless of their overall style of governance, most of the networks depended on the leadership skills of the Network Coordinator or the Project Director to maintain their direction and focus. These leadership skills were particularly important in those States governed by a

steering committee composed of representatives from different agencies and interest groups. For example, it was usually the role of the Project Director to communicate network decisions to the leadership of the sponsoring agency. In some cases, conflicts arose between the sponsoring agency leadership and the decisions made by the network, and the Project Director would act as a mediator to resolve the issues. The degree to which the Project Director could act as a bridge between the two often made the difference in whether the network was able to accomplish its objectives. Conflicts between the network governance structure and the upper management of the sponsoring agency lead to one network becoming inactive and two others searching for new sponsoring agencies.

2. Committee Structures

In addition to a structure for network governance, many of the networks formally structured their committees to help with development of the network activities. In some States, the committee structures were very formal and included long-term activities and responsibilities. In other States, the committee structures were less formal and often time limited. The committee structures usually fell into two categories: function committees and topic committees.

- **Function Committees.** These committees were organized to carry out a necessary function of the network. They usually had responsibility for fund raising, social marketing campaign development, needs assessment and planning, or other ongoing activities.
- **Topic Committees.** These committees were usually charged with developing recommendations for nutrition topics for the social marketing campaign or developing activities directed at target populations. These committees were often time-limited.

In most cases the networks used a combination of the two types of committees described above. For example, the Maine network has developed function committees, including a “Health Promotion” committee and a Funding committee, to conduct ongoing activities. They have also developed several topic committees to promote network activities. One such topic committee is the “Agriculture Committee,” developed to promote a specific program designed to increase use of farmer's markets by food stamp recipients. In addition, those networks using a staff-directed

or "committee of the whole" approach to network structure were more likely to use time-limited "workgroups" than formal committees.

Of those networks with committee structures, 41 percent had four committees. Another 18 percent had five or more committees, 14 percent had three committees, and 27 percent operated without a permanent committee structure. Where committees existed, they typically met monthly or every other month. A common pattern was to have monthly committee meetings (often via conference calls), and then to convene as a network several times a year. While no two networks have developed the exact same committee structure or function, there were a number of common elements among some of the committees (as shown in Table III-3).

| Table III-3. Typical Committee Structure of Networks | | |
|-----------------------------------------------------------------------------------------------------------|--------------------------|----------------|
| Number and Type of Committees | Networks (n = 22) | |
| | Number | Percent |
| Number of Committees: | | |
| 5 or more committees | 4 | 18% |
| 4 committees | 9 | 41% |
| 3 committees | 3 | 14% |
| No permanent committee structure | 6 | 27% |
| Type of Committee: | | |
| Steering committee | 13 | 59% |
| Social marketing/Media committee | 15 | 68% |
| Resource development committee | 15 | 68% |
| Needs assessment/Research and evaluation committee | 9 | 41% |
| School programs committee | 4 | 18% |
| Nutrition Education Plan committee | 13 | 59% |
| Specific target audience committees: i.e., aging, newsletter, partnership, food security, 5-A-Day | 13 | 59% |
| Network development and coordination committees: i.e., partnership, academy, planning, vision, new voices | 12 | 55% |

Below are examples of the types of committees formed by the network and their general functions.

- **Funding and Resource Development Committees.** Responsibility for developing funds for Federal match usually fell to a resource or funding committee. These committees often were responsible for identifying potential grants, government in-kind contributions, and contacting local nutrition programs regarding their participation in network activities. In some cases, the resource committees also were responsible for identifying volunteers for working on network activities. Thirteen networks developed funding or resource development committees.
- **Needs Assessment Committees.** These committees were responsible for examining secondary data related to the needs of food stamp clients and developing or conducting primary research to identify needs of special populations. The needs assessment committees usually were responsible for developing focus groups, conducting key informant interviews, and collecting community-based data. Twelve networks used needs assessment committees.
- **Social Marketing Committees.** Social marketing committees generally worked to develop a social marketing strategy for the network. They were often charged with converting the needs assessment information into a strategic plan for developing messages, identifying methods of delivering messages, making media contacts, and developing materials. Twelve networks used social marketing committees.
- **Message Development Committees.** Message development committees were responsible for identifying the topic areas for the nutrition education messages, and then developing the content for the social marketing campaign. Eleven networks used message development committees.
- **Target Population Committees.** Target population committees were usually used to identify the special needs of different target populations. Some of the committees focused on non-English speaking populations, while others focused on mothers, children, or the elderly. Twelve networks used target population committees.
- **Topic Committees.** Eight networks developed committees around nutrition topics. These committees usually functioned as combination social marketing/message development/target population committees. Some of the topics the committees addressed included 5-A-Day promotions for low-income audiences, eat more fruits and vegetables, eat more low-fat foods, and nutrition topics for school-aged children.

Three networks did not use any committee structure at all. In two of the three States, special workgroups were established to work on time-limited topics but were disbanded once their job was complete. In the third State, local networks were established and much of the planning and implementation work was shifted to these programs.

Organizational theory (Francisco, et al., 1993, Goodman, et al., 1993) suggests that the operation of active committee structures is a predictor of the strength of networks. The results of this current study provide support for this prediction; 93 percent of networks that succeeded in receiving an approved NEP had four or more active committees on their network compared to only 44 percent of the networks who failed to receive funding through an approved NEP (Chi-square = 6.5, $p < 0.01$).

D. Contributors to Effective Collaboration

In general, network members reported that network partners worked well together. By learning from those States whose networks had worked effectively (in part due to the collaborative relationships among members), this study attempted to identify some of the more salient contributing factors. The following are factors reported by network members as contributing to the smooth-running collaborations of networks, and Table III-4 summarizes the benefits associated with these factors.

- One factor leading to an effective network is the promise of reciprocal benefits to all parties. If the network can offer the members something in return for their time, effort, and money, members are more likely to join and remain members. The return may be low and difficult to define from an outsider's point of view, but the most effective networks had partners who reaped some benefit for their contributions, whether they be personal or professional benefits. For example, in Oklahoma, the Social Marketing Campaign message will target families with small children, though one of the most active members of the network represents the Aging population. When asked why she put so much time and energy into the network, she commented that she knew that if the efforts to provide nutrition education to this initial population were successful, soon the elderly would be targeted by the network. She also felt it was important to be a key member of the network so that she could be a constant witness to other members of the needs of the elderly in the State.

| Table III-4. Benefits Attributed to Certain Network Characteristics | |
|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Characteristic | Benefit |
| Emphasis on reciprocal benefits | Ability to minimize turf concerns |
| Active Committees | High member contributions and involvement Members more likely to effectively communicate network mission and activities to non-network individuals |
| Positive prior collaborations | Reduced tension, fewer turf problems More effective decision making Higher likelihood of recruiting more members through networking |
| Frequent self-assessment and evaluations | Perception of responsiveness among members Understanding of what aspects need to be changed Feedback on what is working well |
| Recognition of accomplishments | Renewed motivation for continued efforts Modeling of positive behavior |

- Committee structures offered in a way for individual members to make visible contributions to the network, and breaking work into units that could be handled by committees help to further progress toward each goal. Another factor that contributes to an effective network is having active committees.
- Positive experience with prior collaborations among network members was also cited as a factor for successful networks. In Maine, for example, most of the members had worked collaboratively prior to the Maine Nutrition Education Network's inception. Most of them knew each other from professional meetings, prior efforts, meetings of the Maine Nutrition Council, and the 5-A-Day Coalition. These prior collegial relationships certainly worked in the network's favor in terms of reducing tension, preventing turf battles, and increasing the effectiveness of decision making.
- One way to foster communication among network members and those who manage or administer the network is periodically to have formal conversations to ensure all network members are having their voices heard. The network staff (such as the Project Director, the Network Coordinator, or the Steering Committee members) could set up brief meetings annually to discuss with other members how the network can better serve each member's own target population, how the network can work more effectively with the member's

agency, and how the member can be used most effectively to be an integral part of the network. Not only does that approach generate important and innovative ideas, it also improves morale, shows members that the network staff take their contributions seriously, and allows for a formal venue for grievances and feedback.

- Building in regularly scheduled self-assessment (annually, semiannually) of all network members was described as one way to ensure members' concerns were heard and addressed. By proactively evaluating the satisfaction of the members, networks were more likely to retain members and promote stronger and more collegial relationships. A survey to evaluate the satisfaction of the members allows the network to identify views, opinions, and suggestions, while findings can be used to strengthen collaborations, activities, and meetings.
- Reminders to members about frequent dissemination of the network's message was perceived as important. For instance, the network in New Jersey showed how important it is to formalize networking among network members and the non-members with whom they are in contact. In order to facilitate “intentional trickle-down” of the network mission and message to people outside of the network, each member was asked during meetings to report on how they disseminated the message to others since the last meeting. This helped ensure members would discuss network activities with others across agencies and throughout the State.
- Finally, network members were clear about the importance of recognition of the contributions and accomplishments of network members. This included awards, newsletter articles featuring a particular partner each month, and seeking opportunities to say “thank you.”

CHAPTER IV

Planning and Needs Assessment

All the Statewide nutrition education networks engaged in a needs assessment and planning process to inform the development of nutrition education initiatives to reach particular target audiences. These planning efforts involved a combination of review of secondary data (such as State survey data on dietary practices), and focus groups with members of the target audience. This information was used to select the target audience, identify the nutrition behavior to be addressed, develop messages, and decide on the channels to deliver information.

A key objective of the cooperative agreements was to “expand the reach and approach of current State nutrition education efforts by incorporating the use of social marketing principles and tools in planning activities.” A basic tenant of social marketing approaches is their use of a variety of needs assessment tools to understand the needs and interests of the target audience. The planning 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 and can help bring about positive changes in the population’s behavior. Analysis of data gathered through needs assessments were used to chose target audience, target behavior, message, mode, and delivery. This section describes the needs assessment and planning process undertaken by State nutrition education networks.

A. Conducting the Needs Assessment

All the nutrition education networks conducted some form of needs assessment. Two-thirds of networks designated a specific committee of the network to oversee or conduct the needs assessment while the remaining networks conducted the needs assessment using a committee-of-the-whole. About half the networks conducted the needs assessments using network members and volunteers and about half the networks contracted for assistance in conducting the needs assessments. The length of the planning and needs assessment process ranged from 6 to 18 months. Resources and member's opinions and preferences influenced whether the network chose to hire a contractor or to conduct the needs assessment themselves. About half of the networks conducted the social marketing activities themselves. For instance:

- Kansas nutrition network members conducted focus groups and gathered information at community organization functions, such as A Head Start open house, as part of a needs assessment.
- Network members of the Minnesota nutrition network used the help of a team of graduate students to conduct a neighborhood needs assessment.

About half of networks contracted for help for all or part of their needs assessment activities.

- The Missouri nutrition network hired a consultant to develop the social marketing campaign. The contractor conducted focus groups and interviews with the target population and with Health, Nutrition and Social Service professionals. Results were presented in a report. The contractor recommended slogans, message concepts, core printed materials, print and broadcast media, community events, and professional activities. The Nutrition Education Campaign and Evaluation Committee of the network reviewed the consultant's recommendations and proposed target audiences, needs of the target audience, and ways to motivate the target audience.
- The Georgia nutrition network hired a marketing contractor, to plan a campaign based on the tenets of social marketing, particularly using members of the target audience to guide the development of the campaign and provide feedback on all campaign materials. The network devoted 18 months to conducting formative research and evaluation of draft materials with members of the target audience.

In general, networks that were able to draw on contract specialists were able to conduct a more

thorough needs assessment and complete activities more quickly, than networks which relied solely on their members for all these activities.

Plans for extensive needs assessments were sometimes revised to be less ambitious. For instance, one State network had originally planned to conduct six focus groups in each of the counties in the State. The network held a two-day training session in focus group facilitation, which 24 people attended, piloted focus groups, and conducted focus groups in three counties. After speaking with representatives from other States at the All-Cooperators Meeting in July 1998, the network decided to redirect their focus group research. The population of food stamp recipients in the State is highly concentrated in a small number of urban areas in the State and recipients in outlying areas have difficulty coming together as a group for nutrition education. Instead of focus groups throughout the State, the network decided to conduct interviews that oversample in urban areas with high Food Stamp populations.

Other States ran into some difficulty with completing their needs assessment. For example, the social marketing committee in one nutrition network was chaired by the network member with the most expertise in media. Unfortunately this member's time commitments changed and she was unable to facilitate this project. Fortunately, as part of the network development process, the Network Coordinator discovered another initiative having similar social marketing interests as the nutrition network and who were also struggling with inadequate resources. The groups agreed to combine resources, both personnel and financial, in order to develop and conduct a social marketing campaign.

Some States use their technical assistance hours to assist with the needs assessment. For example California requested the technical assistance provider to conduct key informant interviews with network partners. This request was made because California network officials were concerned that an objective party would be more likely to receive honest and frank information than would network staff conducting the same interviews. Oklahoma officials collected focus group data, and requested the technical assistance provider to analyze the data and prepare a report with recommendations.

Whether or not the networks drew on specialized consultant or contract expertise, it appeared that the involvement of network members in the design and interpretation of their needs assessment activities was critical in determining that the needs assessment information was utilized in the development of nutrition education initiatives.

B. Data Sources

Needs assessment is a data driven process. 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. State nutrition education networks collected secondary data, primary data, or a combination of both in conducting needs assessments.

It is often advantageous to use secondary data when conducting, or at least initially conducting, a needs assessment. Collecting secondary data, most often, is substantially less time consuming and consumes less resources (personnel and financial) than collecting primary data. However, secondary data may not provide the specificity needed (e.g., data may be available on food stamp recipients in New Jersey, but it may not be broken down by county). Primary data collection can provide researchers with specific data to answer particular research questions. Often primary data collection can provide detailed information on a population not available through secondary data. Ideally, if resources are available, a secondary data collection can be conducted to gather general data, and then a primary data collection can provide data to fill the gaps identified during the review of secondary data.

For their needs assessment, many of the State networks collected secondary data (see Table IV-1). States reviewed the literature and reviewed county-level and State-level health data.

| Table IV-1. Types of Data Used to Conduct Needs Assessment | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------------------|
| Type of Data | Networks mentioning (n) | States |
| Primary Data Collection | | |
| - focus groups | 16 | AL, CA, CO, IA, ME, MI, MN, MO, NV, NJ, OK, SD, VA, VT, WA, WI |
| - interviews | 4 | ME, MO, NJ, PA |
| - survey of target population | 2 | ME, WI |
| - survey of service providers | 2 | GA, SD |
| - discussion among network members/survey of network members | 2 | CA, MI |
| - neighborhood needs assessment | 1 | MN |
| Secondary Data Analysis | | |
| Literature review, epidemiologic information, federal consumption data, Food Stamp statistics, Department of Education statistics, national, State, and local data, CDC's Behavior Risk Factor Surveillance System (BRFSS) | 11 | AL, CA, CO, GA, ME, NC, NV, PA, SD, VT, WI |
| Primary and Secondary Data | 10 | AL, CA, CO, GA, ME, NV, PA, SD, VT, WI |

- The Georgia Nutrition Education Network did a comprehensive literature review and reviewed existing data from the Centers for Disease Control's Behavior Risk Factor Surveillance System (BRFSS).
- The Colorado network conducted in-depth analysis of county data, epidemiological information, and federal consumption data.
- In North Carolina, the nutrition network reviewed the extensive needs assessment conducted by the Cardiovascular Disease Task Force. The information was taken from a biannual Carolina Poll, Spring of 1998 that surveyed a random sample of 700 adult North Carolinians.
- Networks in Arizona utilized State survey data on dietary practices by different population groups to identify target audiences for nutrition education efforts—namely, low-income Hispanic women who consumed relatively low amounts of fruits and vegetables.

State networks used a variety of primary data collection methods. Focus groups were by far the most common method mentioned by networks. Other primary data collection methods employed include interviews and surveys.

- A needs assessment for the Virginia nutrition network included 16 focus groups with Food Stamp Program families in different regions of the State.
- For the Michigan nutrition network, five focus groups were conducted with 45 low-income residents of Kent County, the site of the pilot campaign. The questions explored current sources of nutrition information, preferences for new information, and reactions to campaign concepts.
- A committee of the Nevada nutrition network wrote guidelines for focus groups and professional facilitators were contracted to lead the focus groups. Seven focus groups, broken out by gender, were conducted with middle school students.
- The Network Coordinator for the New Jersey nutrition network is conducting interviews face to face or over the telephone with food stamp recipients in the four counties where the social marketing campaign will be piloted. The goal of the interviews is to address what will make a person open up their “junk” mail.
- Interviews were conducted with representatives from each member of the Pennsylvania nutrition network organization. Information collected during the interviews included the mission and goals of the organization, areas not being addressed, and what would be needed to fill the identified gaps. The network also utilized secondary data: demographic information and statistics from Pennsylvania State University, the Office of Rural Health, the Department of Aging, and Second Harvest; and primary data: interviews.
- A survey on fruit and vegetable consumption and focus groups regarding nutrition education preferences were conducted among low-income mothers for the Wisconsin nutrition network. In addition, the network reviewed secondary data using local and national sources to compile an extensive summary of the nutritional status and nutrition education needs of low-income populations. The Wisconsin network collected primary data from low-income mothers via a survey on fruit and vegetable consumption and focus groups regarding nutrition education preferences.
- For the Minnesota nutrition network, a team of graduate students did a neighborhood needs assessment of the organizations (institutions and businesses) that serve the target population within or close to the neighborhood boundaries. Interviews were conducted with key informants and snowball sampling was used to choose other interviewees. The graduate students described the network,

sought the key informants advice on how to approach neighborhood residents and reassured interviewees of the intent of the social marketing campaign. Ten State nutrition networks mentioned that they conducted both primary and secondary data collections for their needs assessments. The South Dakota network collected both primary and secondary data. In their needs assessment, the South Dakota network reviewed data from the survey, focus groups, and State demographic studies of the population. The network developed and distributed Statewide a survey to organizations serving the food stamp population. South Dakota also conducted focus groups with male and female adults who have children under 18 years old.

- The California network analyzed biennial State survey data on dietary practices to determine the target audiences for campaign activities. They then conducted 20 focus groups with Food Stamp Program families in different regions of the State to make decisions about the way to convey messages.

In general, networks which made use of both secondary and primary data tended to produce more detailed assessment reports, and this combination had the advantage of grounding the in-depth findings from focus group discussions within the broader context of dietary patterns within a State. The analysis of secondary data could also help shape and make better use of focus group data (which was a more labor intensive process).

C. Uses Made of the Needs Assessments

The needs assessments were used in a number of ways: (1) to select the target audience, and target behavior, for nutrition education efforts, (2) to learn more about the target audience's perceptions, knowledge, and barriers to change, (3) to develop a campaign logo, (4) to develop and/or test messages, and (5) to select the channels of communication (see Table IV-2).

| Table IV-2. Uses Made of Needs Assessments | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------------------|
| Purpose | Networks Mentioning | States |
| Select target audience | 7 | CO, KS, MO, NV, PA, SD, WI |
| Identify health problem or needs of target audience/ target audience's readiness to change health behaviors/ identify barriers to nutritious eating | 8 | GA, MI, MN, MO, NC, NV, VT, WI |
| Develop theme and logo | 8 | CA, MI, MN, MO, NV, OK, SD, VA |
| Develop messages | 5 | GA, ME, MO, VT, WA |
| Determine mode and medium to reach audiences | 6 | GA, IA, MI, MO NJ, WA |
| Other Target outreach to other potential member organizations and agencies that may be interested in the Network's activities Post results on State NEP web site and summary sheet of data produced | | PA WI |

A number of networks mentioned using the results of the needs assessment to select a target audience.

- The Colorado nutrition network initially planned on targeting either families with young children or the elderly, but after reviewing focus group and other needs assessment data, the steering committee of the network chose to target low income families with children between the ages of three and five. Their needs assessment demonstrated that many organizations in Colorado target the elderly, but there is a lack of programs in Colorado for families.
- The Kansas nutrition network applied the results of needs assessment activities, including focus groups and county-level secondary data, to select the target population: preschool children and their caretakers.
- The South Dakota nutrition network applied the results of surveys, focus groups, and State demographic studies to select the target population: parents with children under 18 years old and teen parents.
- Based on a needs assessment, the Wisconsin network will focus on increased consumption of fruits at breakfast.

- A committee of the Nevada nutrition network reviewed national data and selected girls ages eleven through fourteen as the target audience. Girls were chosen because a high proportion of girls have low consumption of calcium. The network also mentioned that they do not have the resources to target a larger audience, however they anticipate that boys will follow the actions of girls.

The most common use made of the needs assessment was learning about an audience's interest in and perceptions about nutrition and nutrition education. This includes identifying the target audience's readiness to change health behaviors and identifying barriers to changing behaviors.

- In the first phase of planning by the Georgia nutrition network, information was obtained from 3 sources: original data was collected from Georgia's public health nutritionists; a comprehensive literature review was conducted; and existing data from CDC's Behavior Risk Factor Surveillance System (BRFSS) was reviewed. This data was analyzed to provide background information and evidence for identifying specific health problems related to nutrition and physical activity.
- The focus groups conducted for the Michigan nutrition networks's needs assessment revealed that the respondents had a good general understanding of healthy eating habits and the health benefits associated with a healthy diet. However, respondents identified significant barriers to food consumption, including food costs, difficulties with methods of food preparation, lack of preparation time, and family preferences. The campaign was altered so that these barriers were addressed through tangible forms of assistance, such as recipes, meal planners, coupons, in-store demonstrations, and neighborhood cooking classes.
- After conducting focus groups, the Missouri nutrition network chose three action steps/objectives which they believe are behaviors people would be willing to change. The action steps developed are increasing intake of fruits and vegetables; teaching low-fat methods of meat preparation; and increasing intake of grains and beans.

Eight State nutrition networks mentioned that the results of a needs assessment were considered when developing a theme and logo for a social marketing campaign.

- Based on findings from focus groups, the Michigan Nutrition Network adapted their logo, nutrition information, and delivery of their campaign. The slogan of the logo was favorably evaluated and participants expressed a strong preference for a smiling mouth on the logo.

- Needs assessment activities conducted by Oklahoma included market testing slogans and logos. Two different slogans with accompanying logos were developed for market testing among target population members in 1998: 1) Feed Your Family for Fitness, and 2) Eat Well, Live Well...It's Within Your Reach. The slogans and logos were market tested in focus groups. The steering committee reviewed the feedback from the focus groups and determined that the slogan would be Eat Well, Live Well...It's Within Your Reach.

Developing the message for a social marketing campaign was mentioned by five States as an outcome of a needs assessment.

- The Missouri Nutrition Network, chose three action steps/objectives for the social marketing campaign based on results of focus groups. The social marketing committee then developed messages and chose themes around these action steps. The messages and themes were pretested with focus groups. Findings from the focus groups revealed that the target audience prefers themes that rhyme, mention family, and emphasize eating for health.
- The Vermont nutrition network applied what they learned from a needs assessment, which included discussion with network partners, review of literature, and focus group findings, in choosing to focus on variety of foods and the messages: choose a variety of foods; reduce total fat, saturated fat, and cholesterol; eat 5 or more servings of fruits and vegetables; and balance the food you eat with physical activity to maintain healthy weight.
- The Georgia nutrition network applied the results of a needs assessment to develop concepts based on the attitudes and behaviors of the target audience. The concepts were consuming five fruits and vegetables per day, eating a low-fat diet, and encouraging more physical activity. Concepts were pretested with six different focus groups made up of food stamp recipients throughout Georgia. Then the concepts were refined and tested in interviews in WIC clinics with members of the target audience.

Six networks mentioned that the needs assessment was used to determine the mode or select the medium to be used in reaching a target audience.

- Iowa conducted focus groups to determine the best way to get information to the elderly.
- The Michigan nutrition network tailored the campaign's delivery of information via the media based on the results of focus groups. Television, in-store

programs, and local newspaper features were preferred over radio and the Internet. Billboards and magazines were also judged to be effective means of communications. These findings were incorporated into the delivery methods of the campaign.

- The contractor for the Georgia nutrition network developed suggestions for disseminating the message based on findings from the needs assessment.
- Since there is no Statewide television, radio, or newspaper market in New Jersey (residents in southern New Jersey receive media stations from Philadelphia while residents in northern New Jersey receive New York media stations), the New Jersey nutrition network has decided to do a mass mailing. The network mentioned that the interviews they are conducting as part of their needs assessment will be used to determine how to get people to open up their mail.
- Based on the findings from focus groups, the Washington State nutrition education network chose newsletters and direct mail as their medium.

Besides gathering information to use in developing the social marketing campaign, some of the networks had a secondary use for the needs assessment.

- The Wisconsin nutrition network posted findings from the needs assessment on the Wisconsin NEP web site. A summary sheet from the data was produced as well.
- In addition to using the findings from the needs assessment to develop a social marketing plan, the Pennsylvania nutrition network used their research/needs assessment data to target outreach to other potential member organizations and agencies that may be interested in the Network's activities.
- Along with developing a social marketing campaign based on the findings of the needs assessment, the Minnesota nutrition network provided the Department of Health in St. Paul Ramsey County, a network member, with needs assessment and focus group results. The Department of Health reviewed the needs assessment and focus group results and developed classes to meet the needs of the community.

D. Additional Benefits

Nutrition networks mentioned that they often learned valuable lessons from the needs assessments and were provided with unanticipated benefits.

- The South Dakota nutrition network mentioned that they learned that even agencies and organizations that have served a specific population for many years must not rely solely on their own perceptions of the needs of the target population. The target population must be included as a partner in the planning process; their input and feedback is invaluable. For example, when designing a Network logo and theme, South Dakota network members discovered that their perceptions of what would be appealing to the target audience were not accurate, despite the fact that many of the network members have worked with limited resource populations in various programs. In pretests, the representatives of the target population chose very different images and wording than the network members had as being most appealing. This difference reveals the importance of providing an opportunity for the input of the target population during the planning process.

- Members of the Wisconsin nutrition network said that the needs assessment and the local level data collection was a great benefit to the network. Network member's involvement in the needs assessment process fostered the development and growth of inter-organizational relationships within the Network. Movement along the continuum of organizational relationships was evident. Organizations moved from just being network members, to being partners, to being collaborators through their involvement in the needs assessment.

CHAPTER V

Network Nutrition Education and Social Marketing

The Statewide nutrition education networks were actively engaged in development of nutrition messages that were targeted to specific low-income audiences and were delivered via a range of social marketing channels. In a number of States, partners collaborated in the dissemination of messages and the development of complimentary nutrition education efforts.

A central goal of the Statewide nutrition education network cooperative agreements was to foster the development of innovative sustainable approaches to nutrition education for low-income families and particularly for food stamp recipients and eligibles. The previous section discussed the needs assessment and other planning activities of the 22 networks, which is the foundation for developing appropriate and effective nutrition education messages. This section presents aggregate information regarding the scope of the network activities by the fall of 1998. The information provided is based on interviews with Network Coordinators, Project Directors and network members. This section describes major activities of each of the networks. Because of the evolving nature of network activities and the number of partners, this section does not provide a comprehensive description of all nutrition education activities. Nonetheless, the information on the major network activities provides a sense of the scope and breadth of nutrition education and social marketing resulting from network activities.

The section starts by describing the activities stemming from networks' social marketing efforts. Next, the section discusses network activities involving small group and individual nutrition education. The third section describes the effects of networks in terms of system and policy change. A fourth section describes the effects of networks on nutrition education in some

States, and a final section describes lessons that can be learned from the networks' experiences.

A. Social Marketing Activities

The cooperative agreements provided States with resources to recruit network members, develop organizational structures, and create NEPs that include a social marketing initiative. It was intended that the networks' nutrition education activities would be developed through social marketing principles and processes. Although all networks utilized some social marketing processes, nutrition education approaches differed greatly from State to State. Some networks engaged primarily in social marketing interventions, while others utilized a combination of innovative and more traditional nutrition education techniques.

The State networks are in varying stages of the social marketing process. At the time of the final report interviews, 15 States were actively engaged in social marketing-driven nutrition education activities, and the majority of the remaining States were engaged in the planning process. As might be expected, the nutrition education activities of the twelve States who entered into cooperative agreements with FNS in 1995 were more firmly established than the ten States who entered into agreements during 1996. Many of the Round Two States had been, up to this point, engaged in network development and planning activities. Five of the Round Two States (and one Round One State) were still in the planning phase at the time of these interviews and had not yet implemented nutrition education activities. The majority of the networks that are still in the planning process have identified a target audience and developed a logo, slogans and, in some cases, messages even if they have not finalized their method of delivery.

The following four critical aspects of the networks' nutrition education efforts will be discussed in the following sections: target audience, nutrition education message/topic, mode of delivery, and scope of dissemination.

1. Target Audience

One of the most basic and consequential decisions that networks have had to make is deciding on their target audience. Every other decision regarding their social marketing initiative depends on what target audience has been chosen. Not surprising given the diversity of the network States, most networks have identified more than one target audience (see Table V-1). All networks identified food stamp recipients or a broader low-income population as their target audience. Most networks have further segmented their target audience by age group or other identifying factor. Ten networks identified children as their target audience (seven targeted teens specifically), seven have targeted parents or caretakers of children, and three States have chosen the elderly as their target audience.

| Table V-1. Target Audiences for Network Nutrition Education Activities | | |
|-----------------------------------------------------------------------------------|---------------------------|----------------------------------------------------------------------------------------|
| Population | Number of Networks | States |
| Low-income Populations | 22 | AL, AZ, CA, CO, GA, IN, IA, KS, ME, MN, MI, MO, NC, NJ, NV, OK, PA, SD, VA, VT, WA, WI |
| Adults Food Stamp Participants | 8 | AL, CO, ME, NC, NJ, OK, PA, VA, WA |
| Food Stamp Parents with Children | 4 | CA, ME, VA, WA |
| Low-income Parents with Children | 7 | CA, ME, MN, MO, SD, VA, WI |
| Infants and/or Preschool Children | 4 | GA, IA, KS, ME |
| Elementary School Children | 9 | CA, CO, GA, IA, IN, ME, MI, MO, NV, VT |
| Junior High and High School Students | 7 | CA, GA, IA, IN, ME, NV, VT |
| Low-income Senior Citizens | 3 | AL, IA, PA |
| Staff serving Low-income Populations | 3 | ME, MN, WI |

Note: This table is limited to the largest of the major social marketing and nutrition education activities that can be attributed to Statewide nutrition education networks. It does not include activities of individual partners that were underway prior to the establishment of the network.

2. Message Content

The networks are in various stages of developing their nutrition education messages. Some networks have developed messages and begun implementing nutrition education activities, while others have only agreed upon a topic area or central network slogan from which the messages

will be developed. As Table V-2 indicates, the most common nutrition education topics were eating fruits and vegetables (ten networks) and general healthy eating/nutrition (eight networks). One-third of the networks focused on lower fat consumption, 20 percent included a specific messages encouraging physical activity, and 20 percent focused on eating a variety of foods. Some less commonly mentioned topics were thrifty shopping, food safety, and calcium intake.

| Table V-2. Topics of Nutrition Education Messages | | |
|--------------------------------------------------------------|---------------------------|----------------------------------------|
| Topic | Number of Networks | States |
| Eat fruits and vegetables | 10 | CA, GA, IA, IN, ME, MN, NC, NV, WI, VT |
| General nutrition/Healthy eating | 9 | AL, IA, ME, MI, MO, NJ, OK, SD, VA |
| Lower fat/Cholesterol intake | 7 | AL, CA, GA, IN, ME, MN, VT |
| Thrifty shopping | 6 | AL, CA ME MN, VA, WA |
| Eat a variety of foods | 5 | CA, IA, IN, ME, VT |
| Physical activity/Balancing intake | 5 | CA, GA, IN, ME, VT |
| Food safety | 2 | MN, VA |
| Calcium intake | 2 | MN, NV |
| Pregnancy related nutrition | 1 | AL |

Note: This table is limited to the largest of the major social marketing and nutrition education activities that can be attributed to Statewide nutrition education networks. It does not include activities of individual network members that were underway prior to the establishment of the network.

Table V-3 lists the specific nutrition education messages utilized or planned to be utilized by each network. As indicated in the table, 11 of the 22 networks have mentioned multiple messages of varying specificity. The messages range from very specific behavior changes such as the Wisconsin theme regarding increased consumption of fruit at breakfast, to more general nutrition Statements such as Michigan’s “Eat healthy, your kids are watching” message.

**Table V-3.
Network Nutrition Education Messages**

| State | Messages or Themes |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AL | General nutrition; budgeting food dollars; nutrition during pregnancy; reducing fat. |
| CA | Eat more fruits and vegetables & grains, and lower fat: It's "easy, affordable, tasty." |
| CO | Try new foods. |
| GA | Take charge of your health; Take 5-A-Day; Take down fat— It's all in the choices, portions and preparation; Take action— walk, plan, dance . . . |
| IN | Choose a variety of foods; Balance diet with physical activity. |
| IA | Eat a variety of foods. Make healthy food choices. |
| KS | Kansas Nutrition Network . . . Your connection to healthy food resources. |
| ME | "Eat Smart -- It's a Healthy Start." Choose a variety of foods; Eat more fruits and vegetables. |
| MI | Eat Healthy— Your Kids Are Watching. |
| MN | Theme: The Power of Eating: Learning, Energy & Growth. |
| MO | Theme: Eat for Health: It's about you and your family too. Messages: Preparing healthful dinners and snacks is convenient, affordable and a first step to improving a family's overall health. |
| NJ | Encouragement to participate in nutrition education. |
| NC | Eating fruits and vegetables can save your life! Specific messages vary for target populations. |
| NV | Increase grain, fruits and vegetables, increase calcium intake. |
| OK | Feed Your Family for Fitness; Eat Well, Live Well . . . It's Within Your Reach. |
| PA | None at State level. |
| SD | Eating Healthy, You and Your Family Are Worth It. |
| VA | Logo: Smart Choices, Healthy Families It's Your Choice. Topics: Preparing delicious safe food; healthy choices for the whole family; Making money and food stamps go further. |
| VT | Topics: Choose a variety of foods; Reduce fat and cholesterol. |
| WA | Eat at least one meal together; Making money and foods stamps go further. |
| WI | Increased consumption of fruits at breakfast. |

Note: This table is limited to the largest of the social marketing activities in each network.

3. Channels of Delivery

The diversity of the networks and the populations they have chosen to target is also reflected in the variety of channels through which the network's social marketing efforts have been directed.

The most common modes of delivery utilized by the networks were public service announcements (PSAs); radio and TV advertisement; and forums, conferences, booths and speaker's bureaus.

Many networks utilized both innovative nutrition education efforts informed by social marketing approaches and more traditional nutrition education techniques such as one-on-one and classroom nutrition education activities. The networks' more traditional nutrition education efforts will be discussed in Section B. As indicated in Table V-4, the majority of the networks (19 of 22) utilized multiple methods for delivering their messages. Some examples include:

- Alabama utilized 30 second television spots, a 1- 800 hotline, magnets, brochures to promote their message;
- The Maine Nutrition Network utilized paid TV advertisement, a radio PSA, a hotline, newsletters, and individual sessions/home visits; and
- Wisconsin plans to develop an Internet-based resource for nutrition education information.

**Table V-4.
Modes of Delivery for Network Nutrition Education Initiatives**

| Message Mode/Channel | Number of Networks | Stage of Implementation (Fall 1998) | |
|-------------------------------------------------------------------------------------------------------|--------------------|-------------------------------------|------------------------------------|
| | | Planned | Conducting/Complete |
| Ads and PSAs; Radio, Newspaper, TV | 8 | KS, NC | AL, CA, GA, ME, MI, MO |
| Forum, Conference, Speaker's Bureau, Booth | 9 | | CA, IN, ME, MI, MN, MO, NC, NJ, WI |
| Newsletters, Bulletin | 8 | OK, SD | AL, GA, ME, PA, WA, WI |
| Brochures, Posters, Magnets | 7 | OK, SD | AL, CA, GA, MI, VA |
| Manual/Curriculum for Professionals Serving Low-Income Populations | 5 | | AL, GA, ME, MN, MO |
| Direct Mail Information | 4 | NJ | ME, VA, WA |
| Hotline | 5 | NJ | AL, MI, ME, VA |
| Kiosk | 4 | SD | CA, CO, GA |
| Group Classes (6 sessions or more) | 5 | OK | CA, IA, ME, MN, PA |
| Individual Sessions | 3 | NJ | CA, IA, ME |
| Billboard, Outdoor Advertising | 3 | MN | GA, MI |
| Demonstrations | 4 | SD | GA, IN, MI |
| Video | 2 | | AL, IN |
| Internet | 1 | WI | |
| Transit Message | 1 | | GA |
| Special Educational Activities: Great Food Guide Pyramid Adventure, Grocery Store Tours, Walk-a-thon. | 3 | | AL, GA, MI |

Note: This table is limited to the largest of the major social marketing and nutrition education activities that can be attributed to Statewide nutrition education networks. It does not include activities of individual partners that were underway prior to the establishment of the network.

4. Scope of Dissemination

An important factor of consideration in assessing the nutrition education efforts of the networks is the scope of activities conducted: geographic reach—were the activities conducted Statewide, in a number of counties, or in a specific region of the State; number of sites involved in the activity; and number of contacts or individuals participating in the activities. The scope of

dissemination varied significantly, not only from State to State, but also from activity to activity. Some networks conducted nutrition education activities on a Statewide basis such as Georgia and California. In States where local health infrastructure has historically been strong, counties were often the focal point of the network nutrition education efforts:

- In Michigan, where the Public Health Department has a strong county presence with offices operating in each county throughout the State, the low-income population of one county was the target of the network's social marketing campaign. The campaign included media-based awareness building activities as well as partnership building for the development of special nutrition education programs during the campaign.

The majority of States engaged in both county and State level nutrition education efforts, such as the following:

- In California, a subset of counties that were not being served by EFNEP were targeted for the network's nutrition education efforts and, a Statewide social marketing initiative was simultaneously implemented.
- Both Statewide and county-specific efforts were conducted in Maine, a State in which county Cooperative Extension Programs have historically had greater presence than local health departments. The "Eat Smart, It's a Healthy Start" PSA initiative reached 20,000 food stamp households Statewide while individual- and group-based nutrition education classes were conducted in specific counties.

Not surprisingly, networks that engaged in mass-media social marketing efforts often cited the highest numbers of persons reached. States such as California, in which nearly one fifth of the Federal match is retained by the network for the development of Statewide social marketing efforts emphasizing broadcast advertising, have been successful in reaching broad audiences Statewide. Networks have reached large numbers of their target audience through mailing of newsletters and fact sheets as well as distribution of resource manuals/brochures at agencies and locations frequented by the target population. The following illustrates this:

- The Virginia Nutrition Network utilized a food stamp mailing to distribute nutrition education brochures to 200,000 food stamp households Statewide, which encompassed all food stamp recipients in Virginia.

Networks have also had success in generating thousands of contacts through county-based initiatives, such as hosting the Great Food Guide Pyramid Adventure, which generated over 5,000 contacts in one Alabama county. Traditional nutrition education methods such as classroom and one-on-one encounters have generally reached fewer audience members due to the nature of the activity and limitations in staff, space and participation. The scope of these activities are discussed in Section B.

5. Adaptation for Low-Income Audiences

As a part of their planning process, most networks utilized focus groups and pretests in the development of nutrition education messages and channels of delivery. The messages and activities reflect information gleaned from the target audience during the planning process and were developed to meet the needs and requests expressed in the focus groups and pretests. Few States engaged in additional adaptations for low-income audiences outside of the initial assessment process. Some network members, however, reported that adaptations took place in their own organizations as a result of their involvement in the network, due to increased awareness of the need for nutrition education activities, and for materials specifically targeting low-income populations.

B. Individual and Small Group Nutrition Education Network Activities

In addition to innovative social marketing efforts, at least six networks developed and implemented more traditional nutrition education activities such as individual and small group education and counseling (in addition to activities already being implemented by the Cooperative Extension component of the FSNEP in their State). Four networks conducted nutrition education classes and counseling sessions. As noted earlier, several States had not yet implemented their social marketing campaign or other nutrition education activities. Several of these networks, however, were engaged in nutrition education-related activities as they planned and developed their nutrition education campaigns. Four networks developed educational and resource materials such as curricula, resource guides, and newsletters during their planning phase. These network activities are discussed below, organized by their four key components:

target audience, message, mode of delivery, and scope of dissemination.

1. Target Audience

Although the target audiences of the more traditional nutrition education activities varied, as did the social marketing target audiences, all networks chose to focus on low-income caretakers of children for at least one of their activities. Two networks focused on Temporary Assistance to Needy Families (TANF) recipients and other low-income adults. Nutritional needs and nutrition education of seniors and pregnant women was an additional focus for several networks. A few networks focused on professionals serving low-income populations and seniors. As described below, the target audiences were as varied as the activities themselves:

- In Alabama, the target audience was Food Stamp Program recipients and eligibles and low-income parents and children in grades K-12.
- The activities of the Kansas Nutrition Network have focused on children 0-5 years of age and their caretakers. Maine had projects that focused their activities on children K-12, on parents from pregnancy until the child is three years old, and on adult food stamp participants with children under age 18.
- The target audiences of the Minnesota activities were junior high teachers, food stamp participants, and parents of young children.
- In Pennsylvania, Supercupboard activities (e.g., a program of nutrition education provided in conjunction with food banks) have been expanded by the network to target the nutrition education needs of seniors, teen parents, and TANF recipients (particularly women).
- Wisconsin targeted low-income caretakers of children, particularly mothers; practitioners serving low-income populations; and low-income children and their caretakers.
- New Jersey has focused some of its education efforts on staff of the multiple agencies and programs that serve food stamp participants.

2. Message Content

Nutrition education messages disseminated through the networks' individual and group activities spanned a variety of topics similar to those utilized in the social marketing activities.

The most common message was ‘eating a variety of foods.’ As indicated below, the networks utilized multiple messages in their individual and group activities.

- Alabama focused on 5-A-Day; the food pyramid; children’s nutrition needs; healthy snacking for children; food purchasing; meal preparation; and food safety.
- Maine’s messages included: choose a variety of foods; eat more fruits, vegetables and grains; eat 5-A-Day; construct a diet lower in fat; and balance diet with physical activity. Their pregnant and parenting classes addressed infant feeding, exposing infants to a variety of foods, and managing feeding problems.
- In Minnesota, educational workshops for professionals focused on nutrition information resources; food handling and food safety; and vitamin, mineral, and weight guidelines for children.
- In Pennsylvania, healthful eating, eating a variety of foods, lower fat consumption, thrifty shopping, and food safety were among the nutrition education messages for the senior, TANF recipient, and pregnant/parenting teen nutrition education classes.
- Wisconsin focused on nutritional needs of the elderly and nutrition information resources for practitioners.

3. Modes of Delivery

The networks utilized a variety of channels to deliver their nutrition education messages, including structured group classes, individual sessions, one-time workshops, and resource materials/curricula for practitioners. Three networks are utilizing weekly group classes to deliver nutrition education:

- In Alabama, one local nutrition network developed a series of six weekly parent nutrition education classes which were conducted through local religious organizations. Another Alabama county developed a 10-week series of weekly classes covering topics such as nutrition for pregnant moms, infant feeding, and breast feeding utilizing peer educators.
- The Maine network has developed a curricula for six weekly classes taught in elementary, junior high, and high school led by Family and Consumer Life teachers and other teachers within the schools.
- Through a network-sponsored expansion of the Pennsylvania Supercupboard

program, weekly nutrition education classes are conducted in a 6-8 week series.

One network utilized individual counseling and home visiting sessions to deliver nutrition education:

- One county program in Maine provided individual nutrition education sessions and home visits to low-income parents from pregnancy until the child is age three as part of a network-initiated expansion of an existing program for children at risk.

Nutrition education group and individual classes were not the only activities of the networks. They also engaged in a variety of nutrition-related activities designed to meet specific needs of the counties and populations being served, such as:

- A local Alabama nutrition network produced a one-page guide describing nutrition education materials, resources, and contacts for nutrition education services available for low-income residents.
- The Kansas Nutrition Network provided nutrition education messages for inclusion in the Kansas Community Action Program's Annual calendar for low-income families.
- In Minnesota, nutrition education workshops were conducted for junior high school teachers in two cities.
- New Jersey facilitated coordination between WIC, EFNEP, NEP, Summer Food Service Program, the School Lunch Program, Head Start, and SHARE-NJ through the development of the "Empowering Food Stamp Families for the 21st Century" Conference. This conference included sessions focused on the nutrition issues of food stamp participants.
- The Pennsylvania Nutrition Network delivered nutrition education presentations at the annual WIC State meeting, a USDA Roundtable, and Annual Agriculture Day at a local university.

4. Adaptation for Low-income Audiences

The networks utilized focus groups, concept testing, and pretesting during the planning stage in order to develop materials and activities that were appropriate for limited-income audiences.

Modifying the visual layout and adjusting the literacy level of written information are examples of adaptations made by networks during the development of materials. The Alabama network, for example, utilized large print menus that were designed to be easy to read from a literacy stand point as well as visually non-intimidating.

5. Scope of Dissemination

Generally, the individual and group nutrition education efforts of the networks have been conducted in limited areas within the States and have reached smaller audiences than the media-based activities described in the social marketing section. Among the more traditional nutrition education initiatives, food demonstrations and school-based group education programs have yielded the largest number of participants/individuals reached, exceeded only by the distribution of written materials featuring nutrition education information. Some examples are:

- In Alabama, nutrition education efforts were developed and conducted at the county level in 41 of 67 counties, and their scope ranged greatly from parent nutrition education classes in which 36 parents participated, to school-based nutrition education which reached over 5,600 children.
- Nutrition education Statements developed by the Kansas Nutrition Network were distributed to 7,500 low-income families Statewide last year within the Kansas Community Action Program's Annual calendar.
- In Maine, group nutrition education activities reached 4,800 students and 217 teachers in 50 schools in more than 10 counties, and their individual nutrition counseling reached 219 parents in one county.
- A workshop conducted for teachers in the Minnesota twin cities area reached 18 teachers from the two cities. Ten limited income parents participated in each of two series of county-based nutrition education classes targeting parents.
- In Pennsylvania, food demonstrations were conducted at local sites for 16,000 participants per month Statewide last year. Weekly Supercupboard nutrition education classes were conducted for 6-8 week series in three counties with a total of over 500 participants (teens: 100 participants in one county; elderly: 250 participants in one county; TANF recipients: 170 participants in one county).

C. System, Policy, and Environmental Change

The nutrition education networks are often engaged in system and policy changes to increase access to nutritious foods or access to nutrition education. USDA did not expect that all programs would undertake activities to affect changes in this area, but when system, policy or environmental changes do occur, they can make ongoing contributions to facilitate healthy dietary behavior. For instance, several networks have affected system or environmental changes that have increased the access to nutritious foods. Some examples include:

- The Maine Nutrition Network has been working with local Farmer's Markets to allow redemption of food stamps. This has had measurable effects in increasing access to fresh fruits and vegetables. An assessment of food stamp redemption data indicates that there was an increase of 15 percent in the dollar value of redemption of food stamps from Farmer's Markets or roadside stands.
- A local California program has been working with local teenagers to advocate education to allow delivery of nutritious foods in schools. This can include use of yogurt and low-fat foods in school cafeterias.
- In Georgia, as a result of the involvement of one private partner, bottled water has been allowed to be sold in addition to soda in several schools districts. Students have also been allowed to bring water to class. Network staff report that drinking water has now become a socially-acceptable beverage to consume instead of soda beverages.

Networks can also affect policy changes that lead to increased access to nutrition education. For instance, in New Jersey, as a result of the network, the Department of Labor changed its policy to allow the FSNEP to be part of the Employment Services' (ES) Job Skills/Life Skills workshops. A memorandum documenting this change in policy was sent to all ES Regional Managers and ES Local Office Managers. It is likely that such actions will increase in the future as networks become more firmly established and gain greater experience in advocacy activities to encourage nutrition changes.

D. Impact of Network Activities on Statewide Nutrition Education

The cooperative agreements and the resulting networks have served to: 1) increase the capacity of programs to provide nutrition education, and 2) help develop collaborative partnerships that improve nutrition education delivery to food stamp participants through social marketing and

individually directed activities. This has been accomplished through a series of steps which are first outlined, then further discussed below:

- The cooperative agreements encouraged collaboration among public and private partners with the aim of increasing the capacity and improving the coordination and reinforcement of multiple channels of delivering nutrition education.
- The networks planned increased delivery of nutrition education to low-income populations, especially through innovative mechanisms such as social marketing.
- Statewide nutrition education efforts are better coordinated, and programs have been expanded and modified to better meet the nutrition education needs of low-income populations.

1. Increased Capacity and Partnerships

The NEPs have had an important role in developing the capacity for networks to deliver effective nutrition education. Seventeen networks have at least two full-time equivalent (FTE) staff who are dedicated to promoting nutrition education, and in some networks this number is considerably higher. These resources have helped the networks to develop collaborative relationships with the variety of State, local, and private organizations who were engaged in or support nutrition education. In general, the networks have done a commendable job in developing broad-based State coalitions to support nutrition education. Eighty percent of the networks had 15 or more partners, and half of the network members were from the private sector. If there was a shortcoming, it is that the number of for-profit partners was limited. Nonetheless, where for-profit partners were involved, they made important contributions to nutrition education efforts, and network staff are hopeful that the involvement of for-profit partners will increase as the networks move from planning to implementation of nutrition education activities.

2. Expanded Nutrition Education

It is still early to make conclusions regarding the reach of the social marketing activities stemming from the Statewide nutrition education networks initiative. However, observations can be made about network plans for nutrition education initiatives and the messages developed to convey

them. By the fall of 1998, nearly all networks were completing their planning stage or had begun to implement social marketing plans to promote nutrition education efforts. (The only exceptions to this were the three networks that were temporarily inactive while they sought to fill staff vacancies.)

All the networks planned to or were targeting a low-income or a food stamp population. There was, however, considerable recognition of the need for market segmentation within this broader group, and networks had developed more targeted messages and delivery strategies for: (1) adult food stamp participants, (2) low-income parents of pre-school and elementary school children, and (3) programs directed at children and adolescents in schools serving low-income students.

The messages covered different or multiple aspects of messages consistent with USDA Dietary Guidelines for Americans. The most common nutrition education message addressed one or more of the following five topics: (1) increasing consumption of fruits and vegetables, (2) eating a variety of foods, (3) reducing fat intake, (4) teaching thrifty shopping, and (5) balancing intake and physical activity. The messages were being tailored in content and style to be appropriate for low-income populations based on feedback from the target audience.

The messages were designed to be communicated through a variety of social marketing channels including radio and television ads, newsletters, brochures, and public relations efforts in addition to nutrition education sessions. The networks were attentive to targeting the delivery of messages through methods and distribution channels to reach low-income audiences. As a result, networks indicated that existing nutrition education programs have been expanded and new programs have been developed as a result of network involvement. For example:

- In North Carolina there was a significant increase in the number of nutrition education programs being conducted. North Carolina went from having a single nutrition education program (*Out for Lunch*) to implementing 11 programs with four additional programs in the planning stage. More counties than ever are now receiving nutrition education throughout the State.
- Four new programs have been implemented in Pennsylvania due to the influence

of the network. Those include: 1) a farmer's market on-site nutrition counseling program and monthly newsletter; 2) a nutrition education program for the elderly delivered at congregate meal sites; 3) food demonstrations at local food banks; and 4) a school nutrition awareness campaign.

- In Maine, new middle and high school nutrition programs, a summer nutrition program and parent nutrition programs have been funded because of the involvement of the network. The program is currently being delivered in 50 schools covering nearly half of the school districts in the States that offer free or reduced school lunch to 50 percent or more of their students.

Also, the establishment of Statewide nutrition education networks has increased awareness of the need for nutrition education programs, specifically those targeting limited-income populations. As a result of the activities and the awareness-building campaigns of the networks, other organizations and agencies have begun to adapt existing nutrition education programs for low-income populations. Some examples are:

- The South Dakota network has spent much of its early grant time educating organizations and agencies throughout the State about appropriate nutrition education activities for low-income populations. This is particularly relevant since many of the organizations serve a broader population and have not previously focused on low-income individuals. Organizations such as the Pork Producers Council that previously only developed nutrition messages for the general population are now considering adaptations for low-income populations.
- In Pennsylvania, newsletters distributed through a collaborative effort between the Hunger Action Center, the County Commissioners, and the Rural Health Office historically have been developed for the general adult population. As a result of network involvement, they now include low-income-appropriate nutrition education related information. The network is planning to bring an intern on board to further expand this activity.
- California indicated that many of the local nutrition networks who were not previously targeting low-income populations have now incorporated activities that target this group.

3. Collaboration in Social Marketing and Nutrition Education

The majority of networks developed new materials to reach a specific target audience or to provide a more general "umbrella" set of nutrition education resources. Network members

typically used materials developed by the network to supplement existing nutrition education materials from their programs. There were a number of instances in which nutrition education materials were shared across programs or the ideas for materials (such as newsletters for food stamp participants) were shared among the networks in different States. Such sharing typically arose from informal contacts of network members and sharing at conferences.

Various organization and agencies in the cooperative agreement States have also begun or increased collaborative efforts related to nutrition education for low-income populations as a result of their involvement with the Statewide nutrition education networks. Examples include:

- Through coordination with the State FNP, the Alabama network has been able to develop a new program (*Glow Germ*) utilizing nutrition education materials previously purchased through FNP but that were not being utilized.
- The Maine network has facilitated increased collaboration between the Department of Health and Extension which resulted in those organizations using the network needs assessment to develop a new program, “5-A-Day Power Plus,” which provides a nutrition education curriculum for 4th grade teachers and students. As a result of networking and information sharing regarding the nutrition education needs of the limited income populations during the New Jersey network meetings, the State Food Stamp and NEP programs have made their nutrition education materials/programs available to the Division of Employment and Training to be included in their Life Skills workshops.

There were also examples in which different partners collaborated in a particular social marketing initiative to a defined audience. For instance, in Maine, Virginia, and Washington State, the Food Stamp Program provided labels to send newsletters to food stamp families with children (or provided mailing inserts allowing food stamp participants to request this type of newsletter). In Virginia, a number of Food Banks used materials developed by the network to support nutrition education of families.

CHAPTER VI

Lessons and Conclusions

Cooperative agreements awarded by FNS contributed to the development of Statewide nutrition education networks. Those networks are now making important contributions to the delivery of nutrition education to low-income populations through a variety of social marketing efforts. However, this progress has not always been easy, and there is much that can be learned about effective network practices that can be shared among programs.

Factors that contributed to the success of nutrition networks included: (1) experienced leadership teams, (2) support of senior management, (3) attention to partnership issues, (4) attention to resource management issues, (5) emphasis on complementary modes of social marketing, and (6) emphasis on development and enhancement of community nutrition education programs.

Earlier chapters of this report described the progress resulting from the cooperative agreement demonstration in terms of network development (Chapter III), needs assessment and planning (Chapter IV), and nutrition education and social marketing (Chapter V). This chapter provides a more integrative assessment. The chapter describes (1) network accomplishments, (2) challenges faced by networks and strategies to address the challenges, (3) lessons about success, and (4) overall conclusions of the study.

A. Accomplishments

The results of this evaluation suggested that most of the States who were awarded cooperative agreements made considerable progress in meeting the goals of the cooperative agreement.

This report assessed network accomplishments in terms of the following outcomes:

- Preparation, submission, and approval of a Food Stamp Nutrition Education Plan (FSNEP) or addition of network activities to an existing FSNEP;
- The social marketing and nutrition education activities resulting from the networks;
- The resources leveraged (considering the size of food stamp population in the State); and
- Attainment of the objectives for the cooperative agreements (fully met, substantially met, partially met, or failed to meet).

These outcomes are discussed at length in the following four sub-sections of Section A.

1. Approval of Network-Related Nutrition Education Plans

One measure of the success of the overall demonstration program was the proportion of networks that went on to develop an NEP that was approved by the State and Regional Food Stamp Program. By the Fall of 1998, 75 percent (9 of 12) of Round One networks³ and 50 percent of Round Two networks (5 of 10) had submitted and received approval for network activities through an NEP (Table VI-1).⁴ This study considered networks to be successful in terms of sustainability if they received funding as: (1) the sole or umbrella NEP in the State (2 networks); (2) a distinct component of a States' NEP (7 networks) or; (3) part of an existing NEP who operated under the auspices of the Cooperative Extension Service (5 networks).

³ Three of the Round One networks and two Round Two networks decided to pursue ongoing funding as part of the FSNEP awarded to the Cooperative Extension Service in their State.

⁴ By July 1999, three additional networks had received approval for their NEP, bringing the rate of Round Two networks receiving an approved NEP to 80 percent.

**Table VI-1.
Approval of Network-Related Nutrition Education Plans: Fall, 1998**

| NEP Approval | Round One | Round Two | Total |
|---------------------------------------------|-----------|-----------|-----------|
| NEP was submitted and approved | 9 75% | 5 50% | 14 63% |
| NEP was not submitted (or not yet approved) | 3 25% | 5 50% | 8 36% |
| Total | 12 100% | 10 100% | 22 100% |

Note: This table shows column percentages.

Of the eight networks that had not received approval for an NEP, by the Fall of 1998, only two had given up on efforts to submit a plan. One network was responding to request for revisions to their plan, and other networks were still working on their submissions, though their progress had been slowed by difficulty in identifying match or temporary inactivity as the networks sought to recruit key network staff. By July 1999, three of these networks had an NEP approved, bringing the percentage of Round Two networks that received approval of a NEP up to 80 percent.

All eight of the networks that did not submit and/or did not receive approval for their NEP by the fall of 1998, encountered difficulties in identifying sources of matching funds⁵. In addition, six of these eight networks encountered inter-organizational issues regarding competition for match funds that proved difficult to resolve (the problems involved a different set of organizations in each State.)

Also in four of the networks, turnover of a Project Director contributed to the networks' difficulty in preparing an NEP. Four of the networks also confronted turnover in senior management (such as the manager to whom the network Project Director reported). This turnover could create difficulties if the new senior manager decided that the burden associated

⁵ Even though three more Round Two networks had received approval for an NEP by July 1999, our analysis of factors associated with success focuses on receipt of approval by the Fall of 1998, because that is when interviews about network processes and activities took place.

with managing the reimbursement system was not justified by the amount of matching funds that they were able to identify.

In two instances, State-specific political circumstances proved problematic. The first State was recovering from a scandal involving misappropriation of funds for a different social marketing campaign being conducted in a different State agency. Another State decided not to seek additional USDA funds during an election year when candidates were opposing new State programs.

2. Level of Social Marketing Activities

Networks also were assessed in terms of the level of social marketing activity in which they engaged by the Fall of 1998.⁶ This assessment, summarized in Table VI-2, indicated that two-thirds (67 percent) of Round One networks and one-half (50 percent) of Round Two networks were very active or active when it came to developing and implementing social marketing activities. The fact that levels of activity were higher among the Round One networks is likely to be a reflection of the greater amount of time those networks were operational. It suggests that levels of network social marketing activity will further increase in coming years. The sections that follow describe social marketing efforts that resulted from network activities.

⁶ Level of activity was rated by having the evaluation team and the technical assistance team independently classify each network into one of the following categories:

- Inactive—no longer functioning or temporarily inactive (e.g., several networks that had been active were temporarily inactive as they engaged in filling a staff vacancy);
- Planning (e.g., several Round Two networks were still engaged in planning for the submission of an NEP);
- Active (i.e., the network was actively engaged in nutrition education activities initiated by the network as a result of completion of needs assessment activities); and
- Very active (i.e., the network was engaged in three or more major nutrition education activities that were implemented with the support of the network).

There was a 91 percent agreement between the two sets of initial ratings, and discrepancies were quickly resolved through discussion. Nonetheless, these ratings were somewhat subjective, and reflect network activity at one point in time (Fall, 1998). A different set of ratings in terms of level of activity might well apply in coming years.

**Table VI-2.
Level of Network Social Marketing Activity: Fall, 1998**

| Level of Network Social Marketing Activity | Round One* | Round Two* | Total |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|--------------|
| Very Active (approved NEP, 3 or more major social marketing activities attributable to the network) | 3 25% | 0 0% | 3 14% |
| Active (approved NEP, new social marketing activities attributable to the network) | 5 42% | 5 50% | 10 46% |
| Planning (working on submission of NEP and marketing plan) | 1 8% | 3 30% | 4 18% |
| Inactive (3 networks were temporarily inactive as they sought to replace key network staff; 2 networks had largely ceased functioning) | 3 25% | 2 20% | 5 22% |
| Total | 12 100% | 10 100% | 22 100% |

* Percents represent column percents.

As noted previously, one of the key goals of the cooperative agreements was to develop networks that incorporated social marketing approaches to nutrition education. This goal was beginning to be realized, although it was still too early to assess the full impact of social marketing activities. All the networks undertook a needs assessment process to develop nutrition education activities targeted toward food stamp populations. Networks engaged in the following four broad types of social marketing activities.

- **Television and radio broadcast materials.** The majority of nutrition networks actively had been working on the development of TV and/or radio materials to support nutrition education. In 1998, a major Statewide media campaign was launched in California and media campaigns were pilot tested in counties in Michigan and Missouri. A separate evaluation of the Michigan pilot project (described below) found that the social marketing effectively reached a low-income population and conveyed messages likely to influence their behavior. Social marketing campaigns were scheduled to be launched during 1999 in 12 more States.
- **Direct mailing to food stamp participants.** Three networks (Maine, Virginia, and Washington State) developed mailings and newsletters that were sent to more than 100,000 food stamp participants. An evaluation in Washington State found that a substantial proportion of food stamp families read the mailings and reported that they tried some of the suggestions in the newsletters.

- **School-based programs.** About half of the networks were working with children in schools in which 50 percent or more of the children received free- or reduced-price school lunch (one indicator of a low-income population). These programs typically worked with classroom teachers to integrate well-tested nutrition educational materials into their classroom instruction.
- **Development of community activities.** One of the important contributions of networks was the development or enhancement of community-based nutrition programs. Given the matching structure of the NEP, this usually involved identifying existing local government programs that could provide in-kind resources to serve as matching funds. Depending on the proportion of these funds devoted to network activities, resources were increased by 50 to 100 percent. In addition, a number of networks made efforts to develop new community-based networks and to work with diverse groups such as faith communities and emergency food providers.

About half of State networks are developing strong local community-based nutrition programs. For instance, a county program in Maine was providing nutrition education as part of a comprehensive-services program for parents of preschool children who are judged to be at risk for abuse and neglect. California had issued local incentive awards to more than 30 communities, and the North Carolina network was working with 15 community programs covering more than 60 counties of the State (as shown on the map in Figure 2).

- **Private Partnerships.** Although strong public-private partnerships were still emerging, the examples we saw of partnerships suggest that these relationships could be very effective. For instance, local supermarket chains in Michigan and Georgia provided in-kind services to support the development of media materials. Supermarket chains in Arizona and California tested the use of interactive kiosks to increase purchases of fruits and vegetables. An evaluation of the kiosks found that their use influenced modest yet statistically significant increases in the purchase of fruits and vegetables in supermarkets serving low-income communities.

One question sometimes raised about social marketing is whether use of mass media can effectively target a food stamp population. Findings from the Kent County pilot test (Holaday, 1999) indicated that the campaign there reached a low-income audience. The pilot test employed a television ad (which ran 394 times on cable channels (USA, TNN, BET, Nickelodeon, and Lifetime), along with billboards in 20 locations, 200 bus posters, newsletters, and take-home information on school lunch menus in schools in low-income neighborhoods.

A random-digit-dialing telephone survey of 800 adults found that the campaign had achieved a high level of awareness, particularly among low-income adults. The campaign message was recalled by 52 percent of adults with income below \$20,000 (combining measures of unaided and aided recall). This was significantly higher than the rate of recall (42 percent) among adults with higher income levels.

The unaided or “top-of-mind” awareness of the campaign message “Eat healthy, your kids are watching” was recalled by more than twice as many low-income adults (7 percent) and all adults (5 percent) than the national “Got Milk” campaign⁷ which had run for more than a year (recalled by about 2 percent of low-income and higher-income adults). Further analysis indicated that school lunch menus were a particularly cost-effective way to reach low-income adults. Newsletters, billboards, newspapers, and TV ads were about equal in cost-effectiveness. Posters and bus signs were the least cost-effective medium.

The evaluation yielded evidence that the campaign messages could affect the attitudes of adults (Table VI-3). The study found that low-income adults (the target for the campaign) were more likely than higher-income adults to report being persuaded by the message, “Eat healthy, your kids are watching.” When asked what they thought about that message, low-income adults were more likely to respond, “I didn’t know my kids watch what I eat. I’ll try to set a good example now.” The study also found a higher percentage of reported persuasion among African-Americans (34 percent among men and 21 percent among women) than among other

⁷ Since January 1995, the National Fluid Milk Processor Promotion Board has spent approximately \$80 million a year on television and print ads featuring athletes and celebrities sporting a white milk mustache.

ethnic groups, and among individuals without college experience (22 percent) than among those who were better educated.

| Table VI-3. Attitudes Toward Campaign Message: Pilot Study in Kent County, Michigan | | | | | | |
|------------------------------------------------------------------------------------------------|-------------------|------|----------------------|------|--------------|------|
| Group | Low-income | | Higher-income | | Total | |
| Old Acceptors | 65 | 66% | 545 | 78% | 610 | 76% |
| New Acceptors | 20 | 20% | 85 | 12% | 105 | 13% |
| Resisters | 13 | 13% | 72 | 10% | 85 | 11% |
| Total | 98 | 100% | 702 | 100% | 800 | 100% |

Note: Percentages show column percentages. Respondents were asked: “Which Statement best describes what you think about when you read or hear the message, “Eat healthy, your kids are watching?” Would you say:

(Old Acceptors) “I know my kids are watching and I try to set a good example.”

(New Acceptors) “I didn’t know my kids watch what I eat. I’ll try to set a good example now”

(Resisters) “It doesn’t matter to my kids what I eat.”

Source: Adapted from Holaday, R.M. “Evaluation of the Michigan Nutrition Support Network: Network Building and ‘Eat Healthy’ Campaign.” Final Report to Michigan State University Extension. Report by Holaday Research and Consulting. Lansing, MI: March 1999.

In summary, the Michigan pilot study demonstrated that a social marketing campaign can target low-income adults who are likely to be food stamp participants. The Michigan experience also offered evidence of the benefits that a social marketing campaign can have on coalition development at the community level. One long time nutrition educator commented (Holaday, 1999):

Even though we’ve had FNP for five years, some . . . don’t get it. Apparently, it’s the message of the Eat Healthy campaign that makes the difference, and being part of a team. It leads to referrals from one agency to another that just didn’t happen before . . . The campaign focused everybody.

3. Leveraging of Resources

In total, USDA provided roughly \$4 million in funding for the two rounds of cooperative agreements (including the technical assistance associated with the initiative). In 1998, these networks obtained more than \$20 million in non-Federal funding (about 95 percent of these resources came from in-kind resources.) In addition, the networks identified a significant amount of in-kind services from non-governmental agencies that added considerably to the resources that networks were able to devote to nutrition education. The value of non-governmental in-kind was difficult to assess (programs did not have a reason to keep track of these figures since they did not count as match). However, there were enough examples to suggest that these leveraged resources were substantial. For instance, the Virginia network was able to enlist the assistance of volunteers in food banks across the State to provide information about nutritious ways to prepare foods, and the California nutrition network's publicity regarding decreases in State consumption of fruits and vegetables resulted in several hundred hours of air time that translated into more than \$500,000 in value.

Although it usually took considerable effort on the part of networks to put the matching mechanisms into place and to identify sources of matching funds, this work was beginning to bear fruit by 1994 and it appeared that the leveraging of resources would continue to grow in coming years. In States whose networks received support as part of the approved NEP for successive years, the average amount of proposed funding for network activities had increased by more than 20 percent a year. During their initial year, a number of networks had difficulty spending all their approved funds largely due to delays in hiring. However, during the second year, actual expenditures tended to be much closer to the approved amounts.

The cooperative agreements were not the only cause of growth in expenditures for the FSNEP. The network-related NEPs accounted for only about a third of the total \$74 million a year in federal funding associated with the FSNEP program in 43 States. The majority of FSNEP funds went to Cooperative Extension programs, and in most States the extension-related FSNEPs started prior to the implementation of the nutrition education networks. Nonetheless, several findings suggested that the cooperative agreements contributed in important ways to the leveraging of funds for nutrition education. First, the cooperative agreements helped to broaden the network of agencies that participated in FSNEP; more than half of network-related FSNEP

funding in 1998 supported nutrition activities of organizations beyond Cooperative Extension. Second, in most of the instances where the primary grantee was Cooperative Extension, the cooperative agreements were used to help plan for multi-agency coordination and for development of new social marketing activities.

The effect of the nutrition network on resources available to support nutrition education is illustrated by California's program. As the largest of the network programs, it best illustrates the range of changes in nutrition education programs that could be influenced by the nutrition networks (see Table VI-4). For example, non-Federal funding for the extension component of California's FSNEP grew from \$2.6 to \$3.2 million, while non-federal funding for the network-related nutrition education component increased from \$200,000 to \$8.3 million. The network started a number of new programs such as Latino 5-A-Day, and added a social marketing emphasis, that magnified the potential effect of the program on low-income populations.

The increased resources in the California nutrition network—accounting for about two-thirds of the growth—came primarily from a concerted effort to identify State, county, and local governmental programs that were willing to allow the resources they were spending on nutrition education to be counted as match for the network, with the expectation that 50 percent of the additional resources obtained would be returned to the local program to increase its own nutrition education efforts. The remaining 50 percent would be retained by the network to support Statewide social marketing campaign and outreach to special populations, as well as financial infrastructure to track the matching funds.

**Table VI-4.
The Growth in Non-Federal Resources for Nutrition Education for Food Stamp
Participants in California**

| Organization | 1995 | | 1998 | | Impact of Network |
|----------------------------|-------|--------------------------------|-------|--------------------------------|------------------------------------------------------------|
| | Staff | Resources | Staff | Resources | |
| CA Nutrition Network | 3 | \$200,000 | 29 | \$8.3 million | |
| Program development | 2 | | 6 | | Additional capability |
| Administration and support | 1 | | 16 | | New services |
| Media and marketing | 0 | | 4 | | New component |
| Evaluation | 0 | | 3 | | New component |
| Project LEAN | 1 | \$300,000 | 2 | \$600,000 | 50% expansion |
| 5-A-Day | 2 | \$300,000 | 4 | \$300,000 | New media component |
| Latino 5-A-Day | 0 | 0 | 3 | \$300,000 | New Program |
| Dept. of Education | 4 | \$600,000 | 4 | \$300,000 | Network preserved staff after NET program ended |
| FSNEP (Extension) EFNEP | | \$2.5 million \$3.2 million | | \$3.6 million \$3.2 million | FSNEP was started in 1994 Funding for EFNEP stayed flat |
| Total: | | \$6.3 million | | \$16 million | |

Note: Column totals are less than the sum of rows because of adjustments to eliminate double counting.

A third of the growth is attributable to the network's ability to identify foundation funding that could be devoted to nutrition education. While part of this new funding was fortuitous, (a major new source of support, The California Endowment, was established by Blue Cross/Blue Shield during the process of health care reform), the fact that the network was in place as a result of the cooperative agreement enabled the network to take advantage of this opportunity. The California Endowment was interested in coalitions that were engaged in efforts to improve the health of underserved populations. The fact that the network was already established as a program to meet these requirements gave network partners an advantage in submitting grant applications; and senior network personnel alerted network partners to submit grant applications to the foundation.

Other smaller networks have shown comparable or even greater rates of growth. For instance, in Maine, the non-federal resources expended on network activities increased eightfold from less than \$50,000 to more than \$400,000. In addition, the experience developed through the nutrition education networks also contributed to the ability of States to secure funding for other prevention programs. For instance, the experience of the network was instrumental in the ability of the Georgia health department in obtaining a major grant for a network-based approach to prevention of cardiovascular disease in minority communities.

One of the issues the study investigated was displacement. In some national programs, displacement can occur when States reclassify clients or move programs from one funding source to another in a way that maximizes the share of the program cost that is paid by the Federal government. The study did not find evidence that displacement was occurring in any of the States that were evaluated. Rather, it appears that before the network, the funding for nutrition education in many States had been decreasing. In many States, funding for 5-A-Day had been cut back; the EFNEP program had been flat-funded for nearly a decade (resulting in an effective decrease in resources for nutrition education); and USDA NET grants to provide nutrition training to school food service personnel had ended. Given this context, the Food Stamp nutrition education program was extraordinarily timely. The cooperative agreements were able to build on existing networks and provide the resources needed to continue nutrition education to low-income populations.

4. Achievement of Objectives for the Cooperative Agreements

Earlier sections of this chapter have described the success of the cooperative agreement demonstration project in terms of specific outcomes such as obtaining approval for an NEP, developing social marketing activities, and leveraging resources for nutrition education. This section describes the success of the networks in four of the specific objectives associated with the cooperative agreements:

- Building an active Statewide Nutrition Education Network of public and private organizations to support nutrition education and promotion to food stamp recipients and eligibles;

- Integrating messages promoting the Dietary Guidelines for Americans into State nutrition education/promotion for the target audiences;
- Incorporating social marketing approaches to expand the reach and approach of current State nutrition education; and
- Submitting and receiving approval for a nutrition education plan under the State Food Stamp Program.

Using these criteria, networks were classified in terms of how fully they had attained those objectives by the fall 1998. Each network was classified into one of four categories: (1) failed to meet objectives of the cooperative agreement (i.e., networks that failed to submit or receive approval for an NEP); (2) partially met objectives (i.e., one network submitted a plan that was approved as part of the States FSNEP but, at the State-level, it was essentially a single-agency program); (3) substantially met the objectives (these networks submitted a NEP that was approved but major activities were primarily limited to a small number of organizations); (4) fully met the objectives (these networks were judged by the fall of 1998 to have attained all of the objectives of the cooperative agreements).⁸ An assessment of the progress of networks in meeting these objectives is shown in Table VI-5. Characteristics associated with failure and success in terms of this outcome is discussed in the sections that follow.

⁸ The ratings were independent made by the evaluation team and by the technical assistance team. There was 91 percent agreement in ratings then the discrepancies were resolved in discussion. While these ratings are somewhat subjective , nonetheless, they may serve a useful tool in helping to identify lessons associated to the success of the demonstration program.

**Table VI-5.
Progress Toward Attainment of Objectives for Cooperative Agreements: Fall 1998**

| Attainment of Objectives | Round One | Round Two | Total |
|---------------------------------|------------------|------------------|--------------|
| Fully met objectives | 6 50% | 2 20% | 8 36% |
| Substantially met objectives | 2 17% | 3 30% | 5 23% |
| Partially met objectives | 1 8% | 0 0% | 1 5% |
| Failed to meet objectives | 3 25% | 5 50% | 8 36% |
| Total | 12 100% | 10 100% | 22 100% |

Note: Percentages indicate column percentages.

B. Challenges

Cooperators faced a number of challenges. Chief among them were:

- Lack of experience with the FSP reimbursement mechanism. One of the barriers to the networks' submitting approved NEPs was the primary grantee's unfamiliarity with the reimbursement mechanism. In two-thirds of the networks that failed to attain the objectives of the cooperative agreement, the network staff had no prior experience with the Food Stamp Program reimbursement mechanism. Many primary grantees were more familiar with grants which did not have matching requirements. This situation was complicated by new questions about reimbursable expenses that were raised as social marketing efforts were being planned in a wide number of States. Questions ranged from "What constitutes a governmental entity?" to "What criteria should be applied to assure that a social marketing program is reaching a food stamp audience?" Because FNS staff sometimes needed to seek legal guidance to make sure that rules were consistently applied, it often appeared to grantees that the matching requirements were an evolving process.

Unfamiliarity with the funding mechanism did not necessarily make it impossible for a network to succeed, however. Nearly half (47 percent) of the networks that achieved the objectives of the cooperative agreement had a primary grantee that was unfamiliar with the reimbursement mechanism. Indeed, the largest network in the country (receiving more than \$8 million a year) faced similar conditions. The difference was that this network had strong leadership and high level support from senior management, made a concerted effort to address the matching issues, and developed effective procedures to achieve match among partners.

- **Difficulty in obtaining matching funds.** The Food Stamp Program requires State FSNEPs to identify a 1:1 match for every dollar of FSP administrative funds they receive under an approved nutrition education plan. Match can come from State and local governmental cash and in-kind contributions devoted to nutrition education for low-income populations and/or from private cash contributions. However, as mentioned earlier, in-kind match from private organizations (whether nonprofit agencies such as food banks, or for-profit organizations such as supermarket chains) does not count as matching funds. Hence, networks had to devote considerable time and energy to identifying resources that could be counted toward matching funds. Cooperative Extension programs were often able to identify matching funds from State university or local county programs. However, when extension programs tried to go outside these sources, they often faced the same challenges as non-extension groups. Seven of the eight networks that failed to obtain the objectives of the cooperative agreements reported significant difficulties in identifying sources of matching funds.

- **Historical turf and cultural differences among organizations.** Networks often had to confront barriers to collaboration stemming from differences in culture and background of organizations interested in nutrition education. In part, this problem occurred because in some States, the organizations had not worked together before. Sometimes organizations felt no incentive to participate in a network, particularly if they already had an existing source of funding for nutrition education or had a disincentive to growth such as difficulties in hiring new staff. In addition, organizations often varied in their traditional emphasis (e.g., extension programs have emphasized one-on-one or small group education of low-cost meal preparation; public health programs have emphasized broad-based health; food banks have focused on food access issues; commodity councils have an interest in promoting consumption of agricultural products). These differences sometimes proved a challenge to networks; nearly all (89 percent) of the networks that failed to meet the objectives of the cooperative agreements, encountered inter-organizational issues about control and resources that appeared to contribute to the failure of the networks.

- **Limited experience of network members with social marketing.** Although USDA has a longstanding interest in nutrition education, historically it has involved small group and individual education similar to that offered through EFNEP. In many respects, social marketing was new to many network members. At the beginning of the demonstration project, nearly half of the primary grantees had relatively limited experience with integrated social marketing campaigns. The cooperative agreements enabled the networks to develop their capacity in this area.

- **Staff turnover.** Staff turnover was often a challenge to networks; although the effect of turnover appeared to depend on the level of the person who left. About a third of Network Coordinators left and needed to be replaced between the initial award of the cooperative agreements and the fall of 1998. Turnover of Network Coordinators was about the same both for networks that met their objectives and those that did not; thus, it appeared that networks were able to adapt to this change in personnel.

On the other hand, the loss of a Project Director (even though that person may only have worked on the network part time) posed a significant challenge to fledgling networks. In four of the networks that failed to attain project objectives, turnover of a Project Director contributed to difficulties in preparing an NEP. This finding suggests the value of succession planning in the leadership of networks.

This evaluation assessed the success of networks in confronting these challenges and attaining the objectives of the cooperative agreements. Table VI-6 highlights the differences between networks which by the fall of 1998 had met (fully or substantially) or had failed to meet the objectives of the cooperative agreement. This outcome is reported here because it is the most inclusive, but, in fact, similar findings were observed using criteria based on receipt of an NEP, or level of activity, or level of resources, since these outcome were interrelated.

Eight of the nine networks that failed to meet (or only partially met) the objectives of the cooperative agreements (on the part of the health department in resistance to accepting or transferring matching funds) plus AL and WI which didn't try to form a broader network] encountered inter-organizational issues regarding leadership and resources that proved difficult to resolve. (The problems involved a different set of organizations in each State.) This association does not necessarily imply causality; but it does suggest that inter-organizational issues deserve serious attention. In contrast, the lack of experience with FSP reimbursement mechanisms was common among failed networks, but successful networks faced this problem as well. This suggests that lack of experience in this area is something that can be addressed.

**Table VI-6.
Challenges Faced by Unsuccessful and Successful Networks**

| Challenge | Unsuccessful Networks (n = 9) | | Successful Networks (n = 13) | | Significance | |
|----------------------------------------------------------------|-------------------------------|---------|------------------------------|---------|--------------|------|
| | n | Percent | n | Percent | Chi-sq. | p |
| Significant difficulty identifying match | 8 | 89% | 3 | 23% | 12.0 | .001 |
| Inter-organizational challenges | 8 | 89% | 3 | 23% | 12.0 | .001 |
| Limited experience with social marketing | 8 | 89% | 6 | 47% | 6.2 | .05 |
| Primary grantee lacked experience with a reimbursement program | 6 | 67% | 6 | 47% | 1.9 | n.s. |
| Senior management turnover | 4 | 50% | 1 | 8% | 6.9 | .01 |
| Turnover of Project Director | 4 | 44% | 2 | 15% | 4.0 | .05 |
| Turnover of Network Coordinator | 3 | 33% | 4 | 31% | 0.4 | n.s. |
| Three or more challenges | 6 | 67% | 4 | 31% | 4.4 | .05 |
| Four or more challenges | 4 | 44% | 2 | 15% | 4.0 | .05 |
| Five or more challenges | 4 | 44% | 0 | 0.0 | 10.4 | .001 |

Note: Unsuccessful networks were defined as networks that had not met, or had only partially achieved the objectives of the cooperative agreements by the fall of 1998. Successful networks were defined as networks that had substantially or fully achieved the objectives of the cooperative agreements. Networks were assessed in terms of attainment of the four objectives of the cooperative agreements.

C. Lessons about Success

This evaluation identified a number of characteristics that contributed to the development of effective nutrition education networks. For purposes of this analysis, the evaluation team classified networks in terms of: (1) receipt of a nutrition education plan; (2) attainment of objectives for the cooperative agreements (fully met, substantially met, partially met or failed to meet); (3) the level of resources leveraged for network-related nutrition education activities (controlling for the size of the food stamp population in the State); and (4) the level of nutrition education activity resulting from the network. Although these criteria sound different, in

practice, they were highly interrelated; that is, networks that were successful in leveraging resources were better able to support active social marketing efforts.

The analysis of these findings, summarized in Table VI-7 and discussed in the sections that follow, suggests that strengths in leadership, network approach, and resource management contributed to the success of networks.

| Table VI-7. Characteristics Associated with Successful Networks | | | | | | |
|----------------------------------------------------------------------------|-----------------------------------------|----------------|------------------------------------------|----------------|---------------------|----------|
| Characteristic | Successful Networks (n = 13) | | Unsuccessful Networks (n = 9) | | Significance | |
| | n | Percent | n | Percent | Chi-sq. | p |
| Strengths of Leadership: | | | | | | |
| Experienced leadership team | 10 | 77% | 0 | 0% | 9.8 | .01 |
| Support of senior management | 6 | 46% | 0 | 0% | 3.6 | .05. |
| Strengths of Approach: | | | | | | |
| Emphasis on partnerships | 8 | 62% | 0 | 0% | 6.2 | .05 |
| Emphasis on complementary social marketing activities | 8 | 62% | 0 | 0% | 6.2 | .05 |
| Emphasis on local programs | 9 | 69% | 1 | 11% | 5.1 | .05 |
| Strengths in Resource Management: | | | | | | |
| Multiple sources of match | 6 | 46% | 0 | 0% | 3.6 | .05 |
| Resources for financial management | 6 | 46% | 0 | 0% | 3.6 | .05 |
| Multiple Strengths: | | | | | | |
| Three or more strengths | 10 | 77% | 0 | 0% | 9.8 | .01 |
| Six or more strengths | 6 | 46% | 0 | 0% | 3.6 | .05 |

4. Strength in Leadership

Experienced Leadership Teams. Active nutrition education networks uniformly benefitted from experienced leadership teams. Leaders with prior experience with managing multi-agency

coalitions were able to forge strong relationships among network partners, to operate effectively within governmental organizations, and to creatively identify sources of matching funding. Most (77 percent) of the successful networks, and all of the very active networks, were characterized by experienced leadership teams. In contrast, none of the unsuccessful networks had the benefit of an experienced leadership team for the duration of the demonstration project.

The operative term is leadership “teams.” In most networks, a Project Director and the Network Coordinator worked closely together. It was common for one of those individuals to be a “visionary” and for the other individual to bring operational expertise. It was not necessary for both individuals to have both visionary and operational skills; but it did appear important that the team encompass both types of expertise. The most active networks also included staff with a variety of specialized skills in areas such as marketing, accounting, evaluation, and organizational management.

As noted, one of the challenges that networks faced was succession planning. For instance, about half of the networks had more than one person fill the role of network coordinator, and a third of the networks had had more than one Project Director. Although most networks were able to smoothly replace their network coordinators, those that lost a Project Director (to retirement or transfer to another State), were at risk of becoming inactive, at least temporarily, until someone was identified who could fill that role.

Strong Senior Management. The highly successful networks typically benefitted from strong senior management support. Such support was manifest in enthusiasm for the program, willingness to promote the program with other senior staff in State government and assistance, if needed, in garnering the resources to support financial management associated with the system. In some cases this was the person to whom the Project Director reported, in other instances, it was a higher level senior manager within the government.

In contrast, inactive networks often encountered problems in maintaining senior management support. In some States, support depended on a senior administrator who retired. In other cases, it was difficult to convince senior managers to accept the challenges of obtaining matching funds. The cooperative agreement mechanism provided a “honeymoon” period during which the network could try to enlist the support of senior management. But if that support was not evident by the time the cooperative agreement ended, then problems associated with submitting an NEP proved difficult to resolve.

Some networks were active even in the absence of senior management support. But in those instances, the networks had strong support from managers of the State Food Stamp Program, and network members worked to develop strong local linkages for ongoing support.

Several networks also sought the support of a political patron such as the “Governor’s Wife.” This level person could serve as a useful spokesperson who could generate favorable publicity for network activities and boost the morale of network participants. However, to have a major effect on sustainability, this support needed to be coupled with the support of senior management staff.

2. Strengths of Approach

Emphasis on Partnerships. One of the important elements of success was attention to promoting activities across a variety of partners. Competition for match funds between traditional food stamp nutrition education programs and the networks undermined several networks’ ability to develop. This problem occurred in seven of the nine networks that failed or only partially achieved the objectives of the cooperative agreements. Also, networks that have primarily emphasized activities conducted by a single organization have not grown as rapidly in terms of developing as many new nutrition education activities.

In contrast, the very active networks paid considerable attention to partnership issues. Seven of the eight networks that fully achieved the objectives of the cooperative agreements were characterized by the partners’ strong commitment to the network goals and objectives. These

networks worked to develop both common social marketing activities and to promote activities to which each of various partners could contribute. For instance, the Colorado network used the strengths of various partners in northern Colorado, in the Denver area, and in the San Luis Valley area, working with Cooperative Extension, the health department, and the medical school. The Maine nutrition network developed programs at the county level to support collaboration between extension and local health services staff. The California nutrition network used Project LEAN regional offices as locations from which to coordinate expanded outreach to minority communities. The network had introduced major new programs originated by the 5-A-Day coalition, by Project LEAN, and by the Department of Education, and was looking to develop programs with the faith community. The North Carolina nutrition network works with community programs covering more than 60 counties around the State.

Emphasis on complementary modes of nutrition education. Active networks had developed innovative linkages with a variety of programs, tools, and channels to deliver nutrition education messages. In theory, it would be possible for a network to be considered very active if it had a major social marketing campaign even in only one program area. In practice, however, active networks tended to engage in a variety of major programs to deliver nutrition education. For instance, one network had a major initiative working with retail food chains, special nutrition education targeted to minority populations, an active extension program providing individually-directed education, and an overarching nutrition media and social marketing campaign. Part of what made networks effective was that they not only helped coordinate a number of programs, but also delivered common nutrition messages through multiple channels in ways that reinforced each other. These programs recognized that social marketing could compliment one-on-one and small group education efforts, and that an integrated approach would be most effective in promoting behavior change.

Emphasis on growth of community nutrition education programs. A key characteristic of highly active networks was their effort to develop and expand local nutrition education programs. For instance, the Maine Nutrition Network developed effective linkages at the community level across extension, public health, and Area Agencies on Aging that were helping to develop long term linkages to support community-based nutrition education. The North

Carolina network developed mini-grant procedures to encourage grant applications for innovative nutrition education from community organizations throughout the State. Several growing networks have found it helpful to commit development time to one new area each year. As one component is solidly in place, the network then made a concerted effort in another area (for instance, launching a general series of community organization incentive grants, and then once that effort was well underway, starting to develop more specialized outreach, such as work with faith communities or with food banks).

3. Strengths in Resource Management

Innovative Approaches to Identify Matching Funds. Highly active programs have been creative in identifying sources of match. For instance, one State network developed procedures to qualify teacher time in low-income school districts as matching funds. A Cooperative Extension-led network developed a set of procedures and an internal technical assistance manual to help county nutrition programs to identify sources of match to support local programs. The key to one large network program was a strategy of offering county and local government programs a 50/50 incentive to identify matching funds for nutrition education. Under this procedure, for each dollar that a local program identified as being countable for matching funds, the local program received \$0.50 back to increase its nutrition education activities, while the other \$0.50 went to the network for uses such as accounting, State level initiatives (such as a media campaign), and further development (such as outreach to the faith communities). This incentive encouraged county and local programs to participate in the nutrition education process. Network partners were pleased that these incremental funds allowed them to increase the resources they had to work with low-income populations.

Attention to Financial Management. Active and successful networks devoted considerable attention and provided staff resources to respond to financial management. This proved a particular challenge to agencies such as health departments that were not used to this funding mechanism, (i.e., reimbursement for documented match) and so had to develop the accounting systems to handle it.

Several States offered useful examples of careful approaches to financial management. For instance, the North Carolina Nutrition Network developed a manual to help local programs to identify and document matching procedures. The Maine Nutrition Network developed streamlined procedures to allow local schoolteachers to document training and classroom time devoted to nutrition education. The California Nutrition Network hired an accounting manager who had worked with reimbursement programs with another department. The network also hired a consultant who had developed procedures for reimbursement programs and had him adapt accounting software to document matching contributions. The accounting and the contracts units of the health department met jointly with representatives of the State Food Stamp Program to make sure all their accounting procedures were effective. The work of the network in establishing what they considered to be an “audit-proof” accounting system proved important in persuading State and Regional FSP staff to approve the network’s procedures for documenting the matching contributions in their NEP.

It appeared that a combination of these strengths, rather than any single factor, allowed networks to meet the challenges that they faced and achieve the success that is encouraging the continued growth of the program.

D. Conclusion

Sixty percent of networks were able to achieve the goals of the cooperative agreements in terms of developing a Statewide nutrition education network, developing and implementing social marketing efforts to increase delivery of nutrition education to low-income populations, and submitting a nutrition education plan that was approved and resulted in ongoing funding of the networks. The networks that met these objectives reported important accomplishments. The networks succeeded in leveraging more than \$20 million in non-Federal funding for nutrition education during 1998; most of the networks conducted needs assessments and many had launched multifaceted social marketing efforts. The efforts encompassed schools, broadcast and print media, newsletters to food stamp participants, and outreach to minority, elderly, and underserved populations.

The networks often faced challenges posed by limited experience with the reimbursement mechanism, difficulty in finding matching funding, and lack of experience with social marketing. In some cases, these barriers—particularly if they were accompanied by turnover of a Project Director—resulted in failure of the network to flourish. Networks also had to pay careful attention to challenges of inter-organizational teamwork. These barriers were not insurmountable, however. Experienced network leadership; strong senior management support; attention to identifying sources of match and to financial management; and an emphasis on partnership, complementary modes of social marketing, and development of community programs provided strengths that helped the networks to achieve their objectives. Application of these lessons could help to strengthen and increase the delivery of nutrition education to low-income populations.

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Glossary

| Glossary of Terms | |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Abbreviation and/or Name | Definition |
| Cooperative Agreements | These were cooperative agreements awarded to States in 1995 and 1996 to support the development of Statewide nutrition education networks |
| Cooperators | This refers to the organizations supported by the award of a cooperative agreement to the State Food Stamp Program to support development of Statewide Nutrition Education Networks |
| Cooperative Extension | The county and State university extension organization affiliated with the Cooperative State Research Education and Extension Service (CSREES) |
| Dietary Guidelines for Americans | These are the guidelines illustrated in the USDA Food Pyramid |
| FNP | Family Nutrition Program |
| | The term used by some States to refer to the Cooperative Extension component of the State Food Stamp Nutrition Education Program. |
| FNS | Food and Nutrition Service |
| | The organization that administers the Food Stamp Program |
| FSNEP | Food Stamp Nutrition Education Plan |
| | This term refers to nutrition education programs supported by the USDA School Lunch Program. |
| FSP | Food Stamp Program |
| | The USDA organization that administers the Food Stamp Program. |
| NEP | Nutrition Education Plan |
| | The nutrition education plan submitted to and approved by the Food Stamp Program to support approved nutrition education activities under the State's Food Stamp Program Plan of Operations. |
| NET | Nutrition Education and Training Program |
| | This program provides training for nutrition education related to USDA school lunch programs. |
| Primary Grantee | This refers to the lead organization awarded funding by the State Food Stamp Program under the cooperative agreements. |
| Social marketing | A comprehensive, audience-centered approach involving multiple, reinforcing channels of communication and environmental change to promote healthy behavior. |
| State's Food Stamp Program Plan of Operations. | This is the plan submitted by the State Food Stamp Program that once approved by FNS becomes the basis for expenditure of administrative funds by the State Food Stamp Program. |
| WIC | Supplemental Nutrition Program for Women, Infants, and Children |

