

Policy Considerations for Improving the Supplemental Nutrition Assistance Program: Making a Case for Decreasing the Burden of Obesity

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December 2011

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ACKNOWLEDGEMENTS

We would like to acknowledge Mr. Will Humble, Ms. Karen Sell, and others at the Arizona Department of Health for their review and feedback on the draft of this paper. We are grateful to Dr. Nancy Moore at Health Outcomes @ ASU for providing an editorial review of the final document.

EXECUTIVE SUMMARY

The epidemic of overweight and obesity and its multiple causes have captured the attention of researchers, program administrators, politicians, and the public alike. Recently, many stakeholder groups have started investigating the role that food and nutrition assistance programs play in the etiology of the problem and in identifying possible solutions. As a result, policy changes have been recommended and implemented for programs such as the National School Lunch Program (NSLP) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) to improve the nutritional quality of foods they offer to their participants. The Supplemental Nutrition Assistance Program (SNAP) is also attracting attention as a potential vehicle to reduce the burden of obesity among its users. Because of the tough economic and political climate in which all federal programs currently operate, the need for making nutrition assistance programs more efficient and effective in addressing health- and nutrition-related problems affecting the country has never been greater.

This document proposes a set of strategies to improve the effectiveness and efficiency of SNAP. These strategies are based on a review of research literature, recommendations from expert groups, and the experiences of other communities and states. We include information that pertains to potential stakeholder arguments for and against each strategy, as well as the political feasibility, financial impact, and logistical requirements for implementation. We drew candidate strategies from the range of options that have been tested through research and from policies that have been implemented around the country. The order of strategies in this document is based on overall strength of supportive research, as well as political and implementation feasibility. The four proposed strategies are improving access to healthy foods to provide better choices, incentivizing the purchase of healthy foods, restricting access to unhealthy foods, and maximizing education to more effectively reach a larger population of SNAP participants.

To improve access to healthy foods, we propose establishing guidelines that require SNAP vendors to carry healthier options. We argue that improved selection of food at SNAP-authorized stores will improve not only the choices for SNAP participants, but also the overall food environments in the communities where SNAP participants reside. Such an effort will also carry with it the advantage of stimulating sales at small local stores, as SNAP participants will not have to travel to distant supermarkets to redeem their benefits. In addition, building on President Obama's and US Congress' Healthy Fresh Food Financing Initiative, retailers of healthy food should be encouraged to locate in "food deserts." Providing financial incentives for inner-city food retailers to participate and stock healthy food items will help improve access, thereby eliminating food deserts. We also propose improving capacity to accept Electronic Benefits Transfer (EBT) cards for the purchase of healthier foods at farmers' markets by placing wireless terminals at the markets. Enabling use of EBT cards for online purchases through use of novel technology is another strategy that may be worth exploring in areas with poor access to healthy foods.

Incentivizing the purchase of healthy foods (fruits and vegetables) using EBT cards in retail store environments is currently being tested as a strategy by the US Department of Agriculture (USDA); the results from this trial will not be available until 2013. Many communities across the country have been using financial incentives to promote redemption of SNAP benefits at farmers' markets. Because of program restrictions, however, USDA funds cannot be used for financing such incentives. We recommend that funding streams be developed at the local level (state or community) to finance incentivization of EBT purchase of healthy foods.

A recent request from New York City to exclude sweetened beverages from SNAP benefits received considerable attention from media, food industry, public health advocates, and nutrition experts. **Restricting options for purchase of unhealthy foods** can be a powerful strategy for improving diets of SNAP recipients. There is strong scientific evidence for a restrictive strategy, and there is precedence from other federal programs such as WIC and NSLP, which limit benefits to the purchase of foods that are considered healthy. The food industry, anti-hunger advocates, and the USDA, however, have raised significant opposition to such a recommendation.

Lastly, we recommend making changes to the **SNAP-Ed program to adopt public health approaches to expand its reach** and to bring about sustained changes in SNAP participants' behaviors. SNAP-Ed, the education arm of SNAP, traditionally provides one-on-one or group education in community or classroom settings. While such efforts often bring about changes in knowledge, sustained behavior change is hard to achieve. Also, given that almost 43 million Americans receive SNAP benefits each month, the conventional, individual-based SNAP-Ed approach is insufficient to reach these large audiences. SNAP-Ed regulations need to support new approaches in the delivery of nutrition education, such as the use of social-marketing strategies that have a wider reach, and to encourage the use of policy, environmental, and systems approaches for improving diets of SNAP participants.

Improvements in public health through food and nutrition assistance programs, especially at a time of increased regulatory scrutiny and fiscal concern, require well-researched and well-coordinated strategies with a strong chance for success. This document offers the research and rationale necessary to identify areas where strategic agreement, and subsequent action, can take place at both the state and federal level.

INTRODUCTION

The problem of overweight and obesity¹ remains a significant public health challenge in the United States, with a prevalence rate of 68% among adults and 32% among children and adolescents. Although the rate of increase in prevalence of excess weight is slowing across all age groups compared to steep increases seen in the 1990's, the magnitude of the problem and its impact on escalating health care costs, chronic diseases, and psychosocial problems imposes an enormous burden on individuals and society.

Excess weight in adults and children has been associated with chronic diseases such as cardiovascular disease, diabetes, some cancers, hypertension, and stroke^{3, 4} and with higher rates of mortality among Americans.⁵ As a result, the medical expenses and indirect costs associated with obesity overwhelm our health care system, which is already stressed and threatened by the downturn in the nation's economy.⁶ A 2008 estimate put medical care costs associated with obesity at \$147 billion per year.⁷

Although all races, ethnicities, and income groups suffer from high rates of excess weight, some segments of the population carry a disproportionate burden of overweight and obesity and associated chronic diseases. Individuals from low-income households, as well as those from specific racial and ethnic backgrounds including Hispanics, non-Hispanic blacks, and Native Americans are more likely to be overweight and obese than are their counterparts in other groups. Over 33% of adults who earn less than \$15,000 a year are obese compared with 24.6% of adults who earn over \$50,000. Bestimates from the Centers for Disease Control and Prevention (CDC) for 2011 show that 25.8 million US adults over the age of 20 years have diabetes. Compared with non-Hispanic white adults, the risk of developing diabetes is 66% higher among Hispanics and 77% higher among African Americans. Furthermore, there appear to be similar trends in childhood obesity and diabetes, with African American and Hispanic children having a greater risk of developing both.

Food Consumption Patterns among Low-Income Populations

Food insecurity and related poor dietary quality disproportionately affect racial and ethnic minority groups, ¹² with Hispanic and African American households more than twice as likely to be food insecure than are white households. Multiple sources of data highlight the difficulty in achieving a well-balanced diet for low-income households. Individuals in these households purchase only about 86% of the products that are part of the US Department of Agriculture's (USDA) Thrifty Food Plan (TFP) market basket, which is itself a compilation of items meant to meet nutritional needs at low cost. The highest income households, however, are able to purchase 118% of the market basket. ¹³ Additionally, higher scores on diet quality measures, including the Healthy Eating Index, the Diet Quality Index, and dietary quality and diversity, are associated with higher socioeconomic status. ¹⁴ Higher occupational class, higher income, home ownership, and lack of economic hardship are also associated with healthier food habits such as daily consumption of fruits, vegetables, and whole grains. ¹⁵ As a result of lower-quality dietary intake, low-income individuals and families have consistently been found to have

lower intakes of vitamin C, β -carotene, folate, vitamin E, iron, calcium, potassium, vitamin D, and fiber. ¹⁴

The Supplemental Nutrition Assistance Program (SNAP), formerly called the Food Stamp program, is designed to help remedy nutritional disparities by providing low-income households with the means to purchase healthier food. However, significant dietary problems and health outcomes are associated with participation in this federal program. Data suggest, for example, that SNAP participants have higher reported consumption of soda than nonparticipants, ¹⁶ and children from households that receive SNAP assistance have diets that include more high-calorie foods than do children from nonparticipating households. ¹⁷ SNAP participants' diets are worse than those of nonparticipants in terms of higher consumption of total calories from solid fats and added sugars and lower levels of consumption of fruits, vegetables and whole grains. ¹⁸ SNAP benefits are based on the Thrifty Meal Plan (TMP), which has not been revised since 1995. Researchers have argued that current SNAP assistance levels are not adequate to provide healthy meals to participating families. ¹⁹⁻²¹ This issue is particularly problematic given the association between SNAP participation and increasing rates of obesity among both young^{24, 28} and older²²⁻²⁷ female SNAP participants.

The problem is compounded by the lack of healthy food availability in neighborhoods in which SNAP participation may be highest. Households in poor neighborhoods have less access to healthy food outlets that offer lower prices, such as large chain grocery stores and supermarkets. Geographic data show that low-income neighborhoods have 25% fewer chain supermarkets than do middle-income neighborhoods. As a result, low-income individuals, and SNAP participants in particular, have difficulty maintaining adequate fruit and vegetable intake. Data show that individuals who shop primarily at supermarkets rather than at smaller stores consistently consume more produce. Conversely, food environments with primarily smaller stores promote consumption of the least healthy foods, primarily because they offer calorie-dense, nutrient-poor foods at lower prices than healthy options.

Using SNAP to Improve Diets of Low-income Americans

SNAP is administered by the USDA's Food and Nutrition Services (FNS) and is designed to promote the general welfare and to safeguard the health and well-being of the nation's population by raising the levels of nutrition among low-income households. SNAP is by far the largest nutrition program in the country, and its utilization has reached an all-time high. Eighty billion dollars were budgeted for SNAP benefits in 2011, and about 43 million individuals receive these benefits each month. His budgetary allocation includes program expansion due to the economic stimulus bill (American Recovery and Reinvestment Act [ARRA]) passed in 2009, and yet some researchers believe that even current SNAP assistance levels are not high enough to feed families a healthy diet. Furthermore, this economic stimulus is set to expire in 2013 as part of Congressional austerity measures. The loss of stimulus dollars will mean a reduction of roughly \$10.00 to \$15.00 per person in monthly benefits, or about 10% of average per person benefits. This makes protecting SNAP's existing entitlement and maintaining the improvements in ARRA benefit levels beyond their expiration date in November 2013 extremely important. USDA data suggest that SNAP benefits do not hold up over

the course of the month, and on average, households had less than one-quarter of their benefits left by the middle of the month. Reducing benefits strongly increases the likelihood that meeting nutrient requirements through healthy, balanced diets throughout the month will become more challenging.

Despite the large number of participating individuals, SNAP's reach is targeted, as evidenced by the profile of its participants: 85% lived in poverty; 76% of households included a child, elderly or disabled person; and 56% of households that included children were headed by a single parent.³⁷ SNAP therefore reaches the populations that have the highest need.

SNAP and Food Insecurity

Food insecurity, defined as a limited or uncertain availability to procure acceptable foods in socially acceptable ways, is an ongoing problem in the US that has been exacerbated by the recent economic downturn. In 2010, 14.5% of all US households experienced food insecurity, one-third of which experienced very low food security. These prevalence data represent some of the highest rates of food insecurity recorded since the USDA began tracking its occurrence in 1995. In spite of the high rates of food insecurity, an estimated 15 million people who are currently eligible for SNAP assistance do not use it. Although the national SNAP participation rate is 67% among all who are eligible for the program, participation among minority populations (almost half of SNAP participants) is still low. The national participation rate among Hispanics is only 56%. Furthermore, the national SNAP participation rate among the eligible working poor is only 54%. These data suggest that increasing awareness, access, and participation in SNAP is still a priority in working to eliminate food insecurity in the US.

As discussed earlier, there is ample evidence that the diets of all Americans, particularly diets of low-income Americans, are loaded with nutrient-poor, high-calorie foods that provide "empty calories" and few nutritional benefits. 32, 41,15, 16 Huge disparities also exist in diet-related health outcomes: low-income individuals have a higher prevalence of chronic diseases such as obesity, cardiovascular disease, diabetes and cancer. Participation in SNAP has been associated with higher rates of obesity, especially among women. 17, 22-27 However, recent research indicates that this association may be mediated by levels of food insecurity experienced by the participants. 42

In a recent review, Larson and Story considered a growing body of literature that pointed to the coexistence of food insecurity and risk of obesity, and they suggested that promoting healthy food choices was critical for preventing hunger. ⁴³ SNAP is ideally positioned to take on that role. It aims to help low-income people and families buy the food they need for good health. ⁴⁴ The program can therefore be a very effective vehicle for improving the diets of the most disadvantaged segments of the population.

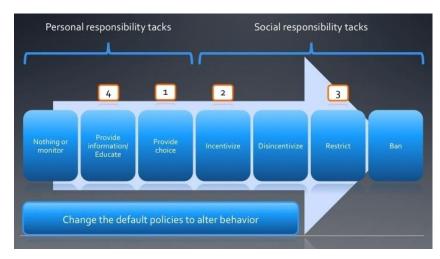
Improving SNAP in the Current Economic Environment

In the current constrained fiscal environment, programs such as SNAP need to operate more efficiently while still achieving the goals of improving access to healthy foods among low-income households. But because SNAP participation has also been associated with overweight and obesity, ^{17, 22-27} and because excess weight is related to increased health care spending, ^{7, 45} the economic efficiency of SNAP as it currently operates is questionable. With many states facing large budget shortfalls in 2012, there is growing concern that cutbacks will lead to less money and resources available for those who need it. ⁴⁶ At the same time, the National Health Expenditure (NHE) grew 4.0% to \$2.5 trillion in 2009, which accounted for 17.6% of national Gross Domestic Product (GDP). Medicare and Medicaid spending also grew 7.9% and 9% respectively, contributing 35% of the NHE. ⁴⁷ A larger proportion of SNAP users participate in federal health care programs. Improving health outcomes in this population by improving their diets can be an effective strategy for reducing health care costs.

Since SNAP is administered at the federal level, most policy level changes need to be initiated and implemented by the USDA's FNS. Changes to the administration and application of the SNAP program at the state level are possible through one of two mechanisms: (1) changing policies at the state level that do not have an impact on federal requirements for the functioning of the program or (2) applying for, and receiving, a waiver related to federal SNAP rules. In the latter case, waivers may be granted by FNS if the proposed change would result in more efficient administration of the program based on local circumstances, for instance, in substituting telephone interviews for face-to-face interviews to determine SNAP eligibility. To date, however, no waivers have been granted that affect policies related to participants' food choices or food environment (Table 1).

SPECIFIC STRATEGIES RECOMMENDED FOR IMPROVING SNAP

In this section we make recommendations to help improve SNAP participants' access to, and consumption of, healthy foods and beverages using strategies that take into account scientific evidence and economic and political feasibility at both the state and federal level. These strategies, targeted to change SNAP participants' behavior, generally lie along a spectrum ranging from a focus on individual or personal responsibility for making healthy choices, to social responsibility for crafting healthy food environments using public policies. This spectrum is graphically represented in the figure below.



Note: Numbers indicate the order of strategies as discussed in this document.

The strategies recommended in this document are based on a review of literature and are supported by scientific evidence, policy analysis, and recommendations from experts. However, an important aspect of the determination of feasible strategies for SNAP is the extent to which key stakeholders may or may not agree with suggested changes. Because multiple stakeholders hold complex and differing views on how SNAP should operate and the extent to which it should be regulated, suggested strategies are also discussed in light of potential objections to their implementation, along with arguments in response to those objections.

We offer these recommendations with a full understanding of the extreme economic climate in which federal nutrition programs are currently operating. As negotiations continue regarding the forthcoming Farm Bill funding, nutrition programs remain at risk for significant cuts. Also, since SNAP is a federally funded program administered by the USDA's FNS and implemented at the state level, recommendations may be dependent upon changes that must take place at the federal level. However, we have identified areas where state agencies, as the implementers of the program at the state level, can take specific actions.

Four specific strategies are recommended for making SNAP more efficient and effective at improving diets of low-income families. A summary table follows discussion of each strategy and includes a rating for level of evidence (based on research studies and expert recommendations and commentary), political feasibility (based on state and federal political and administrative support, as well as potential acceptability to advocates

and stakeholders), and implementation feasibility (based on level of complexity in implementation and cost of implementation). The strategies proposed include the following:

Strategy 1: Improving Access to Healthy Foods

Strategy 2: Incentivizing the Purchase of Healthy Foods

Strategy 3: Restricting Options for the Purchase of Unhealthy Foods

Strategy 4: Including Public Health Approaches to Expand SNAP-Ed Outreach

STRATEGY 1: IMPROVING ACCESS TO HEALTHY FOODS

Over the last few years, a large number of studies have brought disparities in access to healthy foods to the attention of the public and policy makers. ^{29, 49} Of greatest concern has been the identification of food deserts in low-income neighborhoods and the make-up of existing retail food outlets in these areas. For the most part, the science is clear: poor, minority neighborhoods lack access to good-quality, fresh produce and other healthy foods compared with higher-income neighborhoods. ^{31, 50} In poorer neighborhoods, the food environment consists of convenience stores, corner stores, and limited-service restaurants that offer little in the way of healthy fare. This is in stark contrast to healthier neighborhood food environments that include large supermarkets and grocery stores, farmers' markets, and other outlets that offer access to healthy foods at an affordable price.

Improving Access to Healthy Foods: Requiring SNAP Vendors to Carry Healthier Fare

Of major importance to healthy eating is the environment in which individuals make food choices. The healthier the environment, the easier the healthy choice. Setting healthy defaults⁵¹ within food stores has been proposed as a way to improve healthy food choice among SNAP participants, and the precedent for such a strategy exists among food assistance programs. For example, approved vendors for the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) program must carry a number of items considered healthy for consumption to maintain their certification as a WIC store.⁵² Under current USDA guidelines, to be a SNAP vendor, a retail store must sell at least three varieties of qualifying foods in each of the four staple food categories: meat, poultry, or fish; bread or cereal; vegetables or fruit; and dairy products.⁵³ Unfortunately, the USDA does not require qualifying stores to carry items that meet nutrient criteria, or items specifically designated to be healthy within the staple categories. Requiring SNAP vendors to carry healthier options will improve the food environment in communities where they are located, benefiting not only SNAP users but also others who live in those neighborhoods. Studies are currently underway to determine the effect of this sort of strategy on neighborhood food environments in New York, Texas, California, Illinois, Wisconsin, New Hampshire, and Pennsylvania after changes in WIC guidelines implemented in 2008. Early outcomes of these studies

indicate that after WIC-approved stores implement the new package, they are more likely to carry healthier options such as low-fat milk, fresh produce, whole wheat bread, and brown rice ⁵⁴

Improving Access to Healthy Foods: Eliminating Food Deserts by Encouraging Healthy Food Retailers to Locate in Underserved Communities

The Centers for Disease Control and Prevention (CDC), the Institute of Medicine (IOM), and the White House Task Force on Childhood Obesity have promoted equitable access to healthy foods as a promising strategy for reducing the prevalence of obesity and other chronic diseases (Table 2). ⁵⁵⁻⁵⁷ One of the pioneers in improving access to healthy food in disadvantaged neighborhoods has been a Philadelphia-based advocacy agency, the Food Trust. In partnership with the State of Pennsylvania, community development organizations, and other not-for-profit agencies, the Food Trust created a Fresh Food Financing Initiative (FFFI) that, through a public-private partnership, provided \$120 million in the form of loans and grants to bring food retailers into low-income, underserved communities. In addition to improving access to food, this initiative brought 5,023 jobs and 1.67 million square feet of food retail space to the state. ⁵⁸

The success of programs like the Pennsylvania FFFI has led to the development of a national Healthy Food Financing Initiative (HFFI).⁵⁹ With support from the President, Congress, and the US Treasury, the initiative will increase access to healthy, affordable food in communities that currently lack these options. Through a \$400 million investment, HFFI seeks to increase access to whole foods such as fruits, vegetables, whole grains, fat-free or low-fat dairy, and lean meats that are perishable (fresh, refrigerated, or frozen) or canned, as well as nutrient-dense foods and beverages encouraged by the 2010 Dietary Guidelines for Americans. The Pennsylvania FFFI has made a strong economic case for bringing healthier foods into communities, as new supermarkets generate economic activity in the community and surrounding region, increasing the number and quality of jobs. They also generate additional tax revenues for state and local governments.

Improving Access to Healthy Foods: Accepting SNAP Benefits at Farmers' Markets

A vast majority of Americans fall short of the recommendations for fruits and vegetables, ⁶⁰ and SNAP recipients are even less likely to consume adequate amounts. ¹⁸ Due to their mobile nature, farmers' markets can offer unique opportunities to improve access to fruits and vegetables in underserved areas where many SNAP participants reside. In addition to improving access to fresh local produce, farmers' markets may have the potential to reduce food costs for households and to influence affordability of healthier foods in food deserts. ⁶¹

While the number of farmers' markets nationally has grown threefold (from 1,755 to 5,274) between 1994 and 2009, low-income communities and specifically SNAP participants have not benefited from this upsurge. In fact, SNAP benefit redemption at farmers' markets dropped by 71% between 1994 and 2009. One of the challenges has been attributed to SNAP's transition in 1994 from using paper food stamps, which could be easily redeemed for produce at farmers' markets, to Electronic Benefits Transfer

(EBT) cards that require an electronic card-reading device. These devices have not traditionally been available at farmers' markets. In an effort to improve SNAP sales at farmers' markets, the USDA now provides assistance to facilitate the use of EBT benefits at these markets. Farmers' markets that have at least \$100 in SNAP sales each month are eligible to receive a free point-of-sale (POS) device for EBT transactions only. However, the utility of such devices is limited because they require access to electricity and phone lines. Farmers' markets can choose to purchase or lease a commercial wireless POS device that does not need a phone or electric connection. Such a device can also accept debit and credit cards and can be used at multiple locations operated by the same farmers' market organization. Supported by grants from federal agencies, a number of states, including Arizona, provide free wireless terminals to select farmers' markets. Researchers at Arizona State University have shown that overall sales at farmers' markets can increase substantially when outfitted with wireless terminals that accept EBT, debit, and credit cards. For most markets, the increase in sales is more than adequate to cover the cost of renting the wireless equipment.

Advocates for farmers' markets have made a case for the USDA or local state agencies to cover the variable and fixed costs associated with the operation of wireless EBT terminals. Leading the efforts to provide fresh local produce to SNAP participants and to facilitate EBT transactions, Iowa and California provide free wireless EBT access to all farmers' markets across the state (Table 2).⁶² A wireless EBT/credit card machine costs around \$1,000, with additional costs related to fees for wireless access and transactions.⁶⁵ Given the rapid growth in technological advances, FNS should explore low-cost innovative technologies, such as the use of mobile card readers (such as the Square®) for use at all farmers' markets for credit, debit, and EBT transactions to improve the financial viability of these markets.

Improving Access to Healthy Foods: Accessing Food Hubs and Accepting SNAP Benefits Online

Because improving access to locally and regionally produced foods is an important way to address community food security, the USDA and other organizations recently began focusing on a novel local-foods model: food hubs. Food hubs are businesses that aggregate locally produced foods from multiple producers and distribute those foods to individuals, schools, hospitals, businesses, and other organizations. Because they often have the distribution capacity of larger food companies—such as warehouse space, cold storage, and refrigerated trucks—they can also overcome transportation barriers faced by low-income individuals and bring healthy foods directly into low-income neighborhoods. A number of food hubs now exist around the country and operate as both for-profit and nonprofit entities.

The food hub model is new and thus far lacks evidence regarding its impact on food security. However, it offers a new opportunity to improve access to fresh local produce among food-insecure individuals, especially those who cannot access farmers' markets due to limited access. By allowing food hubs to accept EBT cards, SNAP can be integrated into the business plan for the food hubs as they begin to offer sale of local

healthy foods in multiple neighborhoods, community centers, and other locations where low-income individuals may be spending time.

In addition to food hub collaborations, a related and potentially important area of progress in use of SNAP benefits for healthy-food purchase will be development of technology to allow for e-commerce using EBT cards. Currently, EBT may not be used for online shopping due to security and other issues. However, solutions do exist for this problem, and the USDA will consider EBT purchases online once there is enough demand for this functionality (personal communication). If online purchase of fruits and vegetables is eventually allowed, SNAP participants could one day purchase healthy foods online from food hub organizations, and then have their purchases delivered to their door, thus overcoming the significant barrier of transportation to venues selling healthy foods.

Potential Challenges and Objections to Improving Access to Healthy Foods

Community-based anti-hunger advocates are concerned that placing more stringent requirements on SNAP vendors would make it harder for program participants to purchase food using their EBT cards in food deserts (personal communication). However, more stringent guidelines for SNAP vendors will also help improve food access in areas traditionally defined as food deserts. More than 35% of authorized SNAP vendors are convenience stores.⁶⁸ It is likely that SNAP purchases provide a significant source of revenue for these stores, especially when they are located in food deserts. Avenues for expanding that revenue may exist by improving availability and selection at these smaller stores so that SNAP participants can spend a larger share of their EBT benefits there rather than travel longer distances to supermarkets. According to the USDA's estimates, SNAP participation has significant economic multiplier effects, whereby every \$5 of spent SNAP benefits results in \$9.20 in economic activity. Using the 2011 estimates at the national level, an \$80 billion investment in SNAP will generate over \$147 billion in economic activity. This potential for economic activity can be realized in local communities by working with SNAP-authorized stores to carry a larger variety of foods, including a pre-established set of healthier options.

Researchers have observed that farmers' markets primarily serve affluent areas, ⁶⁹ and their sustainability in low-income neighborhoods has been questioned. While it is true that most farmers' markets operate in more affluent neighborhoods, increasingly there are more instances in which communities have successfully brought markets to low-income neighborhoods. ^{70,71} Recent reports also show that SNAP redemption rates at markets have increased exponentially in the last few years. ⁶² Local farmers' markets in states such as Arizona have reported a significant increase in sales after they were provided with wireless terminals. ⁶⁴ Similar experiences have been reported by other farmers' markets after the vendors began accepting EBT cards. ^{62,72}

Lower rates of participation in farmers' market among low-income individuals has been attributed to lack of farmers' markets near the home and lack of transportation to these markets.⁷³ Additionally, studies have reported mixed findings related to stigmatization, discrimination, or cultural barriers in the use of farmers' markets by low-income individuals.⁷⁴ As their resurgence continues with growing interest in purchasing

fresh local produce, stakeholders can work to encourage locating farmers' markets in low-income neighborhoods. They can also use more culturally sensitive and diverse means of promoting these markets among minority groups, as well as linking the markets with public transport. Such an effort, combined with a move towards providing wireless EBT POS readers, will enable SNAP users to redeem their benefits at farmers' markets more easily.

Summary Table Strategy 1: Improving Access to Healthy Foods

| Recommendations | Recommendations Recommendations deral Initiative | | Political Feasibility ^b | Implementation Feasibility ^c |
|---|---|---|--|--|
| Require SNAP vendors to carry healthier fare | Federal | Medium | Weak | Medium |
| Encourage healthier food retailers to locate in underserved communities | State | Medium | Strong | Medium |
| Accept SNAP benefits at farmers' markets | State | Strong | Strong | Strong |
| Allow online purchases using SNAP benefits | Federal | N/A | Medium | To be determined |
| Possible Objections | | Arguments | | |
| More stringent guidelines will make to buy food using EBT in food dese | will impro | ove the local food d selection at stor | | |
| Farmers' markets in low-income a sustainable. | been incrWireless/Encourag low-incor culturally | EBT terminals in ing farmers' mar me neighborhood | crease sales. kets to locate in ds and providing ans of promotion | |

^a Based on research studies and expert recommendations and commentary.

^b Based on state and federal political and administrative support and potential acceptability to advocates and stakeholders.

^c Based on level of complexity in implementation and cost of implementation.

STRATEGY 2: INCENTIVIZING THE PURCHASE OF HEALTHY FOODS

Research has shown that monetary incentives can be an effective strategy to encourage healthier food consumption and to improve dietary behavior. 72, 74-78 Providing incentives for healthier foods is also generally considered a much less controversial way to promote healthier diets among SNAP users compared to restricting purchase options. Purchase and consumption of fruits and vegetables have been shown to be pricesensitive, especially among low-income individuals, meaning that as prices of fruits and vegetables go down, low-income individuals eat more of these foods. The USDA's estimates show that in response to a 10% decrease in the price of fruits and vegetables, SNAP users purchase 6-7% more of them.

Incentivizing the Purchase of Healthy Items: The USDA's Healthy Incentives Program

Recognizing the importance of incentives for promoting healthier diets, the Food, Conservation, and Energy Act of 2008 (hereafter referred to as the 2008 Farm Bill) authorized \$20 million for Healthy Incentive Program (HIP) pilot projects to determine if incentives provided to SNAP recipients at the POS would increase the purchase of fruits, vegetables, or other healthful foods. The results from the HIP pilot project will be available after the conclusion of the study in 2013. The program will determine if the financial incentives provided (for example, 30 cents back on an EBT card for every SNAP dollar used to purchase qualifying fruits and vegetables) will increase the amount of fruits and vegetables consumed. It will also determine if additional monies provided through incentives will be used for buying fruits and vegetables, and if additional calories consumed in fruits and vegetables displace calories from other food groups. The study will also help determine the economic feasibility of providing these incentives on an ongoing basis.

As with any incentives program, the costs of incentives and of program implementation must be assessed. Using the current average monthly SNAP benefit amounts, ⁸⁶ and based on the proportion of the food budget spent on fruits and vegetables by low-income families, ⁸⁶ we estimate that an incentive program such as HIP may increase the costs *just in terms of additional benefits* by \$166.78 per participating household per year at the national level. If HIP incentives are to be instituted on a sustainable basis, the federal government will have to bear this added cost along with the implementation costs, which may be a challenge in light of current deficit reduction plans.

Incentivizing the Purchase of Healthy Items: Incentivizing the Use of EBT at Farmers' Markets

While HIP is testing the feasibility of implementing an incentives program using EBT cards in all retail environments, another form of incentive has been used in more localized areas through farmers' markets in several communities across the country (Table 2). In these cases, SNAP users are provided monetary incentives in the form of coupons to encourage them to use their EBT cards at farmers' markets. For example, in the Philly Food Bucks program funded by a grant from the federal CPPW (Communities

Putting Prevention to Work) initiative, SNAP users at farmers' markets receive \$2 in Philly Food Bucks coupons for every \$5 they spend of SNAP benefits at participating markets. Similarly, the Boston Bounty Bucks program matches up to \$10 of all purchases made with SNAP benefits. Cuyahoga County's Food Policy Council, supported by local foundations, provides grants to local area farmers' markets to provide financial incentives of \$5 to SNAP participants who spend at least \$5 using their Ohio Direction Card (EBT) at the markets. Since these incentives cannot be funded using USDA monies allocated to SNAP, local partners (e.g., foundations or businesses) could work to build a funding mechanism so farmers' markets can apply for grant money to support incentivizing the use of EBT. Proliferation of such initiatives in many communities has warranted a study just initiated by the USDA to understand the implementation of incentives programs at farmer's markets across the country (personal communication).

Potential Challenges and Objections to Incentivizing Purchase of Healthy Foods

Ample evidence shows that low-income individuals consume fewer fruits and vegetables and that inadequate consumption of fruits and vegetables is associated with increased risk of obesity and chronic disease. Even so, skeptics of programs solely aimed at increasing fruit and vegetable consumption argue that merely increasing intake of these foods does not necessarily reduce overall calorie intake and thus have an effect on weight. Research is conclusive about the effectiveness of fruit and vegetable promotion programs on weight loss when they are coupled with educational efforts to reduce consumption of energy-dense foods. However, findings are not conclusive for programs that only promote consumption of fruits and vegetables. Nevertheless, even if increased intake of fruits and vegetables does not result in reductions in calorie intake or weight loss, it does offer additional benefits such as reducing the risk of cancer and other chronic diseases, of which low-income populations carry a disproportionate burden. On the chronic diseases, of which low-income populations carry a disproportionate burden.

Another challenge to this strategy is that if incentives make additional dollars available to SNAP users, savings could be used to purchase energy-dense, nutrient-poor foods. However, this potential problem is less likely to occur when incentives are targeted for use at farmers' markets or for specific purchase of fruits and vegetables at stores. Since most SNAP-eligible foods at farmers' markets include fruits and vegetables, the incentives will most likely be used to purchase these items. Results may differ at other venues, such as supermarkets, where both healthy and unhealthy foods are readily available. The HIP pilot will be able to shed more light on how incentives at supermarkets influence purchase behavior of SNAP users. Incentives may also help SNAP participants avoid having to sacrifice fruits and vegetables (which are often more expensive) to buy other staple items such as bread or milk.²⁰

Summary Table Strategy 2: Incentivizing the Purchase of Healthy Foods

| State/ Recommendations Federal Initiative | | Evidence ^a | Political Feasibility ^b | Implementation Feasibility ^c |
|---|--|---|---|--|
| Provide POS incentives | Federal/ | Under | Strong | Under study |
| for buying healthy foods | State | study | 2 | Cindon study |
| Incentivize use of EBT at farmers' markets | State | Medium | Strong | Strong |
| Possible Objections | | | Arguments | |
| Increasing fruit/vegetable intake necessarily reduce both calorie i weight. | Fruit/vegetable intake has benefits beyond weight loss, such as reduced cancer and other chronic disease risks. Education can accompany the promotion of fruit/vegetable intake to reduce consumption of unhealthy foods, reduce caloric intake, and result in weight loss. | | | |
| More money in SNAP benefits for fruit/vegetable will free up money for unhealthy foods. | | funded p This is less most SNA fruit/vege Since stap more pur | ilot program. ss likely at farmer AP-eligible foods etables. | e to be sacrificed, |

^a Based on research studies and expert recommendations and commentary.
^b Based on state and federal political and administrative support and potential acceptability to advocates and stakeholders. c Based on level of complexity in implementation and cost of implementation.

STRATEGY 3: RESTRICTING OPTIONS FOR PURCHASE OF UNHEALTHY FOODS

SNAP guidelines indicate that program participants can use their EBT cards to purchase a variety of items at approved retail stores. Exceptions include alcohol and tobacco; nonfood items such as pet foods, soaps, paper products, household supplies, dietary supplements, and medicines; foods that will be eaten in the store; and hot foods. However, no regulations exist dictating the healthfulness of food purchases made with SNAP, even though SNAP participants' diets have repeatedly been shown to be less healthful than the diets of income-eligible nonparticipants and higher-income nonparticipants.

SNAP users consume a larger proportion of their total calories from solid fats and added sugars than do nonparticipants. They consume fewer nutrient-rich foods such as fruits, vegetables, and whole-grain products, and they consume significantly greater amounts of energy-dense foods such as full-fat milk. SNAP users also purchase 40% more sugar-sweetened beverages than other consumers purchase. Given this unhealthy picture of SNAP participants' diets, one can make a case for changing program guidelines to exclude energy-dense, nutrient-poor foods from SNAP benefits. Exclusion of such items is likely to reduce consumption of high-calorie foods that are overrepresented in SNAP participants' diets. Furthermore, such foods do not help further the program's primary goal of alleviating hunger and improving the nutrition of lowincome people.

As concerns over the economic efficiency of SNAP and its association with obesity have grown, this particular strategy has received much recent attention. A number of states (Table 1) have considered action to request the USDA to allow them flexibility in establishing standards for what can and cannot be purchased with SNAP benefits. Some states have also requested permission to run demonstration projects or pilot programs in which specific foods are excluded from SNAP benefits. Thus far, none of these requests have been granted by the USDA.

The latest USDA denial came in response to the widely publicized request from New York City to conduct a 2-year pilot project to exclude the purchase of sweetened beverages from SNAP benefits, a proposal that received a great deal of support from public health experts. Commenting on the New York City verdict, childhood obesity experts Kelly Brownell and David Ludwig pointed out that federal and state governments through Medicare and Medicaid bear high and increasing health care costs from diet-related diseases. Yet, through SNAP, the government subsidizes the purchase of roughly \$4 billion worth of sweetened beverages, an important contributor to obesity and chronic disease. Reducing the prevalence of chronic disease in this group can help reduce the escalating costs in government-funded health care programs. National Medicare and Medicaid spending reached \$876.2 billion in 2009. Other experts have noted the inherent counter-productivity in the practice of using public funds to subsidize unhealthy eating. For example, Barnhill argued that in 2011, while the USDA spent billions of dollars on soda purchases for SNAP participants, the budget for programs

aimed at preventing chronic diseases such as diabetes for all Americans was only \$650 million for the year. ²⁰

These types of restrictive strategies are not unprecedented among other federal nutrition programs such as the National School Lunch Program (NSLP) and the WIC program. They also are substantiated with strong support from the research literature. The reasons for supporting such restrictions are numerous. Sweetened beverages are the largest contributor to calories in the American diet; In early half of the sugar consumed by Americans comes from sweetened beverages; and higher consumption of sweetened beverages is associated with increased risk for obesity, diabetes, metabolic syndrome, and other chronic diseases.

Potential Challenges and Objections to Restricting Options for Unhealthy Foods

Even though the case for excluding sweetened beverages seems strong, multiple stakeholders, including the USDA, have raised objections to placing restrictions on SNAP purchases. The food industry, led by the American Beverage Association, has been unified in its opposition to restricting sweetened-beverage purchases using SNAP benefits. It has also been the most vocal, strongly lobbying the federal government on issues related to exclusion of sweetened beverages in federal programs. Industry often frames its argument against restricting options as a loss of freedom of choice. Although such a move would in fact reduce the number of choices that SNAP participants have for beverage purchases using SNAP benefits, Barnhill²⁰ argues that the goal of ensuring that SNAP participants' diets are nutritionally adequate justifies the modest restriction of consumer choice caused by their exclusion. At the same time, the restriction is not absolute, as SNAP participants still may purchase sweetened beverages, just not with SNAP benefits. Moreover, just as the purchase of prepared foods is not allowed, presumably because these foods are an expensive and inefficient solution to alleviating hunger, one may argue that sweetened beverages similarly fail to alleviate hunger, while at the same time increase the cost of maintaining good health at both the individual and societal level.

Anti-hunger organizations and social justice advocates have also argued against restrictions in SNAP purchases. They suggest that restrictions on purchase of unhealthy sugar-sweetened beverages will result in embarrassment and stigma and may reduce SNAP participation.²⁰ The USDA has expressed similar concerns regarding restricting specific food items.⁷⁹ However, data from one study show that only 14% of SNAP-eligible nonparticipants cited stigma as a reason for not participating in the program, and stigma was not among the top reasons for why they chose not to participate. At the same time, SNAP maintains other restrictions on purchases for certain items, and it is not clear if further restrictions would carry any additional stigma associated with program participation. Pilot programs, such as the one proposed by New York City, could help clarify these issues.

Industry advocates and the USDA also have expressed concern that implementation of food restrictions will increase program complexities and costs.⁷⁹ Unlike SNAP, the WIC program, developed and implemented by the same federal agency (the USDA's FNS), restricts the use of benefits for purchase to only specific food items

deemed most nutritionally beneficial.⁹⁹ Approximately a quarter of WIC participants in the United States simultaneously participate in the SNAP program¹⁰⁸ and thus are familiar with using food and nutrition assistance programs that include purchase restrictions. Also, food stores that are certified WIC vendors are familiar with specific food items that can or cannot be purchased using program benefits. WIC-certified stores and WIC participants provide a precedent of how a restrictive program can be efficiently implemented. The financial and implementation burden associated with using similar restrictions for the SNAP program on the vendor and on state and the federal governments needs to be evaluated through pilot programs.

While a restrictive program is likely to have implementation challenges, well-designed pilot projects can shed more light on how these challenges can be overcome. For example, since most energy-dense, nutrient-poor foods are purchased in prepackaged form, one way to identify foods that are eligible for SNAP benefits may be to shift the burden of identification to companies that manufacture packaged foods. In addition to having a Nutrition Facts panel, each package could carry an easily identifiable symbol that indicates that the food is an eligible purchase for SNAP benefits. Given that SNAP benefits bring in billions of dollars in sales to food companies, the cost of identifying SNAP-eligible foods based on simple nutrition criteria, and printing a symbol on the package may be worth considering. However, like any proposed change, such a strategy needs to be tested via a well-designed pilot project.

In denying the NYC request for conducting a pilot to eliminate sweetened beverages from SNAP benefits, the USDA pointed to the challenges of developing a practical system to identify eligibility of foods for purchase or restriction. It has also been argued that there are no widely accepted standards to judge the healthfulness of individual foods. Nevertheless, precedents do exist among other federal programs for excluding the purchase of certain foods or beverages. For example, NSLP restricts purchases based on the USDA's definition of foods of minimum nutritional value, and the WIC program includes only healthy items in food packages.

The USDA has also argued that excluding sweetened beverages from SNAP will not affect their sales and consumption because SNAP participants will use other resources to purchase these beverages. ⁷⁹ If SNAP participants use their non-EBT resources to purchase sweetened beverages, they will face a higher price at the cash register than what they would have paid using their SNAP dollars. This is because individuals do not pay taxes on foods purchased using SNAP benefits. However, 33 states in the United States have levied taxes on the sale of soft drinks at an average rate of slightly over 5%. ¹⁰¹ Studies have shown that when the cost of sweetened beverages goes up, individuals reduce their consumption. ¹¹⁰ Therefore, it is likely that, faced with a higher price, SNAP participants may not buy as many sweetened beverages using their own dollars as they did with SNAP benefits.

To change any regulations, state agencies that implement SNAP must petition the USDA to approve the changes they propose. Under 7CFR 272.2 (c) (1) (ii), FNS is allowed to approve waivers that will result in a *more effective and efficient* administration of the program.⁴⁸ In times of federal deficits and budget shortfalls, funding SNAP participants' purchase of food items that are detrimental to their health

and have the potential to raise federal spending by increasing the cost of federal health care programs does not represent efficiency. Therefore, restricting purchase of such items is likely to improve the fiscal efficacy of the overall federal investment in the program. It will also help improve the public image of SNAP as a carefully designed nutrition assistance program that helps families eat healthier during rough times, as opposed to an inefficient welfare program.²⁰

Summary Table Strategy 3: Restricting Options for Unhealthy Foods

| Recommendations | State/ Federal Initiative | Evidence ^a | Political Feasibility ^b | Implementation Feasibility ^c | |
|--|---|--|---|---|--|
| Exclude energy-dense, nutrient-poor foods | Federal | Strong | Weak | Low | |
| Exclude sweetened beverages | Federal | Strong | Weak | Medium | |
| Possible Objection | ons | Arguments | | | |
| SNAP participants will experience loss of freedom of choice. | purchaseModest rimprovinPreceder(hot food | sweetened bever estrictions are just g participants' die ats exist with the e | ages using non-S tified, given the c t. xclusion of certai | ants can continue to NAP funds. overall program goal of n foods within SNAP al nutrition programs | |
| Will result in embarrassment and stigmatization and reduce SNAP participation. | SNAP restricts other purchases. Pilot programs are needed to assess additional stigmatization. Stigma is not the top reason for why eligible participants do not participate in SNAP. | | | | |
| Increased program complexities and cost. | WIC restricts purchases to specific items, and its vendors operate that program efficiently. Pilot projects are needed to study implementation challenges and strategies for overcoming them. | | | | |
| No standards to judge food healthfulness. | Other federal nutrition programs such as NSLP restrict foods based on the USDA's definition of foods of minimum nutritional value. WIC packages include only healthy foods. | | | | |
| SNAP participants will just use other resources to purchase sugar-sweetened beverages. | Food purchased with SNAP benefits is tax-free. Sweetened beverages will cost more if purchased with other resources. Sweetened-beverage consumption is price-sensitive; with higher costs, consumption is likely to go down. | | | | |

^a Based on research studies and expert recommendations and commentary.

^b Based on state and federal political and administrative support and potential acceptability to advocates and stakeholders.

^c Based on level of complexity in implementation and cost of implementation.

STRATEGY 4: INCLUDING PUBLIC HEALTH APPROACHES TO EXPAND SNAP-Ed OUTREACH

According to the USDA, nutrition education is an increasingly important aspect of the nation's efforts to improve the diets of low-income Americans. SNAP-Ed, the education arm of SNAP, is administered by FNS with the goal of improving the likelihood that SNAP participants and those eligible for SNAP benefits will make healthy food choices within a limited budget and choose active lifestyles consistent with the Dietary Guidelines for Americans.

In most states, SNAP-Ed has traditionally focused on group and one-on-one direct education. While a number of studies have shown one-on-one or group approaches to nutrition education to be effective, 112-114 others have shown that the impact of education may be limited to changes only in knowledge and positive outcome expectations. 115, 116 Nutrition education experts 117 contend that food systems, policy, and environmental changes must accompany nutrition education. Sustained positive behavior changes occur by making the healthy choice the easy choice. 118

In 2011, 1 in 7 Americans participated in SNAP. To reach such large numbers, the SNAP-Ed approach of one-on-one or group nutrition education sessions needs to be reconsidered. Institutions such as the IOM and the CDC have emphasized that changes in dietary and physical activity behavior will most likely result from combined applications of direct nutrition education and public health approaches rather than from nutrition education alone. A public health approach will not only increase the outreach of the program but may also be more cost effective. Advocates working to make SNAP-Ed more effective recommend that the program incorporate public health principles by combining education with systems and policy approaches, environmental changes, multimedia campaigns, and expanded promotional activities that link people to needed nutrition services. In fact, as part of the 2008 Farm Bill, Congress provided clear guidance for the inclusion of public health approaches along with traditional education to increase the likelihood that recipients and potential recipients of benefits under SNAP choose diets and physical activity practices that are consistent with the Dietary Guidelines for Americans.

Due to the passage of the Healthy, Hunger-Free Kids Act of 2010, which reauthorized Child Nutrition and WIC Programs, FNS will be able to issue new guidelines for the SNAP-Ed program in 2012. The act specifically indicates that the SNAP-Ed funds should be used for evidence-based programs, including individual and group sessions, multilevel interventions at multiple complementary organizational levels, and community and public health approaches to improve nutrition. In developing these guidelines, FNS must consider the guidance provided in the 2008 Farm Bill and the recommendations from the CDC and the IOM. It must also include provisions for expanding the scope of SNAP-Ed to include social-marketing techniques, and promote the use of public health approaches to work on policy, systems, and environmental changes for influencing behaviors.

Currently, SNAP-Ed guidelines recommend that core behavioral outcomes be taken into account for assessing nutrition education needs, developing SNAP-Ed objectives, and evaluating outcomes. These outcomes include an emphasis on consuming healthier items such as fruits, vegetables, whole grains, fat-free or low-fat milk and being physically active to maintain a calorie balance. The guidelines specifically forbid the use of *SNAP-Ed funds to convey negative written, visual, or verbal expressions about any specific foods, beverages, or commodities.* This regulation disallows states and local agencies administering the program from actively dissuading SNAP participants from consuming energy-dense, nutrient-poor foods, such as sweetened beverages that do not contribute to overall healthy dietary patterns. Changes in SNAP-Ed guidelines that would allow promotion of healthy food consumption, and at the same time dissuade the consumption of unhealthy energy-dense, nutrient-poor options, are necessary to address the obesity epidemic.

We recommend that SNAP-Ed shift its focus from conducting one-on-one or group education sessions to adopting multimedia approaches that include socialmarketing campaigns to reach greater numbers, use of advanced technology such as smart phones to deliver and evaluate nutrition education, and publicity through mainstream media channels. For example, mass-media campaigns to dissuade SNAP participants from consuming energy-dense foods and beverages would be an efficient way to reach greater numbers and support the implementation and effectiveness of other strategies proposed in this document. Although only 20% of the low-income adults currently own smart phones, 124 researchers are testing this technology to deliver behavior-change focused interventions. Pilot studies are needed to test the feasibility and effectiveness of smart phones to deliver nutrition education to SNAP participants. In addition, SNAP-Ed administrators should formally collaborate with other health promotion program personnel at the federal, state and local levels to promote synergy. This could include identifying common messages with campaigns such as Let's Move, or working with local partners to propose policy and environmental changes that make it easier for SNAP participants to make healthy choices.

Potential Challenges and Objections to Including Public Health Approaches to Expand SNAP-Ed Outreach

Traditionally, SNAP-Ed is provided in group or community settings such as community centers, job-training centers, schools, and after-school programs. The nutrition education community has developed an extensive set of resources and expertise in providing these services. Changing the focus of the program to incorporate public health approaches will require a change in the mind sets and skill sets of those involved in delivering the program. A number of community-based programs are currently undergoing this transition. Many are supported in these endeavors by federal agencies such as the CDC. For example, 25 state health departments are working in a cooperative agreement with the CDC to use public health approaches to improve fruit and vegetable consumption and to decrease consumption of energy-dense foods and sweetened beverages to reduce obesity and chronic disease. 125

SNAP-Ed has a very well organized training infrastructure that could be efficiently used to retrain and retool its staff at federal, state, and local levels to build a

cadre of workers. These workers, in addition to being experts at nutrition education, will need to understand and implement policy, environmental, and systems approaches to bringing about desired behavior change. If SNAP-Ed funds are to be used for dissuading people from consuming energy-dense, nutrient-poor foods, this strategy may face similar challenges to those presented under Strategy 3.

Summary Table Strategy 4: Including Public Health Approaches to Expand SNAP-Ed Outreach

| Recommendations | State/ Federal Initiative | Evidence ^a | Political Feasibility ^b | Implementation Feasibility ^c |
|--|-------------------------------------|---|---|---|
| Combine nutrition education with public health approaches | Federal | Strong | Medium | Medium |
| Create guidelines that allow promotion of healthy foods and dissuasion of energy- dense, nutrient-poor foods | Federal | Strong | Low | High |
| Use multimedia approaches to deliver messages | Federal/ State | Strong | Strong | High |
| Possible Objection | Possible Objections | | | |
| Adding incorporation of public health approach will require retraining program deliverers. | | retrain andMany communitytransition finitiatives t | as an organized i I retool staff. munities are alre from education-a to adding policy, antal approaches. | ady making the and service-based systems, and |
| Discouraging consumption of u choices may be considered pate | See the table following Strategy 3. | | | |

^a Based on research studies and expert recommendations and commentary,

^b Based on state and federal political and administrative support and potential acceptability to advocates and stakeholders,

^c Based on level of complexity in implementation and cost of implementation.

CONCLUSIONS

Behavior change is difficult business. Moving one individual, let alone large segments of the population, towards healthier behaviors requires multiple approaches using an array of strategies. To eliminate obesity and change eating behaviors, a number of strategies are important to consider that address both individual choices and environmental factors that have a strong impact on health. One can conceptualize the array of strategies along a spectrum of responsibility for health and health behaviors, from personal responsibility (i.e., individual action to make healthy, versus unhealthy, choices) to social responsibility (i.e., policy or other environmental changes to foster healthier choices).

SNAP is uniquely positioned to help improve the diets and health outcomes of its users by adopting multiple strategies that address both the personal responsibility and the social responsibility ends of the spectrum. In this document, we reviewed evidence related to four specific strategies: improving access to healthy foods to provide better choices, incentivizing the purchase of healthy foods, restricting options for purchase of unhealthy foods, and maximizing education to more effectively reach a larger population of SNAP participants. Each strategy has the potential to influence and improve food-consumption patterns of SNAP users. Improving access to healthy foods as a strategy has the added benefit of potentially improving the food environments in communities where SNAP participants reside. Incentives for targeted foods can help nudge SNAP participants in the direction of healthy food choices. Restrictions on unhealthy options can set "healthy defaults" within the food environment in which the SNAP participants shop. The scope of SNAP-Ed can be expanded to adopt social-marketing strategies and those aimed at making environmental, systems, and policy changes to make healthy choices the easiest choices.

Some of these strategies are unprecedented within SNAP and require federal action and approval to implement. However, some precedents do exist in other federal food and nutrition programs and can be used to make a case for making changes to SNAP. For instance, two of the largest federal nutrition programs besides SNAP—NSLP and WIC—use nutritional criteria to provide clear guidance on types of foods that may be purchased or served within the program. In addition, WIC requires certified retail vendors to carry specific items whose selection is based on nutritional criteria.

Although exploration of some of the strategies proposed requires federal involvement, multiple municipalities and states already are considering legislation or other action to request more federal consideration of these issues (Table 1). These state actions generally fall in line with multiple recommendations from high-level health organizations (Table 2).

Improvements in public health through food and nutrition assistance programs, especially at a time of increased scrutiny and fiscal concern, require well-researched and well-coordinated strategies with a strong chance for success. We hope this document offers the research and rationale necessary to identify areas where strategic agreement, and subsequent action, can take place at both the state and federal level.

 Table 1: State-level Initiatives and Proposed Legislation to Change SNAP-related Policies

| Bill / Initiative | State | Party | Focus | | | |
|------------------------------|---|------------------|--|--|--|--|
| Strategy 1: Improving | Strategy 1: Improving Access to Healthy Foods | | | | | |
| | CA, IA, NM | State Agencies | Funding for wireless terminals at farmers' markets | | | |
| | NY | State Agency | Funding for wireless terminals at farmers' markets | | | |
| AB 537 | CA | D | Requires farmers' markets to provide for EBT | | | |
| HB 4756 | IL | | Funding for wireless terminals at farmers' markets | | | |
| | MA | State Agency | Funding for wireless terminals at farmers' markets | | | |
| SB 6483 | WA | | Funding for wireless terminals at farmers' markets | | | |
| Strategy 2: Incentivizin | g the Purchase | of Healthy Foods | | | | |
| Sec. 4141, 2008 Farm Bill | CA, CT, DC, FL, MA, NY, PA, VA, WA | | Subsidies and "double dollars" at farmers' markets to purchase fruits and vegetables | | | |

Strategy 3: Restricting Options for Unhealthy Purchase of Healthy Foods

| (None of the following | legislation has | passed or | is being implemented as of December 2011) |
|------------------------|-----------------|-----------|---|
| | | | Seeks to make sweetened beverages and calorie-dense snacks |
| SB 471 | CA | D | ineligible SNAP purchases |
| HF 288 | IA | R | Seeks to make low-nutrition foods ineligible SNAP purchases |
| HB 1399 | IL | R | Seeks to make low-nutrition foods ineligible SNAP purchases |
| HB 1480 | IL | R | Seeks to make low-nutrition foods ineligible SNAP purchases |
| | | | Seeks to make sweetened beverages ineligible SNAP |
| HB 3421 | IL | D | purchases |
| SB 1956 | IL | D | Seeks to make low-nutrition foods ineligible SNAP purchases |
| | | | Seeks to make sweetened beverages ineligible SNAP |
| SF 89 | MN | DFL | purchases |
| 10.007 | NE | 115 | Seeks to limit SNAP beverage purchases to milk, 100% juice, |
| LB 267 | NE | NP | and water |
| | | | Seeks to make low-nutrition foods ineligible for SNAP |
| HB 3098 | OR | R | purchases |

Table 1 (cont)

| Bill / Initiative | State | Party | Focus |
|-------------------|--------------|-------|---|
| HB 3274 | OR | R | Seeks to approve a pilot program making low-nutrition foods ineligible SNAP purchases |
| HR 59 | PA | R | Requests that Congress conform SNAP purchase regulations to WIC-style regulations |
| HB 1151 | тх | D | Seeks to make sweetened beverages ineligible SNAP purchases |
| HB 3451 | TX | R | Seeks to make low-nutrition foods ineligible SNAP purchases |
| SCR 9 | тх | D | Seeks to make sweetened beverages and calorie-dense snacks ineligible SNAP purchases |
| JRH 13 | VT | R | Requests that Congress allow states to make decisions on SNAP food and beverage eligibility |
| | NY (NY City) | | Requests that the USDA allow a pilot program restricting purchase of sweetened beverages through SNAP |

Source: Adapted from National Confectioners Association http://www.candyusa.com/PublicPolicy/IndustryIndexList.cfm

Table 2: Recommendations from the Institute of Medicine, the Centers for Disease Control and Prevention, and the White House Task Force That Match Proposed SNAP Enhancement Strategies

| Organization | Recommendation |
|-----------------------------------|--|
| Strategy 1: Improving Access to H | ealthy Foods |
| IOM | Increase community access to healthy foods in supermarkets, grocery stores, and convenience/corner stores Improve the availability and identification of healthful foods in restaurants Promote efforts to provide fruits and vegetables through farmers' markets, farm stands, mobile markets, community gardens, and gardens Ensure that publicly run entities promote healthy foods and beverages and reduce or eliminate the availability of calorie-dense, nutrient-poor foods Increase access to free, safe drinking water in public places to encourage consumption of water instead of sugar-sweetened beverages |
| CDC | Increase availability of healthier food and beverage choices in public service venues Improve availability of affordable healthy food and beverage choices in public service venues Improve geographic availability of supermarkets in underserved areas Provide incentives to food retailers to locate in or offer healthier food and beverage choices in underserved areas Improve availability of mechanisms for purchasing foods from farms Provide incentives for production, distribution, and procurement from local farms Institute smaller portion-size options in public service venues |
| White House Task Force | Increase access to healthy, affordable foods in communities Improve the quality of school foods |

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|------|------|--------|---|
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| TaU. | 10 2 | (Cont | |

| Table 2 | (Cont.) | |
|----------------------------|---------------------------|--|
| | Organization | Recommendation |
| Strategy 2: In | centivizing the Purc | hase of Healthy Foods |
| Incentivizing Purchases | IOM | Promote efforts to provide fruits and vegetables in a variety of settings, such as farmers' markets, farm stands, mobile markets, community gardens, and youth-focused gardens |
| | CDC | Provide incentives for production, distribution, and procurement from local farms |
| Strategy 3: R | estricting Options for | or Purchase of Unhealthy Foods |
| IOM | dense | re that publicly run entities promote healthy foods and eliminate calorie- e foods burage consumption of calorie-dense, nutrient-poor foods and beverages |
| | | taxes, incentives, land use and zoning regulations |
| CDC | • Restr | rict availability of less healthy foods and beverages in public service venues |
| | • Limit | advertisements of less healthy foods and beverages |
| | • Disco | ourage consumption of sugar-sweetened beverages |
| | • Instit | ute smaller portion size options in public service venues |
| Strategy 4: Incl | uding Public Health | Approaches to Expand SNAP-Ed Outreach |
| | | |
| Education | IOM | Improve the availability and identification of healthful foods in restaurants |
| | | Promote media and social-marketing campaigns on healthy eating and preventing childhood obesity |
| | CDC | Limit advertisements of less healthy foods and beverages |
| | White House Task Force | Increase access to federal nutrition programs |

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¹ An adult who has a Body Mass Index (BMI) between 25 and 29.9 is considered overweight. An adult who has a BMI of 30 or higher is considered obese. Overweight among children is defined as a BMI at or above the 85th percentile and lower than the 95th percentile for children of the same age and sex. Obesity among children is defined as a BMI at or above the 95th percentile for children of the same age and sex. BMI = weight (kilograms)/ [height (meters)]².

ii The 2008 Farm Bill defines food desert as an "area in the United States with limited access to affordable and nutritious food, particularly such an area composed of predominantly lower income neighborhoods and communities."