



Creating Healthy States: Building Healthier Nutrition Programs

Executive Summary

Rates of overweight and obesity have reached epidemic levels in the United States, and no single approach will turn them around. However, the Food Stamp Program (FSP) and Special Supplemental Program for Women, Infants and Children (WIC), which provide broad coverage of high-risk groups, afford potentially effective ways to promote healthier lifestyles that can decrease the prevalence of obesity. Governors have considerable opportunity to curb the health problems caused by excess weight through innovative changes in FSP and WIC coupled with other initiatives with the target populations.

Financial and physical access to nutritious foods, in addition to education and guidance on healthy nutrition and lifestyle choices should be core components of increasing the health impact of FSP and WIC. To a large extent, state actions thus far have focused primarily on physical or geographical access, including the following types of innovations:

- **Pennsylvania** launched a Fresh Food Financing Initiative to increase the number of supermarkets and grocery stores in the state's underserved communities.
- In **New York**, Food Change created the Harlem Community Supported Agriculture Project to give low-income families consistent access to healthful foods produced by farmers upstate.
- **California** organizes farmers' markets in low income areas through the Farmers' Market Nutrition Program. The program promotes demand by providing FMNP checks to its WIC recipients, also increasing financial access.

Access to nutritious foods alone will not resolve complex issues of obesity. States need to reinvigorate nutrition education and promotion to address the challenges of at-risk groups. Success demands collaboration through partnerships across a range of state and local organizations and cross-cutting programs that reinforce healthy choices. Government and private-sector retailers are working to launch initiatives to use innovative nutrition communication strategies to improve the food purchases of households. Statewide alliances also may use new communication methods and incentives to promote healthier eating among nutrition program recipients.

Efforts to improve the nutrition of low-income individuals in FSP or WIC will need to be integrated to ensure that healthy options are available and that health messages are reinforced everyday. Efforts thus far may be directed to recipient populations exclusively, but could be more effective if they are part of a broader effort to promote wellness.



Enormous gains have been made over the past 50 years in improving the nutrition of our nation's poor families. Building from this strong foundation, the FSP and WIC can continue to promote health through initiatives designed to address the changing landscape of today's nutrition environment. As states pilot test program innovations and enhancements, the U.S. Department of Agriculture should strengthen the state-federal partnership by granting them greater program flexibility for promoting health and wellness.

Introduction

Overweight and obesity in the United States have recently increased dramatically in both children and adults. Fifteen years ago, no more than 25 percent of any state's population was obese. By 2004, nine states had obesity rates of at least 25 percent,¹ and the percentages continue to rise. Over the past three decades, increasing rates of overweight and obesity have prompted considerable attention from federal, state, and local governments, seeking to understand the underlying causes of the obesity epidemic and develop more effective policies and programs to prevent and reduce obesity—particularly in the nation's low-income and underserved populations.

This brief summarizes current knowledge about the relationship between obesity and participation in the Special Supplemental Program for Women, Infants and Children (WIC) and the Food Stamp Program (FSP) and suggests innovations to more effectively leverage those programs to promote healthy lifestyles and prevent obesity among program participants.

A Brief History of Nutrition Programs in the United States

The federal government created the Food Stamp Program (FSP) and the Special Supplemental Program for Women, Infants and Children (WIC) more than 30 years ago when evidence pointed to diet, nutrition, and health disparities between low-income and higher-income groups. The FSP was designed to improve the diets of households by increasing the food purchasing power of poor families. The Thrifty Food Plan (TFP), the lowest-cost plan developed by the U.S. Department of Agriculture (USDA), is used to calculate the nutritional basis of benefits for food stamp recipients. An extensive body of research indicates an association between FSP and:

- Increased food spending
- Improved diet quality
- Greater increases in food expenditures than would occur if recipients received an equivalent amount of cash^{2,3}

WIC—later renamed the Special Nutrition Program for Women, Infants and Children—emerged from the 1969 White House Conference on Food, Nutrition and Health, convened by President Richard Nixon. A key conference finding was that “food supplementation of high risk women and their children was warranted.” The WIC program provides nutritious food supplements to low-income, pregnant, breastfeeding and post-partum women, in addition to infants and children up to their fifth birthday. WIC also provides nutrition education and serves as an adjunct to health care.

Two national evaluations and a large body of sound research^{4,5,6} consistently affirm that participation in the WIC program is associated with:

- Improved diet quality
- Decreased rates of low birth weight
- Reduced neonatal deaths
- Improved growth in infants and children
- Decreased rates of anemia in women, infants, and children
- Increased rates of breast feeding.

A five-state study based on 105,000 medical records also found that WIC participation during pregnancy—because it improved birth outcomes—was cost effective.⁷ Every dollar spent on WIC recipients during the prenatal period corresponded to between \$1.92 and \$4.21 in Medicaid savings. More recent studies in 2002 and 2004 confirmed findings on the program’s cost effectiveness.^{8,9}

Nutrition Programs Today

The Food Stamp Program and WIC have achieved their initial objectives. The federal government’s Healthy People 2000 report credits FSP and WIC with successfully reducing underweight and anemia earlier than the 2000 target date.¹⁰ The programs have made enormous progress in improving the health and nutritional status of low-income groups in the United States.

However, different challenges now confront the FSP and WIC and the populations they serve. While previous calorie and nutrient gaps between lower and higher income groups are largely gone, all income groups have the problems of overweight and obesity. On average, problems of overweight and obesity are now more prevalent than underweight in the FSP and WIC target groups. And although the diet quality for low-income households has improved, the typical food consumption patterns of poor people falls far short of what is recommended for good health.¹¹

Policy-makers are now faced with the complex task of addressing what is called “the double burden of disease”—increasing overweight and obesity in the same households that are food insecure. Public health officials and policymakers are examining ways that the federal nutrition safety net programs can address under-nutrition simultaneously with overweight and obesity.

The Potential Link Between Nutrition Programs and Obesity

Overweight and obesity are pervasive in the United States, where more adults are overweight than not. FSP and WIC participants increasingly also are diagnosed as overweight or obese, leading to speculation that participation in the programs may be contributing to the problem.

The most common explanation of a possible link between the FSP and/or WIC and overweight is the programs’ effect on diet: If participation in FSP or WIC leads to an increase in caloric intake, this could precipitate obesity. However, there are no data to suggest this has happened.

Results from the last national evaluation of WIC⁵ indicate a significant improvement in the intake of essential nutrients but no increase in the caloric intake of WIC infants and children. Energy intake increased in pregnant women by 110 calories, and this is assumed to be one of the factors leading to healthy birth-weight babies. Similarly, the FSP evaluation results show an improved nutrient intake in participating households.¹² The overall conclusion is that the nutrient quality of the diets improves as a result of participation in WIC and/or the Food Stamp Program.

More recently, an expert panel reviewed the evaluation research to examine the strength of evidence indicating that nutrition programs were causing increases in overweight and obesity in participants. The panel concluded that the available research on FSP and WIC causing obesity was nonexistent.¹³ Food stamp participation does not lead to weight increases. In fact, data indicate that from 1976 to 2002, the probability of a woman being overweight grew the least among food stamp recipients.¹⁴

Conversely, nutrition programs can be part of the solution to overweight and obesity. The consensus from the research literature is that a combination of strategies targeted at individuals, households, communities, and states is required to successfully stem the nation’s rising obesity rates. For states to have a coherent strategy to address obesity, the energy balance (between calories taken in and calories expended through activity) must become a major focus. Nutrition programs have historically emphasized only one side of this equation. With federal support and flexibilities, FSP and WIC could target both food consumption and physical activity, thereby playing a greater part in the strategies to reduce obesity.

Low-income, at-risk groups are a particular challenge because low-income households have a higher prevalence than higher income groups of health conditions related to poor nutrition.¹⁵ Because of their broad coverage, FSP and WIC afford potentially effective ways to promote healthier lifestyles that can decrease the prevalence of overweight and obesity in the United States.

The Cost of a Healthful Diet

Price is one factor that influences which foods households choose to purchase. Many researchers argue that healthful foods—with low energy density but high nutrient density—are expensive. On the other hand, the low cost of energy dense fats and added sugars¹⁶ drives over-consumption. Numerous studies have shown that healthier diets can be more costly,¹⁷ and it is a common assumption in the research literature¹⁸ that it costs more money to purchase and more time to prepare a healthful diet. Consumer perception reinforces this attitude.¹⁹ In one study of food stamp recipients in Oregon, participants repeatedly commented that produce was more expensive than other categories of food.²⁰

While healthful eating may cost more, it need not. Analyses of more than 7,000 foods show that there can be more than a 10-fold difference in the cost of foods with a similar nutrient density—the ratio of shortfall (essential) nutrients to avoidance nutrients (e.g., calories and fats). The higher the nutrient density, the more nutrients a food has per calorie eaten.

Table 1 shows that within each of the major food groups, some nutrient-dense choices are more cost efficient—that is, they provide more nutrients per dollar spent—than others. For example, per dollar, skim milk is 85 percent more nutrient dense than ice cream. On average, the most nutrient-dense food choices are fruits and vegetables, but they are perceived to be the most expensive.

The most recent Dietary Guidelines for Americans²¹ emphasize nutrient density as a way to guide food choices, urging people to “get the most nutrients out of your calories.” However, this statement fails to convey how complex it can be for consumers to choose nutrient-dense foods in a cost-effective way. This is particularly important for food stamp households where individuals are trying to maximize the nutrition effect of food expenditures.

Table 1. Nutrient Density per Dollar

<i>Dairy</i>	<i>Food Quality Score cost per 100 grams</i>
Ice cream	0.7
Sherbet	5.9
Milk, whole	14.6
Milk, skim or nonfat	85.5

<i>Meats, fish, legumes, eggs</i>	Food Quality Score <i>cost per 100 grams</i>
Bacon	0.2
Hot dog	0.3
Egg	1.0
Chicken, breast, fried	1.2
Salmon, canned	3.6
Pinto, calico, or red beans	5.4
 <i>Grains</i>	
Apple strudel	0.7
Bread, whole wheat	4.9
Bread, white	5.0
White rice	5.6
Corn flakes cereal	5.8
 <i>Fruits</i>	
Avocado	10.1
Blackberries	18.5
Apple	23.1
Banana	45.6
Strawberries	71.2
 <i>Vegetables</i>	
Olives, black	0.7
Tomato catsup	3.4
Tomatoes	42.7
Spinach	87.9

Opportunities for Promoting Healthy Lifestyles through FSP and WIC

The May 2000 National Nutrition Summit concluded that the overarching principle for good health and nutrition was ensuring food security: access at all times to enough food quantity and quality for an active and healthy life. Access to a healthful diet is determined by income, food prices, time, and the availability of nutritious foods. The Food Stamp Program and WIC have demonstrated success in improving diet quality and/or nutrition. The effectiveness of these programs could be enhanced with innovative efforts to provide greater geographical, financial, and informational access to healthful foods options.

Optimal effectiveness of efforts to reduce obesity among FSP or WIC recipients will be achieved through initiatives that are integrated across programs that serve these individuals, and with efforts aimed at the general public. Thus far, states have attempted to enhance some aspects of access, but greater flexibility is needed to allow for coherent, sustainable strategies.

Geographical Access

In many urban areas, the number of supermarkets has been declining over the past 30 years. Not only are supermarkets low-cost food suppliers, but they also are more likely than smaller markets to provide a variety of foods—in particular, fruits and vegetables. While there is no single model for increasing access to supermarkets and grocery stores in underserved areas, tax incentives and financing for food retailers are obvious ways to attract them to areas serving FSP and WIC participants.

A number of states have started initiatives to increase the physical access of poor households to supermarkets and a wider variety of produce. For example, **Pennsylvania**'s Reinvestment Fund created a Fresh Food Financing Initiative to increase the number of supermarkets and grocery stores in the state's underserved communities through dedicated gap financing for established markets. In response to the rising concern over the lack of access to fresh foods in less-profitable communities in urban and rural areas, this program aims to provide choices for a nutritionally balanced diet by making healthier foods available at a lower cost.

New York State's Food Change created the Harlem Community Supported Agriculture Project to connect Harlem residents with upstate farmers. Harlem residents experience above-average rates of diet-related chronic diseases, including obesity, and had no easy access to affordable wholesome foods. This program offers families reliable access to healthful foods by purchasing shares in farmers' crops before the growing season begins. Participating families take delivery of a weekly supply of fresh, seasonal foods from May to November and can use foods stamps to pay for the program.

West Virginia's Food Stamp Nutrition Education Program, working with local grocers, collects foods that would otherwise be discarded, including bread, fresh fruit, and vegetables. These items are given to participants in the nutrition education program, providing them with a wider range of nutritious foods.

Financial Access

Higher income and lower food prices increase a household's financial access to food. The Thrifty Food Plan (TFP) serves as the nutritionally-based formula for calculating financial benefits under for the Food Stamp Program. Raising the TFP benefit levels would increase the likelihood that food stamp participants could afford to purchase a greater variety of nutritious foods. It is likely that this issue could be raised during consideration of the upcoming Farm Bill.

The FSP has an opportunity to reward healthy eating among low-income households by providing incentives to purchase healthy foods. One idea would be to enhance the purchase power of food stamp dollars spent on fruits and vegetables or whole-grain items, while decreasing the power of dollars spent on less-healthy options. Federal leadership and state pilot programs can explore options to incentivize healthful food choices that could be highly beneficial to both the programs and their participants.

An example of this is the WIC Farmers' Market Nutrition Program (FMNP), which is funded through the USDA and is implemented in 37 states. The FMNP brings farmers' markets to low income areas by providing organizational support for market organizers and by creating demand by providing checks only redeemable at participating markets. This incentivizes healthy eating and increases physical access to produce. **California's** Farmers' Market Nutrition Program, by far the largest; has over 500,000 recipients, over 300 participating markets with more than 1800 farmers, with a budget of just over \$3 million.

Clearly for such efforts the issue of cost neutrality is important. Because supermarkets and grocers must often discard unsold fruits and vegetables, they have a built-in incentive to contribute some produce at reduced cost. An alliance of food retailers could collaborate with one or more states to implement a pilot program to increase the consumption of fruits and vegetables among FSP households, identifying cost-sharing mechanisms to ensure the cost-neutrality for the private sector.

Providing produce vouchers, also called "Green Stamps," to purchase these unsold fruits and vegetables or financial incentives for healthier options does not restrict personal choice, but rather rewards healthier eating. These approaches could be effective, particularly in concert with a nutrition promotion campaigns and other education efforts.

Information Access

FSP and WIC participants need knowledge and skills to purchase and consume a healthful diet. Choosing foods that are nutrient dense—providing a lot of essential nutrients but low amounts of calories and fats—is challenging for everyone, and even more so for families who want to make nutritious food choices on a limited budget. Therefore, nutrition education has become an even more integral part of the FSP and WIC.

FSP has increasingly emphasized nutrition education over the past decade. The challenge in both FSP and WIC is the limited average exposure time to nutrition education; WIC has just two, 15-minute encounters with participants per certification period. It is not reasonable to expect to achieve a significant effect on diet and physical activity behaviors in these short nutrition education encounters alone. Nor is it reasonable to expect that there will be substantial increases in the nutrition education services for nutrition programs.

With limited time and resources, FSP and WIC need to take new directions to make the current mix of nutrition education services more effective. Partnerships with the private sector will be needed to educate recipients about healthful, cost-effective food options and reinforce healthy options at the point of service, because clearly changes in diet and physical activity that are needed to promote good health do not occur in 15 or 30 minutes—or even in one day or a week.

For example, **West Virginia's** seamless nutrition education program links all of the available resources devoted to nutrition education. The state's nutrition education staff develops relationships with Food Stamp recipients at the local level, achieving small, incremental, but sustainable improvements in diets and physical activity.

USDA recently awarded, for the first time, three cooperative agreements with partners to improve diet and physical activity by promoting the 2005 Dietary Guidelines for Americans and the use of the My Pyramid food selection plan. One partner, a radio station that serves Hispanic communities, has agreed to air Spanish-language nutrition education messages that will reach millions of low-income listeners. In another effort, a consortium called Naturally Nutrient Rich is working with USDA to promote My Pyramid, developing a series of messages targeting millions of people throughout the United States.

Through a third partnership, the Safeway Company will launch a series of in-store pilot efforts in August 2006 to promote more nutritious food choices at point of purchase. Safeway is using a nutrient density approach to communicate the underlying science of My Pyramid and the Dietary Guidelines to customers in a user-friendly way. While this nutrition promotion effort is not limited to FSP or WIC households, it has enormous potential to tailor a part of the communications to nutrition program participants who are already customers. USDA may approach additional national or state supermarket chains to begin a similar type of collaboration.

The Future of the Nutrition Programs

New Life for Food Stamps

With the FSP serving a large target population, taking full advantage of the program with federal support can improve nutrition for low-income households. Exciting activities underway in a number of states will reinforce the program's ability to promote good health, and additional steps could be taken to expand the program's scope.

In several states, FSP nutrition education programs have increased the use of social marketing as a strategy to successfully change behavior. To share and learn from this state-level experience, a mechanism is needed for promoting best practices in nutrition education. A small investment of funds could establish a database that provides easy access to information about innovative projects nationwide.

A database of best practices also could provide links to materials developed at the state and local levels to educate FSP participants. It could include common nutrition education messages and materials, created to leverage the monies that have already gone into developing successful state and local nutrition education activities.

Promoting Energy Balance Through WIC

To promote healthy lifestyles, WIC nutrition educators have to stress both diet and physical activity. The concept of energy in balance, while not new, has not been incorporated into many of the program's nutrition messages²². Physical activity needs to be viewed as an integral part of WIC, but often this is not the case. It is likely that some retraining of the WIC program's nutrition counselors will be needed to convey this message.

A renewed emphasis on physical activity will have the added benefit of appealing to parents. Parents view active children as healthy children; therefore, parents will respond favorably to messages about increasing the activity patterns of preschoolers, with an emphasis on free play that also provides cognitive and developmental benefits. Such messages counter parental attitudes about overweight and obesity that often assume "bigger is better." Indeed, a number of studies have indicated that many parents are not aware that their child is overweight;²⁴ a preschooler has to be extremely overweight before a parent becomes concerned.

A key partnership opportunity to deliver and reinforce nutrition education could exist with WIC, Head Start, and children's health care providers. Many nutritional habits are set in a child's early years, and these three groups together could have substantial impact on the nutritional knowledge of parents of these children. Governors could develop a consortium of these and related groups to develop a nutrition education strategy.

USDA is scheduled to announce a revised WIC food package in 2006, which—according to the National Institute of Medicine²³—will emphasize healthier choices within food groups, such as whole grains, and stress the importance of eating fruits and vegetables. As the first major revision of the WIC food package in decades, this announcement creates a special opportunity for states to promote the underlying concepts of healthful eating in all programs aimed at preschool-aged children.

Enabling State Innovation

In conclusion, the FSP and WIC could be enhanced to serve as key parts of an effective strategy to prevent overweight and obesity in the United States. Increased federal support and state innovation is needed to ensure the nation's nutrition programs fulfill their potential in addressing the obesity epidemic.

States and nutrition programs need the ability to pilot test changes in FSP operations that could have an enormous impact on the program's ability to promote healthier lifestyles. Two innovations that have been suggested repeatedly are:

- Providing extra value for food stamps used to purchase healthy food options
- Combine education efforts across programs to ensure more strategic approaches to support healthy choices.

To accomplish this, USDA needs to shift more authority to the states for promoting health and wellness, and allow greater flexibility to pursue integrated strategies for health improvement. Clearly a more dynamic federal-state partnership is desirable for all. Without federal waivers or other program flexibility, it will continue to be difficult for states to find opportunities for innovation that better serve the nutrition program participants. USDA could partner with states to create a powerful force for identifying ways to more quickly and effectively grant waivers.

USDA also should reconsider the annual renewal process for approving state food stamp nutrition education plans. This annual funding cycle creates barriers for long-term planning among the organizations implementing nutrition education programs and limits the potential for evaluation. Multi-year contracts between USDA and states would alleviate this bottleneck and are an administrative imperative to increasing the effectiveness of food stamp nutrition education.

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