

SNAP to Health:

A Fresh Approach to Strengthening the Supplemental Nutrition Assistance Program

Center for the Study of the Presidency and Congress
Health and Medicine Program

SNAP to Health: A Fresh Approach to Improving Nutrition in the Supplemental Nutrition Assistance Program



Center for the Study of the Presidency and Congress (CSPC)

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SNAP TO HEALTH: A FRESH APPROACH TO IMPROVING NUTRITION IN THE SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM

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TABLE OF CONTENTS

PREFACE 1

EXECUTIVE SUMMARY: A MENU OF RECOMMENDATIONS FOR STRENGTHENING SNAP 4

BACKGROUND 11

PROJECT METHODOLOGY 19

OPPORTUNITIES FOR SNAP IMPROVEMENT 22

CONCLUSION 50

APPENDIX I: PROJECT TEAM MEMBERS AND STAFF 53

APPENDIX II: ACKNOWLEDGMENTS 55

APPENDIX III: FARM BILL TITLES 57

APPENDIX IV: USDA ORGANIZATIONAL CHART 59

APPENDIX V: FOOD AND NUTRITION SERVICE, USDA ORGANIZATIONAL CHART 60

REFERENCES 61

PREFACE

The test of our progress is not whether we add more to the abundance of those who have much; it is whether we provide enough for those who have too little. —President Franklin D. Roosevelt

There are no easy answers, but there are simple answers. We must have the courage to do what we know is morally right. —President Ronald Reagan

A decent provision for the poor is the true test of civilization. —Samuel Johnson

Hunger and food insecurity are major public health problems in America that have increased in severity due to the current economic recession. The Supplemental Nutrition Assistance Program (SNAP), formerly known as the Food Stamp Program, serves as the U.S. Department of Agriculture's (USDA) largest federal food assistance program, with a budget of $75.6 billion in FY2011. This safety net program aims to alleviate hunger and improve the nutritional status of participants by increasing the resources available to low-income households to purchase food.

This year, SNAP participation is at its highest level since the program's inception. In April 2012, 46.2 million people in the United States (approximately 15 percent of the U.S. population) were enrolled in SNAP, representing more than a 60 percent increase in participation since 2007.[1] Nearly 50 percent of those beneficiaries are children.[2] Furthermore, while between the ages of 1 and 18, nearly half (49.2 percent) of all children in the United States will be a member of a household that participates in SNAP.[3]

One in six people in the United States is food insecure, while two-thirds of adults and one-third of children are overweight or obese—*a modern paradox*.[4,5] These public health problems disproportionately affect low-income populations.[6] The high rates of obesity and food insecurity among low-income Americans underscore the importance of exploring ways to employ SNAP strategically as a tool to promote healthier nutrition as well as reduce obesity rates among program participants and to stimulate a food environment in which healthy food choices are the easy and expected choices.[7]

The Food Stamp Program was established in 1964 to achieve a more effective use of agricultural overproduction, strengthen the agricultural economy, and address hunger and food insecurity in America. In 2008, it was renamed the Supplemental Nutrition Assistance Program (SNAP) to increase the focus on nutrition, yet there have been minimal changes in its policies to achieve this goal. In its current configuration, SNAP does little to encourage participants to purchase nutritious foods or to discourage the purchase of products that do not make a meaningful contribution to a healthy diet. While the program provides some nutrition education to beneficiaries through SNAP-Education (SNAP-Ed), this component receives limited funding and has only recently been modified to allow a broader range of activities to harness the public health potential of SNAP.[8] Furthermore, the USDA does not collect data on the foods purchased by SNAP beneficiaries nor does it make publicly available information about the venues where products are bought. Additionally, the program does not use its potential to improve the food environment by mandating

that SNAP-certified retail stores offer foods that meet the *2010 Dietary Guidelines for Americans,* the U.S. nutritional recommendations for promoting good health and preventing disease.[9] Furthermore, a recent report argues that various corporate interests have impeded efforts to strengthen nutritional policies in SNAP.[10]

At the federal level, the Congressional legislation with the greatest impact on SNAP is the *Food Conservation and Energy Act,* commonly known as the Farm Bill, which is scheduled for reauthorization in 2012. SNAP is the major program encompassed in the Nutrition Title of the Farm Bill, which receives the largest amount of funding of any of the Farm Bill's fifteen titles, or overarching program areas (See Appendix III). This funding for SNAP must not be cut during the 2012 reauthorization. However, the Farm Bill could provide a vehicle to align farm and food policy with national public health priorities. The reauthorization process as well as future legislative and Administration action provide opportunities to reformulate SNAP as a program that serves not only as an invaluable safety net for low-income households but also as a tool to fight the concurrent threats of food insecurity, poor nutrition, and obesity among low-income Americans.

To study the feasibility of strengthening nutritional policies in SNAP, help rectify the costly health disparities experienced by America's low-income families, and inform current and future policy deliberations, the Center for the Study of the Presidency and Congress (CSPC) convened an interdisciplinary team of experts in federal and state health policy, nutritional epidemiology, public health, agricultural economics, and health communications, which has undertaken the following activities:

- Conducted a comprehensive scientific literature review on SNAP.
- Conducted in-depth key informant interviews with 27 experts across multiple sectors about innovative strategies to improve nutritional policies in SNAP.
- Designed and implemented a survey of over 500 key stakeholders to identify barriers and opportunities for improving nutrition for SNAP beneficiaries. The survey was developed based on the findings of the key informant interviews and analyzed quantitatively.
- Conducted a comprehensive statistical analysis of data from the 1999-2008 National Health and Nutrition Examination Survey (NHANES) to examine the relationship of SNAP participation with obesity prevalence and the dietary intakes of children, ages 4-19 years old.
- Launched an interactive website (*www.snaptohealth.org*) to function as a "virtual town hall" and forum for public discourse on improving nutrition in SNAP. The site serves as a platform to solicit ideas, discuss approaches, and build national support for strategies to improve nutrition in federal food assistance programs now and in the future.

This report provides the results of these activities including key recommendations for a fresh approach to improving nutrition and health in SNAP. Currently, Congress is debating the 2012 Farm Bill and some are proposing large cuts to SNAP at a time when the program is serving as a critical safety net for over 46 million Americans. This project was designed to provide a thorough, comprehensive examination of evidence to support objective policy decisions about this large and complex program. It aims to identify options and guide changes that would help to reduce widespread diet-related health disparities threatening our economy and national security.

The principal message of this document is that SNAP funding must not be cut and should be maintained as a lifeline for low-income Americans, but the program should be strengthened and modernized to serve as a 21st century public health instrument to improve nutrition, alleviate food insecurity, reduce obesity rates, and enhance the health of America's low-income population.

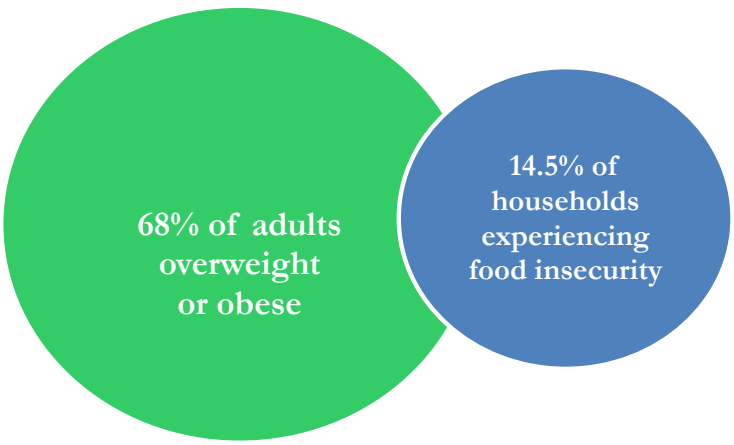
This report provides a useful roadmap for policymakers, public health professionals, advocates, educators, and others working to strengthen SNAP—to move SNAP to health—through the Farm Bill and other policy venues now and into the future. To ensure the health and prosperity of the American people, greater emphasis must be placed on ensuring healthy nutrition for all.

EXECUTIVE SUMMARY: A MENU OF RECOMMENDATIONS FOR STRENGTHENING SNAP

Background

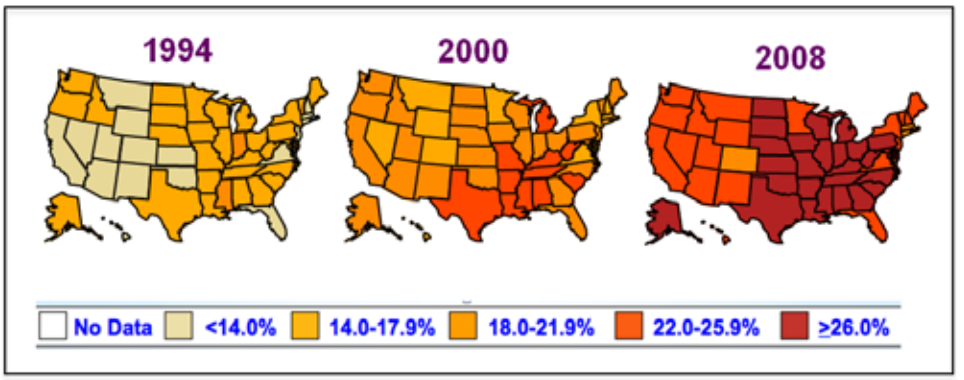
The Supplemental Nutrition Assistance Program (SNAP) serves as the U.S. Department of Agriculture's (USDA) largest food assistance program with an annual budget of $75.6 billion in FY2011. SNAP provides a safety net for America's low-income population to meet food and nutrition needs. This important program aims to alleviate hunger and improve the nutritional status of participants by increasing the resources available to low-income individuals and households to purchase food. When the Food Stamp Program, now called the Supplemental Nutrition Assistance Program (SNAP), was designed in the 1960s, its purpose was to address under-nutrition among low-income Americans. Over the past thirty years, however, an obesity epidemic has emerged in America that co-exists with food insecurity. One in six people in the United States are food insecure, while two-thirds of adults and one-third of children are overweight or obese.[11,12] These public health problems disproportionately affect low-income populations.[13]

In 2010, 14.5 percent of households in the United States were food insecure, meaning that they did not always have access to enough food for all family members to live active, healthy lives.[14] Food insecurity and poverty are associated with significant social, economic, and health consequences. Children living in poverty are more likely to experience adverse health conditions including low birth weight, lead poisoning, asthma, delayed immunizations, dental problems, mental illness, and accidental death.[15] In the long term, children that grow up in impoverished conditions are more likely to have lower academic achievement and to live in poverty as adults. Among adults, food insecurity is associated with postponing needed medical care and medications, increased hospitalizations, inadequate intake of key nutrients, and poor physical and mental health, including an increased rate of depression.[16,17]



Throughout history, poverty, hunger, and food insecurity have been associated with under-nutrition and thinness. Today, these conditions are also linked to obesity and chronic disease.[18] Since the mid-1970s, America has seen the rise of an obesity epidemic (see *Figure 1*) with an estimated 68 percent of American adults currently classified as overweight and 34 percent as obese according to body mass index (BMI).[19] Over the past three decades, childhood and adolescent obesity rates have more than tripled. This dramatic rise in obesity rates is linked to changes in food consumption patterns, the food environment, increased caloric intake, as well as a decline in physical activity levels. Foods high in energy, sugar, refined starches, and sodium have become widely available and affordable, and portion sizes have increased significantly. Furthermore, only 3 in 10 people in the United States achieve the recommended level of physical activity.[20]

Figure 1: Prevalence of Obesity in U.S. Adults (Body Mass Index ≥ 30)[21]



The physical, emotional, social, economic, and national security consequences of obesity are serious and insidious. Obesity has health-damaging effects on almost every organ system of the body and is linked to high rates of chronic disease including diabetes, coronary heart disease, hypertension, stroke, arthritis, and some cancers.[22] Obese children are more likely to have risk factors for cardiovascular disease including high blood pressure or elevated cholesterol levels, and the onset of heart disease and type 2 diabetes in youth is occurring at earlier ages.[23] A recent report found that rates of type 2 diabetes and pre-diabetes among adolescents in America have skyrocketed from 9 percent in 2000 to 23 percent in 2008.[24] As a result, this generation of children may not be as healthy or live as long as their parents.[25] It is estimated that, if current trends continue, an additional 65 million Americans will become obese by 2030; as a result, there will be 400,000 new cases of cancer, 6 to 8 million additional cases of diabetes, and 5.8 to 6 million additional cases of coronary heart disease or stroke due to overweight and obesity.[26] Low-income populations are disproportionately affected by these diseases linked to obesity.[27]

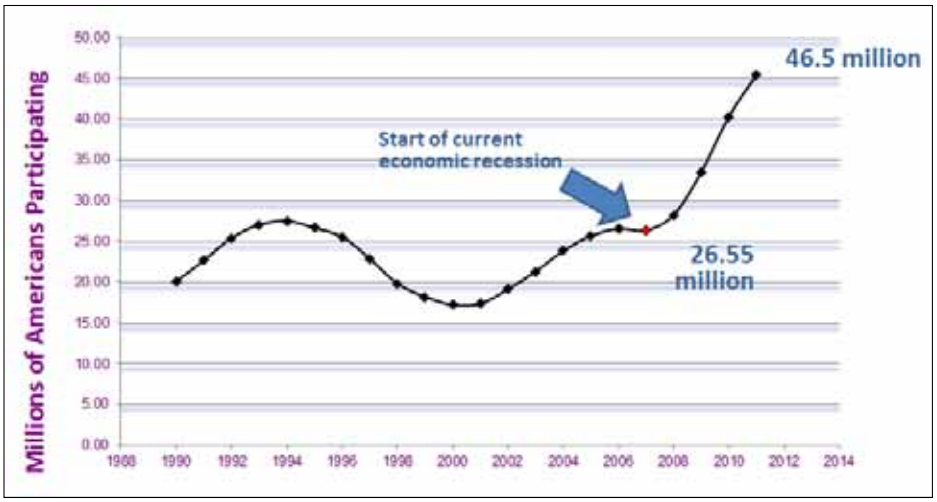
The increasing prevalence of obesity and its co-morbidities presents a significant financial burden to the U.S. healthcare system. Excess weight is associated with greater medical expenditures among adults, adolescents, and children.[28,29] The total annual medical cost of obesity in the United States is now an estimated $190 billion.[30] There are also indirect costs of obesity, including the value of income lost from decreased productivity, restricted activity, and absenteeism—accounting for an estimated $450 billion annually.[31] A recent report estimates that, by 2030, U.S. healthcare spending will rise by as much as $66 to 68 billion annually if obesity rates in America continue to increase.[32] A

significant portion of these costs are shouldered by federal health insurance programs, including Medicaid and Medicare, which spent approximately $61.8 billion to treat obesity and related diseases in 2009. This federal spending accounts for 42 percent of the total medical costs associated with obesity.[33] Furthermore, a recent study identifies a growing socioeconomic gap in childhood obesity rates: children from more affluent families are experiencing a greater reduction in obesity rates compared to youth from low-income families.[34] Additionally, there are national security concerns associated with obesity. A recent report found that 27 percent of young people in the United States are not eligible for military service because of overweight and obesity.[35]

SNAP: A Vital Safety Net

SNAP provides a critical safety net for 1 out of 7 Americans. Enrollment in the program has increased dramatically during the past three years as a result of the current economic recession and changes in SNAP policies (see *Figure 2*), with participation in 2009 estimated at 72 percent of eligible Americans and 60 percent of the working poor.[36] In April 2012, 46.2 million people (approximately 15 percent of the U.S. population) were enrolled in SNAP, an increase of over 60 percent since 2007.[37] Nearly 50 percent of SNAP beneficiaries are children, and 49 percent of America's youth will be enrolled in SNAP before their 19th birthday.[38,39]

Figure 2: Increased SNAP Utilization During the Current Economic Recession [40]



The Census Bureau indicates that the value of SNAP benefits, when added to cash income, moved 13 percent of participating households above the federal poverty line in 2010. SNAP benefits had an even greater impact on the poorest households, raising 16 percent above 50 percent of the federal poverty level.[41] Additionally, a study examining three states found that SNAP reduced child poverty by 3.4 to 5.1 percentage points in 2008.[42] SNAP is also widely regarded as one of the most important stimulus programs in place for mitigating the impact of economic recessions in America by sustaining demand for goods and services provided by businesses.



Improving Nutrition in SNAP

In recent years, Congressional legislation has addressed the need to improve nutritional health and prevent obesity for participants enrolled in federal food assistance programs. The Special Supplemental Nutrition Program for Women, Infants and Children (WIC), established in 1972, was revised in 2009 to provide a defined food package that aligns with the *Dietary Guidelines for Americans*. In addition, the *Healthy, Hunger-Free Kids Act* in 2010 required that the National School Lunch and Breakfast Programs and the Child and Adult Care Food Program be modified to improve the nutritional quality of meals. However, this kind of nutritional policy change has not yet occurred in SNAP.

Although the *Food, Conservation and Energy Act of 2008* (the Farm Bill) renamed the Food Stamp Program to the Supplemental Nutrition Assistance Program (SNAP), this name change was not paired with structural changes to the program that would influence participants' nutrition quality. Given the concurrent hunger and obesity epidemics in the United States, the Government must take bold steps to improve nutrition among SNAP recipients. The current focus on SNAP and its reauthorization in the 2012 Farm Bill has fostered dialogue on strategies to improve the nutritional status of SNAP beneficiaries now and into the future.

As the program is currently configured, SNAP recipients face numerous barriers to achieving nutritious diets. At the population level, several factors hinder the adoption of healthier eating practices, such as the lack of nearby food markets and restaurants that offer a good selection of healthy, value-oriented foods; the marketing of unhealthy foods to program participants; food industry and other corporate interests that push back on program changes; the relatively higher price of some healthier food choices; a lack of time to plan meals and shop; limited cooking and food preparation skills; population norms that favor overconsumption; and generally lower health literacy among people with less education.

Reformulating the program to encourage healthy, nutritious food choices could catalyze short- and long-term cost savings in areas such as healthcare, worker productivity, and educational achievement for children.

In addition to these forces, there are broader macro-level factors that shape food production, manufacturing, marketing, and distribution that influence SNAP participants' food choices. The nutrition education component of the program—SNAP-Ed—receives modest funding. Furthermore, educators, researchers, advocates and policymakers face challenges in understanding how to improve nutrition among program participants in part because the USDA does not currently collect point-of-purchase data about the foods that are bought by SNAP recipients or make publicly available information about where benefits are redeemed.

Strengthening the program to encourage healthy, nutritious food choices could catalyze short- and long-term cost savings in areas such as healthcare, worker productivity, and educational achievement for children.[43]

To achieve these goals, this report presents seven categories of policy change for consideration:

I. **Lower the cost of healthy foods for SNAP recipients.**
II. **Increase access to healthy foods.**
III. **Discourage the purchase of high-calorie, unhealthy foods.**
IV. **Modify the distribution and amount of SNAP benefits to better meet the needs of recipients.**
V. **Increase knowledge about foods purchased with SNAP benefits and the program's impact on nutrition and health.**
VI. **Strengthen SNAP-Ed to reach the greatest number of individuals with comprehensive, effective, and evidence-based educational programs and interventions.**
VII. **Increase innovation and cross-agency collaboration on SNAP at the federal and state levels.**

From these strategies, the project team identified a set of *ten key recommendations* (see page 9) that received wide support in the project's stakeholder survey of leading experts from both the public and private sectors. Taken together, these recommendations constitute a fresh approach to improving the nutritional status and health of SNAP recipients. In combination, these policies would be more effective than any individual strategy applied alone. Although some of the recommendations may raise questions about cost and feasibility in the current political climate, the project team strongly urges their adoption. Following these recommendations will provide a roadmap for strategically using SNAP as a public health tool to improve nutrition for the more than 46 million people in the United States enrolled in the program.

The need to alleviate food insecurity, reduce obesity rates, and enhance the health of America's low-income population is so pressing that every effort must be made to maintain SNAP as a lifeline for 1 out of 7 Americans, but modernize it to address these contemporary public health challenges.

MENU OF RECOMMENDATIONS

Fresh policy approaches for consideration to improve nutrition in SNAP

Protect Current Funding Levels for SNAP

A reduction in SNAP spending would jeopardize the health and well-being of the 1 out of 7 Americans for whom SNAP is a food lifeline—nearly half of whom are children. Cuts would hurt the working poor, strain already-stressed charitable safety net programs, and threaten the frail economies of low-income communities.

Collect Data on SNAP Purchases

Require the U.S. Department of Agriculture (USDA) to collect and make public data on SNAP product purchases to help improve participants' nutritional quality as well as to increase the program's effectiveness, efficiency, and transparency.

Identify a Set of Integrated Strategies that Would Help Align SNAP Purchases with the *2010 Dietary Guidelines for Americans*

As a complement to other USDA nutrition assistance programs, especially WIC and the National School Meal Program, identify and test a set of transformative improvements for SNAP that would build program infrastructure to promote healthier nutrition for low-income Americans.

Focus Attention on Children's Health in SNAP

Half of all youth in the United States will have been enrolled in SNAP at some time before their 19th birthday. SNAP is a missed opportunity for improving children's nutrition and preventing obesity. Adequate nutrition is essential to their development, learning, and growth. Strengthen nutrition in SNAP to improve children's health by pilot-testing a defined food package for youth.

Use Incentives to Make Fruits, Vegetables, and Whole Grains the Easy Choice

Encourage public and private support for programs that incentivize the purchase and/or reduce the price of nutrient-dense foods in grocery stores and farmers' markets.

Establish Stronger Food Stocking Standards for SNAP Retailers

Strengthen stocking standards for a variety of healthy foods (e.g. fruits and vegetables) in order to be certified as a SNAP retailer.

Provide States with Flexibility to Evaluate Fresh Approaches to SNAP

The USDA should grant states greater flexibility for waivers to pilot test and evaluate program changes in SNAP that would improve nutrition (e.g. pilot projects to assess the feasibility of incentivizing the purchase of healthy foods and/or limiting the purchase of high-calorie, nutrient-poor products with SNAP benefits).

Promote Innovation in SNAP

Establish a Center for Health and Nutrition Innovation at the USDA, headed by a Chief Public Health Officer, to promote novel strategies and support pilot projects that enhance healthy nutrition for SNAP beneficiaries. Apply information technology and social media to promote healthy food choices.

Create a Partnership to Move SNAP towards Health

Establish a strong partnership between the USDA and the U.S. Department of Health and Human Services (as occurs with the *Dietary Guidelines for Americans*) to ensure that promoting health is central to the mission of this federal nutrition assistance program.

Establish a National Strategy of Fresh Approaches to Strengthen SNAP

Create a National Strategy for strengthening SNAP under the auspices of a Federal Interagency Taskforce. The plan should identify the actions needed to promote research, program policy change, technological innovation, and evaluation that will improve nutrition and prevent and reduce obesity and its health damaging consequences among SNAP beneficiaries.

Summary

Modernizing SNAP in the 21st century requires applying innovative, fresh approaches, harnessing untapped opportunities to better align the twin goals of reducing food insecurity and securing healthier nutrition for SNAP beneficiaries. Developing and implementing such innovations requires drawing on the history of the program with careful consideration of enrollment patterns, program structure, and strategies to tailor SNAP to the economic landscape now and in the future.

If strengthened, SNAP has the potential to synergize many different food assistance and public health programs targeting low-income Americans, so that the healthy food choice becomes the easy and expected choice. The implementation of innovative policy changes to SNAP represents an opportunity to have a positive influence on the health and economic security of over 46 million Americans, reduce health care costs linked with food insecurity and obesity, and as a result strengthen America's future in the years ahead.

If strengthened, SNAP has the potential to synergize many different food assistance and public health programs targeting low-income Americans, so that the healthy food choice becomes the easy and expected choice.

BACKGROUND

The History of SNAP

The first Food Stamp Program, called the "Food Stamps Plan", was an initiative implemented in 1939 under the administration of President Franklin D. Roosevelt as an initial component of the New Deal. Food assistance was made available to low-income people and families through the purchase of food stamps and the provision of additional bonus stamps that could be used for specific foods identified as being in surplus. Participants in the program purchased booklets of orange stamps to buy food and household items including starch, soap, and matches, but the stamps could not be used to buy alcohol, tobacco, or foods eaten at stores. For every $1 in orange stamps that was purchased, an additional $0.50 of blue stamps was received. Blue stamps could be used to buy commodity surplus foods that were listed in the grocery store, including products such as dry beans, flour, corn meal, eggs, and fresh vegetables.[44]

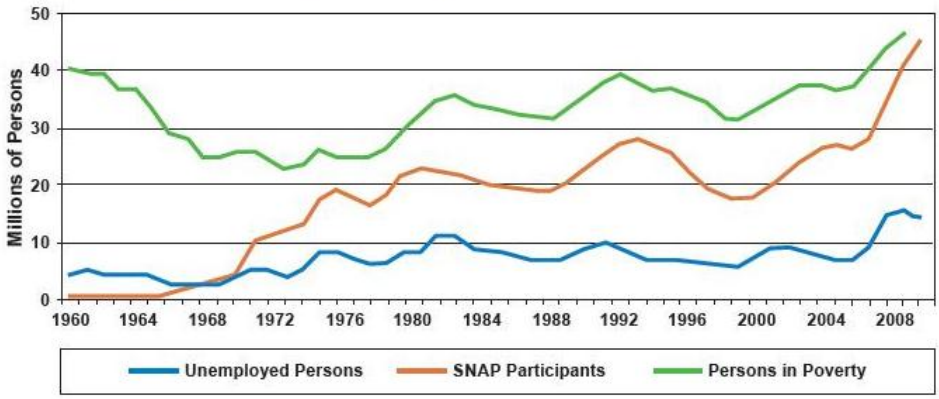
Although that program was discontinued in 1943 when agricultural surpluses were no longer abundant, interest remained in achieving more effective use of agricultural overproduction, improving levels of nutrition among low-income individuals, and strengthening the agricultural economy. After pilot testing in 1961 under President John F. Kennedy, the Food Stamp Act (P.L. 88-525) was passed in 1964 as a part of President Lyndon Johnson's Great Society Program. Early versions of the bill included prohibitions on the purchase of soft drinks, "luxury foods", and frozen foods; however, these prohibitions were dropped in the final legislation.[45]

The 1964 Food Stamp Program required the purchase of "stamps" or coupons at benefit levels similar to what a household would normally allot to food expenditures. A "bonus" amount (benefit), which was determined based on a participant's income level, was awarded to enable the purchase of a low-cost, nutritionally adequate diet as defined by the Economy Food Plan. The Economy Food Plan was a meal plan developed by the USDA as a guide to estimate the quantities of food from each of 11 groups (milk, cheese, ice cream; meat, poultry, fish; eggs; dry beans, peas, nuts; flour, cereals, baked goods; citrus fruits and tomatoes; dark-green and deep-yellow vegetables; potatoes; other vegetables and fruits; fats and oils; and sugars and sweets) needed in a week to provide nutritious meals for those living on a low income and applied for individuals in 17 age-sex groupings and for women during pregnancy and lactation. The food plan reflected USDA dietary guidelines, food prices, and consumption behavior but was designed for short-term or emergency use.[46]

In 1975, the USDA revised the Economy Food Plan and replaced it with the Thrifty Food Plan (TFP). The Thrifty Food Plan is used to calculate the maximum allotment of SNAP benefits participants receive and was designed for long-term use. The TFP is based on a set of calculated market baskets, which include a selection of foods in quantities that reflect current national dietary recommendations for Americans, food composition data, food prices, and food habits. The cost of the TFP is calculated each month and provides the basis for inflation adjustments to the monthly allotments received by households participating in the Food Stamp Program.[47] The TFP was revised in 1983, 1999 and 2006 to reflect current dietary recommendations, prices and food habits. In practice, the TFP serves as an economic threshold for the maximum food stamp allotment.

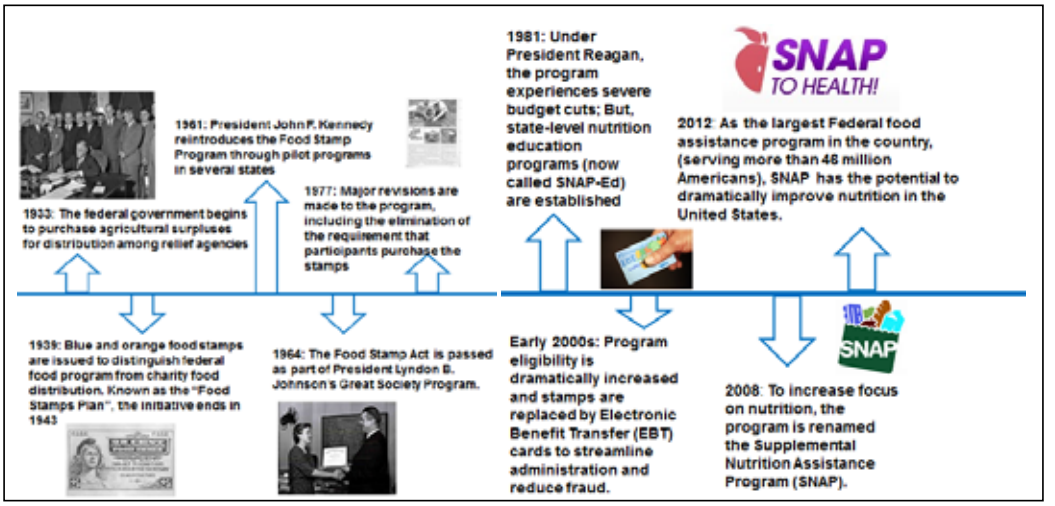
The patterns of participation in the Food Stamp Program since its inception have closely followed cycles of economic prosperity and recession in America (see *Figure 3*).[48] Participation in the Food Stamp Program grew exponentially in the late 1960s and early 1970s, from half a million people in 1965 to nearly 15 million by 1974. After considerable criticism concerning administrative practices and eligibility standards for the Food Stamp Program, the Food Stamp Act was revised significantly in 1977. One component of the landmark 1977 legislation was to establish national standards of eligibility. Additionally, individuals were no longer required to purchase food stamps and instead received them at no cost. Participation in the Food Stamp Program increased by 1.5 million people in the first month after the purchase requirement was repealed, and more than 20 million individuals were enrolled by the end of 1977.[49] The 1977 bill also added important administrative provisions for outreach, bilingual personnel, and materials, along with nutrition education.[50]

Figure 3: SNAP Participation, Poverty, and Unemployment [51]



In 1981, a nutrition education component, now termed SNAP-Education (SNAP-Ed) was introduced as a state option (see *Figure 4* for an overview of the program's history). States could apply for matching funds from the federal government to deliver nutrition education to eligible persons (all persons at or below 185 percent of the federal poverty level who may or may not be enrolled in SNAP). In 1992, seven states conducted nutrition education programs. By 2004 as concerns about poor nutrition among Americans grew and the USDA promoted the nutrition education option, all 50 states were participating in SNAP-Ed. Funding levels were based on the amount of state share that could be raised to qualify for federal matching funds. Some states were able to develop large-scale social marketing campaigns. In 2012, SNAP-Ed—the only nutrition education component of SNAP—received merely $380 million in funding, just 0.5 percent of the overall SNAP budget.[52]

Figure 4: The History of SNAP (The Food Stamp Program)[53,54]



SNAP Today

Today, SNAP is the largest of the USDA's food assistance programs (*Figure 5*) with a budget of $75.6 billion in FY2011. The USDA works in partnership with states to administer SNAP (See Appendix V). This year SNAP participation is at its highest level since the program's inception. In April 2012, 46.2 million people in the United States were enrolled, nearly 50 percent of whom are children. Although the eligibility criteria for the Food Stamp Program have changed and participation levels have fluctuated based on economic trends over the years, the Food Stamp Act of 1977 established the framework for the program as we know it today (see *Figure 6* for program information). The program allows participants to buy "edible foods" including breads, cereals, fruits and vegetables, meats, fish and poultry, pastries, snacks, and dairy products from most retail food outlets. The purchase of seeds and plants to grow food for household consumption is also permitted. Restricted items include alcohol, tobacco, vitamins, pet food, food that will be eaten in the store, hot food available from the retail outlet, and dietary supplements.[55]

Figure 5: USDA Expenditures on Food Assistance Programs, Fiscal Years 1980-2011[56]

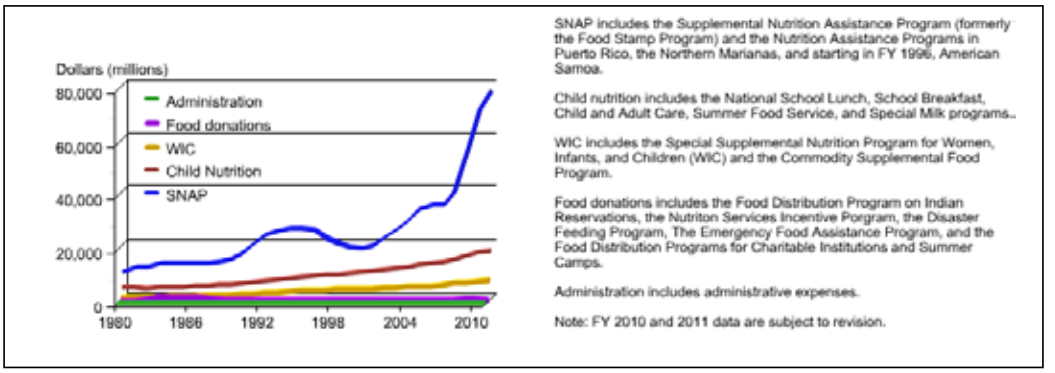
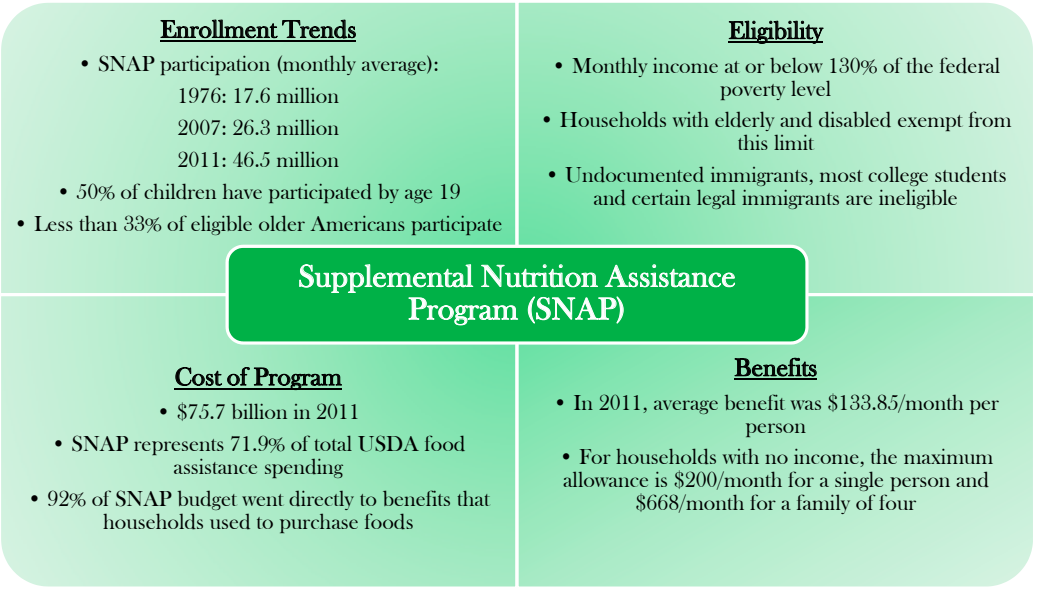
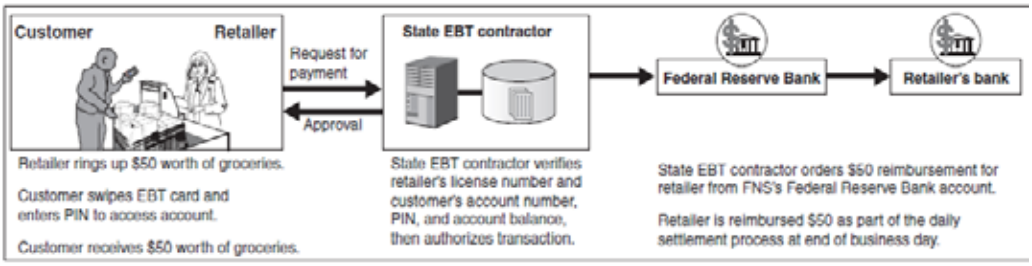


Figure 6: Supplemental Nutrition Assistance Program (SNAP) Quick Facts[57]



Efforts are currently underway to expand participation among groups with currently low levels of enrollment in the program, such as seniors and the working poor,[58] and to reduce the stigma associated with participating in the program. In 2004, stigma reduction efforts were greatly enhanced with full implementation of the USDA requirement for states to transition from paper food stamps to a system based on the electronic benefit transfer (EBT) card. Using this system, monthly SNAP benefits are automatically transferred to a SNAP recipient's EBT card account, which is used like a debit card to purchase food in stores. After purchases are made, the retailer can inform a participant how much money remains in his or her account for that month. In many states, SNAP participants can check their balance through an online account. For households that qualify for other cash assistance programs, such as Temporary Assistance for Needy Families (TANF), those benefits may also be loaded on the EBT card in a separate account, allowing the purchase of non-food items, such as gasoline and household necessities (see Figure 7).

Figure 7: Example of a Food Stamp Electronic Benefit Transfer (EBT) System[59]



In 2008, the *Food, Conservation and Energy Act*, commonly known as the Farm Bill, changed the name of the program from the Food Stamp Program to the Supplemental Nutrition Assistance Program (SNAP) in order to refocus it as a nutrition initiative, rather than solely as a program to alleviate hunger. The change also sought to emphasize the supplemental nature of the program.[60] Additionally, provisions were set in place to 1) provide $20 million for the Healthy Incentives Pilot to test the feasibility and effectiveness of monetary incentives for purchasing fruits and vegetables at farmers' markets and retail stores and 2) provide additional funding for EBT terminals at farmers' markets and farm stands.

When first established, the Food Stamp Program focused on providing a sufficient quantity of food to participants in order to reduce hunger and food insecurity in the United States. Today, there is an added emphasis on encouraging participants to choose foods with high nutritional quality through SNAP-Ed. However, since there are few limits on what foods can be purchased in SNAP, some health advocates argue that SNAP must be strengthened to encourage participants to purchase fewer unhealthy foods that may be contributing to poor nutritional and physical health including obesity.

The Role of Nutrition in SNAP

During the past several decades, there have been dramatic changes in the food environment. Where food is grown, where it is purchased, how much it costs, where it is prepared, the types of food consumed, how it is eaten and in what quantities, marketing of products to consumers, and the energy output associated with obtaining food have undergone major transformations.[61] In the United States over the last 30 years, there has been a shift away from diets high in plant foods (fiber and complex carbohydrates) toward more energy-dense diets that are high in animal fats, saturated fats, sugars, and refined carbohydrates. High-fat and high-sugar foods that were once reserved for special occasions are now readily available, inexpensive, and routinely consumed by many people. These foods are cheaper in many instances than highly nutritious foods such as fruits and vegetables.

These significant changes in the food environment are experienced most intensely among people with low incomes. Major nutritional problems facing low-income populations in the United States include periodic episodes of food insecurity; frequent consumption of unhealthy foods, and low levels of physical activity.[62] Food security is defined as having access to enough food for an active, healthy life—including nutritionally adequate and safe foods—and being able to acquire foods in socially acceptable ways. Between 2000 and 2007, food insecurity rates remained between 10 and 12 percent of all households in the United States. However, in 2008 and 2009, food insecurity increased to nearly 15 percent of all households—that is, 1 in 7 Americans.[63] Food insecurity occurs when access to adequate food is limited or uncertain at times.[64]

Scientific evidence over the past decades indicates that eating a healthy diet is strongly associated with reduced risk of obesity and major chronic diseases, including diabetes, heart disease, hypertension, and certain forms of cancer.[65] However, several studies indicate that the most affordable foods today are high in refined grains, added sugars, and unhealthy fats. Healthier options, such as lean meats, fruits and vegetables, and whole grains, are significantly more expensive.[66] A recent USDA report estimates that it would cost $2 to $2.50 per day for a 2000-calorie adult diet to satisfy recommendations for fruits and vegetables in the *2010 Dietary Guidelines for Americans* (in 2008 dollars).[67] In low-income households, finances limit the resources available to buy foods recommended as healthy. Time constraints, unfamiliarity with healthier foods, lack of access to appropriate cooking facilities, and knowledge and skills in food preparation can pose

barriers to preparing meals with fresh ingredients.[68] Evidence also suggests that social factors associated with food insecurity, such as household food allocation, maternal stress, and highly variable family routines, increase susceptibility to obesity.[69,70] Moreover, the abundance of opportunities to eat fast food and sweets in low-income urban neighborhoods and the disparities in grocery store availability in urban and rural contexts may also contribute to excessive consumption of unhealthy foods.[71]

In many low-income communities, there may be limited access to safe places to be physically active. Frequently, people living in these communities lack transportation that would allow them to access grocery stores. This combination of pressures makes it difficult for some families to manage scarce resources, achieve a nutritious diet, and maintain a healthy weight. Furthermore, advertising and marketing of unhealthy foods in various media has increased dramatically.

The principal mission of SNAP is to reduce hunger and food insecurity by providing low-income households with additional resources to buy food. Most studies find that participation in SNAP is associated with reduced food insecurity or a lower probability of being food insecure.[72,73,74,75] However, evidence on improvements in SNAP participants' dietary intake quality is mixed. These studies are limited by the lack of data collection on foods purchased by SNAP beneficiaries. Studies in the 1990s, most of which were conducted before SNAP-Ed became more prevalent, found that program benefits were associated with increased consumption of discretionary fats and added sugars, but not with significantly increased consumption of fruits and vegetables.[76,77] Fox, Hamilton, and Lin's review[78] provides little evidence that the Food Stamp Program influences dietary intake of key nutrients or overall diet quality.

To be consistent with the nutritional objectives of SNAP, as embodied in the program's name—*Supplemental Nutrition Assistance Program*, participation should result in consumption of healthier foods and better nutritional status. However, concerns have been raised about whether SNAP participation may contribute to excess consumption of unhealthy foods as well as to overweight and obesity. Several studies have evaluated the relationship between participation in the Food Stamp Program/SNAP and adult obesity rates; these have shown no suggestion of reduction in obesity rates and some evidence of adverse consequences. Gibson[79] observed that both current and long-term participation in the Food Stamp Program were associated with a significant increase in obesity among low-income women enrolled since 1979 in the National Longitudinal Survey of Youth; the effect persisted even after controlling for potential socio-demographic factors including education and occupation. In more recent studies, positive associations have been found between SNAP participation and obesity[80,81,82,83] and waist circumference[84] among low-income women. Several studies have reported no statistically significant associations for low-income adult men.[85,86,87] A recent study found that household SNAP participation was associated with obesity, increased waist circumference, and obesity-related complications.[88] Studies rarely are able to control for other factors such as food marketing, promotion, or community access to healthy food.

There is concern about whether SNAP may be contributing to excess consumption of unhealthy foods as well as to overweight and obesity.



There is some evidence that the longer adults are enrolled in the program, the more likely they are to be obese. Ver Ploeg and Ralston[89] qualify these results by noting that longer-term participants in SNAP may differ in other ways, and therefore, caution should be exercised in drawing associations between long-term use of SNAP benefits and weight gain. There is a cyclical pattern of eating among many SNAP recipients characterized by periods of overconsumption at the beginning of the month when resources for food are more abundant, followed by periods of under-consumption at the month's end when the quantity and quality of foods being consumed is reduced due to fewer resources. In theory, this process could alter the body's ability to maintain caloric balance.[90,91,92]

The low intake of nutritious food among children participating in SNAP represents a significant missed opportunity for the program to promote health during an important life stage.

The effect of SNAP participation on children's weight outcomes has not been as extensively studied as among adults. In a longitudinal analysis of 1976-2002 National Health and Nutrition Examination Surveys data, USDA investigators Ver Ploeg and colleagues[93] found no systematic relationship between food stamp participation and weight status among young children (2-4 years) or school-age children (5-17 years). Ver Ploeg and Ralston[94] reviewed a number of studies that examine the relationship between SNAP and obesity and found that, for many program participants including children, the use of program benefits had little effect on increasing body mass index (BMI) or the likelihood of being overweight or obese. In another study, BMI percentile and probability of being overweight or obese were lower among children enrolled in SNAP.[95] Furthermore, a study of more than 350,000 children in Illinois found that young children enrolled in SNAP had lower rates of nutritional deficiency than low-income non-participants.[96] The longitudinal Fragile Families and Child Wellbeing Survey found that higher food prices in cities was significantly related to a higher BMI in children.[97] In both adults and children, the mixed association between SNAP participation and weight outcomes over the long term deserves further investigation and data collection on food purchases in the SNAP program is urgently needed to facilitate this research.

In response to this research gap, one component of this CSPC's *SNAP to Health* project was an analysis of data from the 1999-2008 National Health and Nutrition Examination Survey (NHANES) to examine the relationship of SNAP participation to dietary intakes and obesity rates of its young beneficiaries, ages 4-19 years old. The study concluded that all low-income children in the study were far from meeting national dietary guidelines for fruits, vegetables, whole grains, fish and shellfish, nuts, seeds and legumes, and potassium. Conversely, most low-income children met or exceeded recommended limits for consuming processed meat, sugar-sweetened beverages, saturated fat, and sodium. Children receiving SNAP benefits had diets of somewhat poorer quality in some categories (e.g., 43 percent more sugar-sweetened beverages, 47 percent more high-fat dairy, 44 percent more processed meat, and 19 percent less nuts, seeds and legumes) compared to other low-income nonparticipants. However, their diets were of somewhat higher quality in other categories (improved calcium, folate and iron intake). There was no significant difference in dietary quality scores. Most importantly, the diets of all low-income children did not meet national dietary guidelines aimed at promoting health and need improvement. An important conclusion of the study

was that the low intake of nutritious food among children participating in SNAP represents a significant missed opportunity for the program to promote health during an important life stage.

As a program with 46.2 million enrollees, SNAP has the potential to be applied as a public health tool that can help reverse the complex problems of food insecurity and obesity. This policy report identifies and examines strategies that have promise to exert a positive, transformative influence on improving the nutrition of the 1 out of 7 Americans who are SNAP recipients.

PROJECT METHODOLOGY

Through science-based policy analysis and broad stakeholder input, the interdisciplinary CSPC project team, comprised of experts in federal and state health policy, nutritional epidemiology, public health, health communications, and agricultural economics, undertook the following activities to identify a fresh approach of best practices and innovative strategies for improving the health and nutritional status of SNAP participants:

1) Prepared a comprehensive scientific literature review on SNAP.

The scientific literature review, which can be found in the "Background" section of this report, addresses several key issues including: 1) the history of the SNAP program, 2) an overview of SNAP's target populations and program administration, and 3) evidence of SNAP's effects on nutritional and other health outcomes. The review also includes a discussion of pilot, demonstration, and other regional and local projects underway to improve the nutrition of SNAP participants; proposed changes to the SNAP program to improve nutrition and considerations of associated potential costs or savings; and the barriers and opportunities presented by any proposed changes to the SNAP program for retailers, consumers, and local governments. These recommendations can be found in the "Opportunities for Program Improvement" section of this document.

2) Conducted key informant interviews with program stakeholders.

In-depth, semi-structured interviews were conducted in the spring of 2011 to examine the opinions of 27 leading experts about the factors that influence eating patterns and practices among SNAP recipients as well as strategies that might be implemented to improve the dietary status of program beneficiaries. Key informants were selected through purposive sampling and included representatives from advocacy, government, industry, and research organizations. Respondents identified economic, political, cultural, and environmental challenges and barriers to improving nutrition in SNAP. In response to the existing challenges and barriers discussed, respondents proposed multi-sectoral strategies that could improve nutrition among SNAP recipients. The strategies would aim to improve nutrition at the individual, retailer, state, and federal policy levels.

3) Conducted an online survey of over 500 stakeholders to examine opinions about the barriers and opportunities for nutrition improvement in SNAP.

A web-based survey of 520 stakeholders was conducted to 1) assess perceived programmatic barriers to obtaining healthy foods in the current structure of the program, 2) assess perceived effectiveness of a wide variety of possible strategies for improving the nutritional status and dietary intake of SNAP beneficiaries, and 3) compare differences in opinions across multiple sectors. Survey respondents were recruited from across the United States for their knowledge about the program's nutrition policies and practices and included individuals from academia, advocacy organizations, healthcare professions, state and local government, and food industry. A 38-item online survey was developed from the key themes identified from the 27 key informant interviews conducted during

April-June 2011. Although it is not possible to identify a perfectly representative sample of all stakeholders, the project team attempted to include as many relevant stakeholders as feasible. The survey questions included a variety of closed- and open-ended items developed from themes that emerged in these key informant interviews. Topics included participants' general attitudes and perceptions about SNAP; barriers and strategies to improve SNAP enrollment; participants' attitudes towards program nutrition; SNAP benefit allotment and distribution; participants' perceptions of existing barriers and strategies to improve nutrition in the program; participants' attitudes towards restrictions on various food items; strategies to improve the retail food environment; strategies to strengthen the program's nutrition education program (SNAP-Education); and general characteristics of survey respondents (sector, years of experience working in SNAP, and geographic region of focus).

4) Performed a comprehensive statistical analysis of data from the 1999-2008 National Health and Nutrition Examination Survey (NHANES) to examine the relationship of SNAP participation to dietary intakes and obesity rates of its young beneficiaries, ages 4-19 years old.

To evaluate differences in childhood weight, dietary intake, and dietary quality in low-income children by SNAP participation status, this study analyzed data from the 1999-2008 National Health and Nutrition Examination Surveys (NHANES). The study population was a nationally representative sample of 5,193 children aged 4-19 with household incomes ≤130 percent of federal poverty level from the 1999-2008 NHANES. Measured height and weight were converted to age- and gender-specific BMI z-scores. Diet was measured using 1-2 24-hour recalls. Foods, food groups, and nutrients were selected based on their importance to children's growth and development and future adult health. Overall dietary quality was assessed using the Healthy Eating Index-2005 (HEI-2005) and the Alternate Healthy Eating Index (AHEI). HEI-2005 was developed by the USDA Center for Nutrition Policy and Promotion to measure compliance with the *2005 Dietary Guidelines for Americans*. Data from the USDA MyPyramid Equivalents Databases were combined with the NHANES dietary files to estimate MyPyramid equivalents for the HEI-2005. The HEI-2005 is comprised of 12 components based on consumption patterns per 1,000 kcal: total fruit, whole fruit, total vegetables, dark green vegetables/orange vegetables/legumes, total grains, whole grains, milk, meats and beans, oils, saturated fat, sodium, and discretionary calories from solid fats, added sugar, and alcoholic beverages. The AHEI was developed by the Harvard School of Public Health as a dietary pattern related to chronic disease risk in adults. The AHEI has been related to chronic disease risk in adults, though this relationship has not been examined in children.

5) Established an interactive website (www.snaptohealth.org) to function as an online forum for public discourse on improving nutrition in SNAP.

The *SNAP to Health* website serves as a "virtual town hall" for public discourse on SNAP and its reauthorization in the 2012 Farm Bill. The site 1) functions as an information portal and online resource hub for the general public, researchers, advocates, and other key stakeholders on issues related to SNAP, nutrition, obesity prevention, food security, and strategies for improving nutrition in the program; 2) provides a central venue for interactive discussion on SNAP through blogs, discussion forums, polls, and webinars; 3) establishes a platform for quickly disseminating project findings, SNAP news (appearing in online and written press around the country), and Farm Bill

updates to a national audience; and 4) serves as a web-based nutrition hub, providing "one-stop shopping" for links to many important informational resources on nutrition and SNAP in the public and private sectors.

Summary

This project's mixed-methods approach helped to create a comprehensive picture of the full spectrum of barriers and opportunities at the individual, family, community, and policy levels for SNAP participants to attain a healthful diet. Promising strategies emerged through this research: multiple sectors, including non-profit organizations; federal, state, and local government; research institutions; and industry associations have proposed innovative macro- and micro-level ideas, approaches, and pilot programs that provide a fresh approach to strengthening nutrition in SNAP. These options have the potential to encourage healthful food purchases and consumption patterns among SNAP recipients.

This report identifies seven categories of strategies for SNAP program improvement including I) lowering the cost of healthy foods for SNAP recipients; II) increasing access to healthy foods; III) discouraging the purchase of high-calorie, unhealthy foods; IV) modifying the amount of SNAP benefits to better meet the needs of recipients; V) increasing knowledge about the impact of SNAP on health and nutrition; VI) strengthening SNAP-Ed to reach the greatest number of individuals most effectively; and VII) increasing innovation and cross-agency collaboration on SNAP at the federal and state levels.

Through conducting a scientific literature review and consulting with expert stakeholders, this report presents information about the importance, feasibility, and pathways forward to implement a fresh approach with innovative interventions and strategies to strengthen SNAP. This project aims to find ways wherever possible—within current funding levels where opportunities exist—to better integrate the program's various elements into a system of multiple interrelated components that work together to achieve the public health and societal goals of a healthier United States.

This report presents information about the importance, feasibility, and pathways forward to implement a fresh approach with innovative interventions and strategies to strengthen SNAP.

OPPORTUNITIES FOR SNAP IMPROVEMENT

Currently, SNAP provides support for food purchases for more than 46 million Americans, 50 percent of whom are children. Therefore, the program is uniquely positioned to have a positive impact on the health of 1 in 7 people in the United States if policies are put into place to promote nutrition in this program. Increasing participation in SNAP (approximately three in ten people eligible for SNAP do not participate in the program) is a critical step to addressing food insecurity in the United States.[98] Given the significant transformation that has occurred in the food environment over the past fifty years, remarkable advances in nutritional sciences, and the changing ways in which people consume food since the establishment of the Food Stamp Program in 1964, there is significant interest in developing 21st-century strategies to improve the nutritional health of low-income Americans as well as to reduce the toll of the obesity and chronic disease epidemics occurring among this population.

A number of barriers inhibit low-income Americans from acquiring and consuming nutritious foods. These barriers include the often higher cost of nutrient-rich and fresh foods, the heavy marketing and low cost of unhealthy foods, limited access to healthy foods, low levels of nutrition knowledge and health literacy, as well as an inadequate SNAP benefit level.

Although SNAP is in place to increase the resources available to low-income individuals and households to purchase food, it has not been adequately leveraged as a tool to improve the nutritional quality of participants' dietary intake. There are currently no program-wide incentives to purchase healthier foods or limitations on purchasing unhealthy products, except for alcohol and tobacco. The USDA does not collect scanner data on what foods are bought by SNAP recipients and the program has not been strengthened with environmental and business strategies to improve the nutritional quality of foods purchased. SNAP-Ed, the nutrition education component of the program, has been unable to capitalize on its national potential because of minimal funding, strict USDA guidelines about intervention approaches and targeting methods, and limitations on messages that can be included in its educational programming.

There are currently no program-wide incentives in SNAP to purchase healthier foods or limitations on purchasing unhealthy foods.

Listed below are seven categories of opportunities for SNAP program improvement to enhance the nutrition of SNAP recipients and reshape the program's policies to promote health in the 21st century. The discussion for each of the identified opportunities includes a description of the significant issues and barriers to implementing the option as well as proposed opportunities for moving forward to improve SNAP. Taken together, these recommendations provide a fresh approach to improving nutrition for the 1 out of 7 Americans who participate in SNAP.

CATEGORY I – Lower the cost of healthy foods for SNAP recipients. At current benefit levels, healthy foods (e.g. fruit, vegetables, whole grains, and lean protein) are often unaffordable for many SNAP recipients.

KEY ISSUES:

A frequently cited barrier to accessing nutrient-rich foods among SNAP participants is the relatively high cost of fruits, vegetables, and whole grains compared with the low cost of unhealthy processed foods such as soda, candy, chips, and snack foods. Research demonstrates that fruit and vegetable purchases decrease as prices of these items increase, particularly among low-income families.[99,100,101,102]

Research supports the effectiveness of decreasing the price of healthy foods to promote their purchase.[103,104,105,106,107,108,109] The USDA estimates that a 10 percent decrease in the price of fruits and vegetables results in the range of a 2-3 percent to a 5-7 percent increase in purchase of these items.[110,111] A report by the Government Accountability Office[112] indicates that financial incentives paired with nutrition education can be effective at increasing consumption of targeted foods. Initiatives that reduce the relative price of fresh produce through monetary incentives have been shown to increase fruit and vegetable consumption.[113,114] The cost of operating a government-funded incentive program presents a significant challenge to its sustainability. The design of incentive programs relies on customers being aware and valuing the benefit as well as the price response (a product being perceived as good value) and an income response (an individual perceiving that he or she has enough money to purchase the item).[115] Determining the appropriate incentive amount requires balancing the effectiveness of the intervention with the cost of providing the incentive.

While evidence that increased fruit and vegetable consumption is related to reduced caloric intake and weight loss is unclear,[116] higher intake of these foods has been related to a reduced risk of hypertension, heart disease, stroke and some types of cancer.[117,118,119,120] Therefore, increasing fruit and vegetable purchases and consumption are important strategies for improving the health and nutrition of SNAP participants.

Initiatives that reduce the price of fresh produce through monetary incentives have shown to increase fruit and vegetable consumption.

This approach is also viewed favorably among SNAP recipients. A 2012 study of SNAP beneficiaries in Massachusetts found that 86 percent of recent SNAP participants thought that providing incentives or more benefits for healthy foods, such as fruits and vegetables, would help SNAP beneficiaries to eat better.[121] Incentive programs for healthy food items, such as fruits and vegetables, while costly, are considered by many to be less controversial—and therefore potentially more politically feasible—than limitations on foods deemed less nutritious.[122,123]

OPPORTUNITIES FOR PROGRAM IMPROVEMENT:

- **Expand government- and private sector-supported incentive programs that reduce the price of healthy foods, principally fruits and vegetables, in farmers' markets and grocery stores.**

Based on the promising results of privately funded incentive programs at farmers' markets, including New York City's Health Bucks program[124,125] and the Double Up Food Bucks program in Michigan, the 2008 Farm Bill provided $20 million to support the Healthy Incentives Pilot (HIP) program. This initiative will test whether financial incentives provided to purchase fruits, vegetables, and other healthy foods can influence food purchasing and consumption behavior among SNAP recipients.[126] In 2010, the USDA selected Hampden County, Massachusetts, as the HIP pilot site. This county includes 27 urban, suburban, and rural cities and towns and is home to approximately 50,000 SNAP households. Among these SNAP recipients, 7,500 were randomly selected to participate. For every dollar spent on eligible fruits and vegetables, participants receive 30 cents credited to their EBT card, effectively reducing the price of these food items and incentivizing increased purchases.[127]

Since HIP credits the incentive back to the SNAP participant's EBT card for use at a later date on any SNAP eligible purchase, it is not known to what degree the incentive money is being reinvested in the nutritious foods that were targeted for promotion. Given this potential issue, future research should examine how technical interventions using the EBT card could ensure that incentive money is spent only on targeted foods, such as fruits and vegetables. Alternatively, research might examine how providing incentives at the point of purchase to reduce the price of fruits and vegetables, rather than being credited back to the beneficiary's EBT account, could influence purchasing behavior.

Nonetheless, HIP will shed light on how incentivizing targeted food items (fruits and vegetables) influences the overall purchases of SNAP participants. The results from this study, available after the pilot is completed in 2013, will help determine: 1) the impact of the financial incentive on individual consumption of fruits and vegetables; 2) the extent to which calories consumed from fruits and vegetables displace calories from other foods; and 3) the costs associated with operating the program and challenges for sustaining the program long term, among other outcomes.

- **Allow retailers to use financial incentives, including price promotion, in their stores as a strategy to reduce the cost of healthy foods for SNAP recipients. SNAP recipients would pay a discounted price on items compared to what non-recipients pay.**

Under current USDA regulations, grocery stores are not permitted to promote or discount particular food products specifically for SNAP recipients. However, it has been shown that in-store price promotion has the potential to significantly increase fruit and vegetable consumption. A USDA Economic Research Service report suggests that providing a subsidy of 10 percent of the value of the product would increase fruit and vegetable consumption by about 2-7 percent.[128]

In permitting retailers to promote healthy foods through price promotions, USDA must also devise a standardized system for determining which foods can be promoted as "healthy" options. There could be reasonable debate about which foods qualify as sufficiently nutritious to promote for purchase with SNAP benefits. One strategy is to choose general food groups (for example, fruits and vegetables) and to provide incentives for all products within those groups. This approach would

require care in defining the foods to be counted as "fruits and vegetables" (e.g. allowing only fresh or disallowing processed items that contribute excess amounts of added salt, sugar, saturated fat or trans-fat). Alternatively, a ranking system could be implemented. Foods that rank above a certain nutrient score or that are low in sugar, refined starch, and saturated and trans fats could be targeted with incentives. Several grocery chains have recently developed their own rating systems. Another option, used in the United Kingdom, is a traffic-light nutrition label used to designate foods that are high, medium, or low in fat, salt, and sugar.[129] However, a nutritional scoring system may be vulnerable to political pressure and food industry interventions through the reformulation of processed foods. Additionally, a rigorous ranking system may not favor whole, fresh foods, such as milk, yogurt, seeds, and nuts because of their fat content, even though when consumed in moderation, they can be components of a healthy diet.[130]

Implementation of any ranking system must be supported by a nutrition education campaign for the public to ensure that SNAP participants are aware that the incentive exists and what foods are eligible for it. This strategy could also incentivize corner stores to stock more fresh fruits and vegetables, since these retailers are often reluctant to do so due to uncertainties about whether such items will sell.

CATEGORY II – Increase access to healthful foods in SNAP. Make the healthy food choice, the easy choice.

KEY ISSUES:

In addition to making healthy options affordable, it is essential that they also be readily available. The Institute of Medicine's recent report *Accelerating Progress in Obesity Prevention* recommends establishing environments that ensure that healthy food and beverage options are the routine, easy choice.[131] However, in some urban, rural, and suburban areas, there is limited access to retailers that stock healthy foods like fruits, vegetables, whole grains, lean meats, and dairy products. The term "food desert" has been used to describe areas where residents lack access to affordable and nutritious food due to the long distance between their homes and grocery stores and/or lack of access to transportation, while "food swamps" describe areas where outlets like fast food and convenience stores far outnumber grocery stores that carry quality fresh, whole foods. In these areas, SNAP recipients may not have access to healthy foods at affordable prices. In the United States, 23.5 million people live in areas where more than 40 percent of the population earns an income below 200 percent of the federal poverty level and also live more than one mile from a supermarket. In addition, 5.8 million households (5.5 percent of the U.S. population) are at least half a mile from the nearest supermarket and lack a vehicle. Among these households, 2.4 million (2.3 percent) live more than one mile away and lack vehicle access.[132] For SNAP participants, the average distance to a grocery store from their residence is 1.8 miles, but participants travel on average 4.9 miles to reach the store where they shop most frequently.[133]

Lack of access to grocery stores has been associated with decreased expenditures on foods important for a healthy diet, like fruits, vegetables, and milk.[134] Lower intake of nutritious food may be associated with obesity and related chronic diseases. Residents of neighborhoods with greater access to supermarkets tend to consume more fresh produce as well as have healthier diets and lower obesity rates.[135,136] By improving access to healthy foods, nutrition in low-income communities could be improved not only for SNAP recipients but for all residents. While 83 percent of SNAP benefits are spent in supermarkets or superstores, the majority of SNAP-certified stores are smaller convenience stores, drug stores, liquor stores, and other retailers that have expanded into the food business; many are in low-income communities that lack supermarkets.[137] For such vendors, the variety of foods is very limited and inadequate to support healthy food choices for SNAP recipients.[138] Changes to vendor and business practices in SNAP offer the opportunity to make the healthy choice, the easy choice for beneficiaries.

Changes to vendor and business practices in SNAP offer the opportunity to make the healthy choice the easy choice for beneficiaries.



OPPORTUNITIES FOR PROGRAM IMPROVEMENT:

- **Implement stricter stocking standards to be certified as a SNAP retailer, similar to what is required of stores that participate in WIC. Funding for initial fixed costs for modifications or purchase of necessary equipment to stock healthful food items could be provided through public and private investments.**

A key strategy to expand access to fresh produce and other healthy options in low-income communities is to require all retailers that participate in SNAP to stock more fruits, vegetables, and other recommended foods. Considering that small food retailers like corner stores are already prevalent in many low-income areas and that convenience stores represent 36 percent of authorized SNAP stores, they are a logical place to offer nutritious foods such as fruits and vegetables.[139,140] Currently, to qualify as an authorized SNAP retailer, a store must either 1) stock and sell food for home preparation and consumption in all four categories of staple foods—namely, breads/cereals, dairy products, fruits/vegetables, and meat/fish/poultry (two must include perishable foods)—or 2) obtain more than 50 percent of gross total sales from the sale of one or more staple food categories.[141] Adding requirements for healthy foods in SNAP-certified stores would provide greater choice of products in some venues and has the potential to reduce the purchase of nutritionally poor food by some SNAP participants through substitution of healthier options.

Recent studies have demonstrated a link between the presence of corner stores in communities and the increased purchase of unhealthy food items by SNAP beneficiaries, reinforcing the need to improve the quality of foods offered.[142] For example, availability of convenience stores within a quarter mile buffer of a girl's residence was associated with greater risk of overweight/obesity.[143] In addition, even after controlling for age, gender, and socioeconomic status, the sugar-sweetened beverage intake of adolescents was associated with residential proximity to convenience stores.[144] On the other hand, research has also shown the potential of corner stores in shaping positive developments to improve community health. A study in Hartford, Connecticut, evaluated the availability of healthy food and customer purchasing behavior in relation to corner stores. For each additional type of fruit or vegetable that was available in the store, the likelihood of a customer purchasing fruits increased by 12 percent, and the likelihood of purchasing vegetables increased by 15 percent. Moreover, customers who were SNAP participants were 1.7 times as likely to purchase fruits as those who were not SNAP participants.[145] These results suggest that expanding the selection of produce in corner stores can encourage the consumption of fruits and vegetables in low-income and food-insecure communities.

Further evidence to support strengthening the criteria for retailers participating in SNAP comes from a survey of local retailers conducted in 2009, in which the authors reported that products subsidized by WIC (which has a defined food package) were increasingly stocked by small retailers.[146] Thus, stocking decisions by retailers can be shaped by nutrition policy changes in the federal food assistance programs. Policies that increase the demand for healthy foods and shape the food environment would benefit SNAP participants as well as the general population.

However, barriers to corner stores stocking fresh produce include fixed costs such as refrigeration, display equipment, and training, as well as higher spoilage rates.[147] Promotion and sale of more frozen and canned fruits and vegetables may be especially useful in such places where the nutritional value is comparable to fresh produce. Providing funding from public and private sources to help

corner stores with initial fixed costs of purchasing refrigerators or freezers, or bulk-purchasing arrangements among area corner stores for specific food items are several possible approaches, along with advertising and marketing the nutritious foods to consumers.[148]

- **Promote programs that encourage full-service grocery stores to open in food deserts.**

Food deserts lack easy access to grocery stores with affordable and nutritious food, so one strategy is to encourage large grocery stores to open in these locations. Supermarkets and large grocery stores typically provide more choices and lower prices for consumers than do convenience stores.[149] SNAP recipients with easy access to supermarkets consume more fruits and vegetables than those without easy access.[150] However, some retailers are hesitant to locate stores in these areas due to high initial financing requirements, perceptions that stores in these locations will not be profitable, and difficulties finding an appropriate site.

There are several strategies to address these concerns. Grants, loans, and tax credits through government and public-private partnerships are a demonstrated approach to tackling high start-up costs. The Fresh Food Financing Initiative (FFFI) in Pennsylvania is a public-private funding initiative that provides grants and loans for retailers to open stores in food deserts. The initiative has resulted in 68 new or improved grocery stores in Pennsylvania, providing increased food access for 400,000 residents.[151] The City of New Orleans has developed its own Fresh Food Retail Initiative Program with $14 million in funding to encourage grocers to locate in underserved areas.[152] In Washington, D.C., the City Council passed the *Food, Environmental, and Economic Development (FEED) DC Act of 2010*, which establishes a grocery ambassador, grocery and healthy corner store financing program; and the ability to provide grants, loans, tax credits, and other assistance to stores.[153] The California FreshWorks Fund is devoting over $260 million to encourage grocers to expand into underserved communities.[154]

One barrier preventing grocery stores from expanding into food deserts and swamps is the perception of lower profitability of markets opening in these locations, including concerns about the customer base, their purchasing power, operating costs, and crime rates. Although supermarkets with higher SNAP benefit redemption rates have different operating cost structures than stores with low redemption rates, they have essentially similar operating costs. For example, while sales margins are lower at these stores, labor costs are also typically less.[155] In terms of finding a site, some retailers struggle with zoning requirements, difficulties finding adequate space, and higher construction and operating costs in urban areas. Chicago and New York City have worked to coordinate and guide retailers to meet requirements while containing costs.

Critics rightly point out that the availability of nutritious foods does not necessarily translate to healthier choices by consumers. Without consumer demand, the strategy to encourage full-service grocery stores to locate in underserved areas will not be effective. An integrated set of complementary strategies is needed.



- **Encourage alternative retailers (mobile pantries, online food purchasing systems for SNAP recipients, community-supported agriculture/farm shares) to promote and accept SNAP benefits.**

Alternative food sources, such as mobile markets/vans and community gardens, provide opportunities to increase access to nutritious food options for populations with limited transportation or poor access to grocery stores. For example, the ease with which mobile vendors can move to multiple locations within a day greatly increases the number of people who can be reached.

Several initiatives are already successfully providing access to fresh and affordable fruits and vegetables through alternative means. *Garden on the Go*, a mobile produce truck serving Marion County in Indianapolis, Indiana, began in May 2011; within 9 months, it surpassed 10,000 sales transactions, making it one of the fastest-growing programs of its kind in the nation. A recent survey among shoppers found that 83 percent of repeat customer respondents reported purchasing more produce because of *Garden on the Go*.[156] Baltimore City's *Baltimarket,* a "virtual" supermarket program, allows low-income residents to place grocery orders online and pick them up at their local library or elementary school. The program has received an overwhelmingly positive response with 91 percent of participants indicating their access to fruits and vegetables has improved, while 73 percent shared that *Baltimarket* enabled them to make healthier choices.[157] Additionally, these initiatives have incorporated nutrition education with cooking demonstrations and informational handouts to promote healthy behaviors over the long term. Both *Baltimarket* and *Garden on the Go* accept SNAP benefits and could be used as models for future national/state initiatives and programs.

- **Increase the use of SNAP benefits with mobile vendors, at farmers' markets, farm stands, green carts, and with online grocers by using EBT terminals in these settings and covering costs related to customer service and transaction fees.**

Using SNAP benefits at farmers' markets is one way for participants to obtain fresh fruits and vegetables while simultaneously supporting local farmers, growers, and regional food systems. However, only 26 percent of farmers' markets in the United States are authorized to accept SNAP benefits, and many lack the wireless EBT terminals necessary for those transactions.[158] Farmers' markets can receive a free EBT terminal from the USDA, but often these terminals require electricity and a landline. Renting EBT terminals is also an option, but one that is costly for farmers' market operators and vendors in terms of rental fees, wireless service fees, and individual transaction costs. New options may emerge that allow vendors to use EBT technology wirelessly through smart mobile phone applications or card swipe devices that attach to smart phones.[159] Furthermore, with the growing popularity of online grocery services, pilot projects should examine the feasibility of using SNAP benefits for web-based transactions of SNAP purchases.

The 2008 Farm Bill instructed the USDA to provide grants to farmers' markets for purchase of wireless EBT devices to encourage increased access and reduce overhead costs. Legislation states that a minimum of 10 percent of total funds appropriated for the Farmers' Market Promotion Program (FMPP) are to be used for grants to support EBT for federal nutrition programs at farmers' markets. In 2010, the USDA used 30 percent of FMPP funding for EBT purchases, though only 10 percent was mandated by legislation.[160] Additionally, the devices can be useful for research

and marketing purposes, as well as enabling the use of credit cards to purchase food, which may increase overall revenue for farmers' markets.

Some farmers' markets have received funding to purchase a single EBT terminal where SNAP participants can swipe their card and receive currency (tokens, certificates, or receipts) to use with vendors. A pilot study in Philadelphia used funds from the USDA Farmers' Market Promotion Program to provide each vendor with an EBT terminal. The researchers found a 38 percent increase in sales at markets using multiple EBT terminals.[161] However, the aggregate effect is limited by relatively small (through growing) participation in farmers' markets. The USDA reports that just 0.2 percent of American consumers' food dollars are spent at farmers' markets.[162] SNAP redemptions at farmers' markets and farm stands in FY2009 represented less than 0.01 percent of total SNAP expenditures.[163] While farmers' markets are not accessible to most beneficiaries year-round, as the number of markets and the diversity of agricultural products increase, farmers' markets can become a more significant source of healthy fresh food and provide important business opportunities in low-income communities, especially for small and new farmers.

- **Add a transportation benefit in SNAP or encourage private support of such an initiative to assist beneficiaries living in areas distant from a full-service grocery store to access a range of nutritious food products.**

For many low-income people, transportation costs cut into limited resources. Additionally, difficulties transporting a large amount of groceries on public transit can impede SNAP participants' ability to buy food in bulk.[164] Rather than convincing supermarkets to move into food deserts, it might be faster or more feasible to improve transportation for SNAP beneficiaries to access existing supermarkets. As a community service, some supermarkets provide free shuttle service home for neighborhood shoppers whose purchases reach a minimum dollar value.

Options include extending or adding new routes to existing public transportation, providing transportation subsidies or discounts for transportation costs for SNAP beneficiaries, and utilizing a subsidized supermarket shuttle service. For example, a mayor in Madison, Wisconsin, proposed that monthly bus passes be discounted to half the normal rate for SNAP participants.[165] However, a methodology would be needed to determine which SNAP recipients lack access to transportation or a nearby supermarket. It would be useful to pilot test options in diverse geographic locations to determine their impact on participants' access to supermarkets and the effectiveness of such a transportation program to improve access to healthy nutrition.

CATEGORY III – Discourage the purchase of high calorie, unhealthy foods and emphasize the importance of SNAP as a children's health program.

KEY ISSUES:

In contrast to the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), which provides a defined benefit package of specific nutritious foods that align with the health needs of WIC participants and the *2010 Dietary Guidelines for Americans,* the original intent of SNAP to alleviate hunger resulted in few limitations being placed on the types of foods that could be bought with SNAP benefits. Currently, only alcohol, tobacco, hot foods, prepared foods that can be eaten in the store, vitamins, pet foods, and nonfood items are excluded. There are proposals, especially from the public health community, to explore ways to maximize the nutritional impact of SNAP by further limiting the foods that may be purchased with SNAP benefits (e.g., by excluding items with low nutrient value such as sugar-sweetened beverages, candy, or salty snacks).

Strengthening the requirements on the nutritional content of foods allowable for purchase with SNAP benefits would help address the dual problems of food insecurity and obesity, especially for children, who represent 50 percent of SNAP beneficiaries. However, only minimal research has been conducted to test the impact of this type of intervention. Concerns about this approach include that it is difficult to set science-based standards that exempt certain foods; that food companies will minimally reformulate products defined as unhealthy and market them to adapt to the regulations; that shoppers will substitute other unhealthy foods in place of disallowed items; that it is too administratively challenging for small SNAP vendors to enforce the limitations; and that limitations will stigmatize SNAP recipients in check-out lines. Pilot programs are needed to test the feasibility and outcomes of limiting certain food purchases in SNAP as well as to determine the technical capacity of maintaining automated food code systems as products are reformulated. Notably, the USDA already has extensive experience in administering a defined food package that includes limitations on food purchases through the WIC program. Additionally, nearly all grocery stores use technology to code food products, which should help minimize administrative complexity.

OPPORTUNITIES FOR PROGRAM IMPROVEMENT:

- **Ensure that retailers use EBT SNAP signage and ads only to promote healthy foods. Encourage point-of-purchase marketing of healthy food items and the positioning of nutritious foods in prominent areas of stores targeted specifically to SNAP recipients.**

Strategies to market and sell healthy, nutritious foods include the use of improved in-store and point-of-purchase marketing. However, efforts to improve nutrition among low-income households must compete with multi-billion dollar investments in marketing and advertising that encourage the consumption of foods high in unhealthy fats, sugar, and sodium. A study found that approximately 87 percent of the 7.9 ads for food and beverages seen daily on television by children aged 6-11 were for products high in saturated fat, sugar, or sodium.[166] Especially disturbing among current trends is that fast food, snack food, and soft drink companies are using powerful promotions with online and social marketing platforms targeting youth that are seamlessly integrated into their online spaces. Companies create immersive environments with multi-media to elicit an automatic response, making the users more vulnerable to promotions. They infiltrate young people's social networks, collect personal data about food purchasing, and use "neuromarketing" techniques harnessing the tools of

neuroscience to get youth to engage in impulsive food purchasing behaviors, sometimes circumventing rational decision-making.[167]

Access to affordable and nutritious foods does not necessarily mean that consumers will choose to purchase these foods. Complementary strategies to accompany healthy food access include strategies to promote dietary behavior change. Point-of-purchase nutrition information is an environmental approach to promote healthy eating.[168] Point-of-purchase shelf labels have been effective in increasing knowledge, and people who noticed the labels were more likely to use the information when making purchases. However, results on changing eating behavior are mixed.[169,170,171] A recent study in corner stores did find that using point-of-purchase promotion resulted in increased sales in a low-income urban community.[172] Providing prominent positioning and extra display space for healthy food items resulted in more sales of these foods.[173] Other recommendations shown to be effective include point-of-purchase promotions of reasonably priced, healthy foods targeted specifically to the needs of SNAP beneficiaries; placing fruits and vegetables close to the register and at eye level; and locating sugar-sweetened beverages and candy at the back of the store.[174] However, many point-of-purchase labeling strategies have been evaluated only in general markets and with adult and adolescent populations, so the impact on children and low-income populations as well as what messages are most effective is not clear.[175] Using point-of-purchase labeling could be made more effective in combination with other approaches such as nutrition education, price changes, and social media campaigns.

Policy challenges to improving in-store and point-of-purchase promotion of healthy food purchases by SNAP recipients include the lack of restriction on the placement of "EBT SNAP accepted" signage and the restriction on offering healthy foods at lower prices to SNAP participants. Currently, retailer guidelines require placing "We Accept Food Stamp" posters "in a prominent place" in the store. However, "SNAP accepted" or "EBT accepted" signage is being placed prominently outdoors alongside images of sugar sweetened beverages and unhealthy foods by stores that carry few nutritious food items and within stores on shelving adjacent to nutrient-poor products (e.g. chips, sugar sweetened beverages, and candy).[176] Ironically, manufacturers and retailers are not permitted to offer any special sales, coupons, or other price discounts to SNAP customers, even for healthy options like fruits and vegetables, and SNAP-Ed *Guidance* does not allow nutrition educators to develop literature or materials that influence a store's pricing strategies.[177] Policy changes could be made to restrict EBT SNAP signage only to healthy, recommended foods and to allow businesses to offer sale prices and discounts on healthy, under-consumed foods, such as fruits and vegetables, whole grains or low-fat milk products, to their SNAP customers.

- **Support the implementation and evaluation of pilot projects limiting unhealthy food purchases with SNAP benefits such as soda, candy, and/or unhealthy snack foods.**

Given the success and public support of WIC, which provides a defined set of foods that meet the nutrient needs of pregnant and lactating women as well as young children under the age of five in accordance with the *2010 Dietary Guidelines for Americans,* there has been some interest in adopting a similar approach to the types of foods that may be purchased with SNAP benefits by limiting or excluding food items that have very little or no nutritional value.[178] The lack of information about the effectiveness and feasibility of such approaches in SNAP underscores the need for pilot programs to test this strategy.

Some states and municipalities have requested waivers from USDA to limit purchases of soda, other sugar-sweetened beverages, snack foods, and candy. In 2004, Minnesota requested permission from the USDA to prohibit purchase of candy and soft drinks using SNAP benefits based on the hypothesis that diet quality would be improved by limiting the purchase of "empty calorie foods." In 2008, Maine tried to impose a ban on purchasing sugary drinks with SNAP benefits. In 2010, New York City proposed an experimental two-year ban that would restrict the use of SNAP benefits for drinks that have more than 10 calories per 8 ounces, with an exemption for 100 percent juices, milk, and milk substitutes. However, the USDA denied all of these waiver requests.

Since the late 1970s and coinciding with the rising rates of obesity, intake of sugar sweetened beverages (SSBs) has increased more than two-fold to become the single greatest source of added sugar in the American diet.[179] While SSBs have been linked to high rates of obesity and diabetes and provide no needed nutrients, proposals to limit these foods have been met with resistance despite a powerful body of evidence that finds SSBs and other low-nutrient foods are detrimental to health. The link between increased SSB intake and increased weight gain is believed to occur through three mechanisms: 1) SSBs contribute to a high glycemic load, leading to inflammation, insulin resistance and impaired β cell function; 2) liquid calories have a lower satiety and the body does not compensate for excessive caloric intake during subsequent meals, resulting in a greater energy intake overall; and 3) regular consumption of SSBs is associated with accumulation of visceral adipose tissue and dyslipidemia through increased hepatic lipogenesis and associated hypertension.[180]

Proposals to limit sugar sweetened beverages have been met with resistance despite a powerful body of evidence that finds sugar sweetened beverages and other low-nutrient foods are detrimental to health.

Using the most recently available national survey data, SNAP beneficiaries have higher risk of health problems associated with SSBs compared to other persons with low incomes. Data collected from one supermarket chain found that SNAP beneficiaries purchased 40 percent more soda than other consumers,[181] and in a survey in California, SNAP participants reported higher soda consumption than low-income non-participants.[182] However, another survey of participants in California did not find large differences.[183] While the evidence for differences in diets between SNAP participants and low-income non-participants is mixed, the snapshot of a typical SNAP diet is cause for great concern.

While 60 percent of added sugar in children's diets comes from food, 40 percent is from SSBs.[184] Proposals to limit certain foods are controversial because the limitations may not discourage consumption of other non-nutritious foods; individuals may substitute foods equally low in nutritional value. In addition, bans may not be able to keep up with new product formulations and commercial marketing, and limitations may be difficult to administer.[185] Arguments against product limitation include that it may be difficult for policy makers, food retailers, and SNAP participants to distinguish which products are eligible for purchase with SNAP dollars and some suggest that purchasing limitations could cause stigma and confusion at checkout counters, potentially decreasing SNAP participation.[186] Others argue that such limitations signal to low-income participants that they are not capable of making their own decisions and do not take into account that many of the

healthier options are not affordable with the current benefit amounts.[187] However, limitations on certain food items already are in place for some items in SNAP (alcohol, tobacco, and prepared foods). Therefore, it should be possible to move in this direction if the approach is shown to shift purchasing toward a more nutritious SNAP market basket. Another important action that would help inform future policy measures in SNAP about the purchase of SSBs with benefits would be to conduct a Surgeon General's Report on the Health Effects of Sugary Drinks to assess the scientific evidence.

- **Support the implementation and evaluation of a pilot project using EBT technology to cap the dollar amount of monthly benefits that SNAP participants can spend on nutrient-poor food items such as sugar-sweetened beverages.**

Another avenue for exploration is the possibility of capping the amount of SNAP benefits used each month to purchase food items that do not make a meaningful contribution to a healthy diet, and when consumed excessively might have a negative impact on health and weight. The implementation of a capping system would require policy changes in the program paired with information technology innovations to the EBT card including the development of a coding system for foods that could be purchased in capped amounts. Once the allocated amount had been spent, participants would be expected to pay for additional foods or beverages in categories with their own resources. This redesign could be balanced by providing incentives for purchasing nutritious foods.

- **Focus increased attention on children's nutritional health by considering the pilot testing of a defined food package for child recipients of SNAP. The children's package would include specific allowable foods.**

In many ways, SNAP is a children's health program and needs to be redesigned to maximize its impact on improving the health of youth beneficiaries. Nearly 50 percent of SNAP beneficiaries are children, and one half of all youth in the United States will have been in households that used SNAP at some time before the age of 19.[188,189] The successful WIC Program may provide some useful insights into how to reshape SNAP to encourage the purchase and consumption of foods that contribute to a healthful diet. The WIC food package only includes specific foods that contain nutrients that promote healthy development and help prevent major diet-related health problems and risks faced by its target populations. From its inception, WIC participants have received vouchers for infant formula, milk, cheese, eggs, infant and adult cereals, and fruit juice to meet nutrient requirements.[190] Modifications to WIC in 2009 better aligned the program with the *2010 Dietary Guidelines for Americans* by including fruits and vegetables and whole grains, more flexibility with substitutions such as soy beverages or tofu instead of milk, and a reduction in the amount of eggs, cheese, juice, and milk in the benefit package for women and children.[191,192] Results from a study of WIC participants in California found that providing WIC vouchers to purchase whole grain food resulted in a 51 percent increase over baseline in the number of respondents reporting higher consumption of whole grain products.[193]

Because SNAP provides fiscal benefits to households rather than individuals within the household, it is more complicated to tailor the benefits appropriately to meet the needs of individuals where their dietary statuses may differ, such as for children or teenagers. While it may be difficult to limit what adults can purchase at this time with their benefits, it is widely agreed that children (who represent nearly 50 percent of SNAP participants)[194] need proper nutrition for their health, learning,

and development. Therefore, the amount of the benefit attributable to children in the household could be potentially modified to include only foods and beverages that align with the *Dietary Guidelines for Americans*. There is momentum building for such measures due to the new nutritional standards for the National School Lunch and Breakfast Programs supported by USDA included in the *Healthy, Hunger-Free Kids Act*.

Furthermore, as was the case with tobacco control efforts and lead poisoning, the government has played a leadership role with regulations and education initiatives to protect and improve the health and wellbeing of children by limiting their exposure to harmful substances. In fact, throughout recent history, the health of children has often served as a catalyst for federal program policy changes. The public has supported approaches that protect children's health as well. Lessons learned from tobacco control and prevention initiatives could be applied to strengthen nutrition in SNAP by focusing on children's health.

Lessons learned from tobacco control and prevention initiatives could be applied to strengthen nutrition in SNAP by focusing on children's health.

A recent Institute of Medicine report concludes with the recommendation, "All Government agencies providing food and beverages to children and adolescents have a responsibility to provide those in their care with foods and beverages that promote health and learning."[195] Ensuring that the proportion of SNAP benefits for youth contributes toward a healthy diet for them is an important nutrition policy change to be considered for this federal nutrition assistance program.

CATEGORY IV – Modify the distribution and amount of SNAP benefits to better meet the needs of program recipients. Currently, the benefit levels are inadequate to cover monthly food expenditures for many participants.

KEY ISSUES:

The once per month distribution of SNAP benefits may result in a "feast and famine cycle" among some SNAP participants. The Thrifty Food Plan, which currently sets the level of SNAP benefits, may be set too low for participants to purchase a healthy diet, especially because it assumes that SNAP participants prepare a large proportion of food from scratch. Some experts believe that the rapid rise of obesity and overweight is linked to the high cost of healthy foods. Some have argued that low-income households cannot afford to eat healthfully due to the high cost of these foods.

To better address the needs of low-income recipients today, the amount, flexibility, and targeting of SNAP benefits must be improved.

Additionally, SNAP households with school-aged children may struggle with heightened food insecurity during summer months when children are not in school to receive free or reduced price meals through the National School Lunch and Breakfast Program.

To better address the needs of low-income recipients today, the amount, flexibility, and targeting of SNAP benefits must be improved. SNAP recipients include many people who have faced long periods of uncertain job prospects and/or low wage jobs, who may also be refugees and other legal residents who are non-native English speakers. The program must be tailored to the needs of today's low-income population.

OPPORTUNITIES FOR PROGRAM IMPROVEMENT:

- **Increase the SNAP benefit level by moving from calculating the amount based on the Thrifty Food Plan to the Low-Cost Food Plan.**

The USDA's Center for Nutrition Policy and Promotion (CNPP) currently calculates a series of food plans that provide guidance on eating a nutritious diet at different income levels, including the Thrifty, Low-Cost, Moderate-Cost, and Liberal Food Plans. To construct the plans, CNPP starts with data on how American households at different income levels actually eat. For the 40 percent of households that receive the maximum benefit, SNAP benefits alone may be sufficient to purchase a healthy diet in some parts of the United States. However, the SNAP benefit amount does not change despite the varying cost of foods in different geographic regions of the country. Furthermore, the Thrifty Food Plan may not fully take into account the amount of time that must be allocated to successfully eat nutritiously on a budget.[196] Research conducted at Tulane University estimated that households would need to devote over two hours daily for food preparation to follow the 1999 Thrifty Food Plan.[197] With this in mind, the most recent Thrifty Food Plan includes some convenience foods, but does not include hot ready-to-eat meals from grocery stores or restaurant meals. Moreover, even if households have the skills and are able to allocate enough time and money



to achieve the healthy diet described in the Thrifty Food Plan, perceived affordability may sometimes undermine some healthy food choices.[198]

The USDA Economic Research Service suggests that households with incomes less than 130 percent of the poverty line are likely to spend additional income on beef and frozen prepared foods, but not fruits and vegetables.[199] Among such households, a 10 percent increase in income prompts a relatively small increase in expenditures: 1.15 percent for fruits and 1.93 percent for vegetables. Fruits and vegetables may not be seen as high-priority foods, and spending on them may be further postponed until a higher income level is reached.[200] It is important to note, however, that while cost is a significant obstacle to fruit and vegetable consumption, focus group participants have identified several additional barriers.[201] For example, women participating in focus groups reported they did not want to serve vegetables disliked by children, were concerned about food waste, and believed that other foods could be more readily prepared.

Further research to examine the adequacy of current SNAP benefit allotments is being conducted by a committee of the Institute of Medicine (IOM) and the Division of Behavioral and Social Sciences and Education at the National Academy of Sciences. The committee's goal is to investigate the feasibility of developing an objective and science-driven basis for determining SNAP benefits by taking into consideration SNAP program targets, such as increased food security and improved nutrition—as well as evaluating the evidence for the adequacy of current SNAP allotments.

- **Pilot test a program that provides SNAP recipients with the option of receiving benefits twice per month rather than the current monthly distribution.**

Currently, SNAP benefits are distributed monthly to SNAP recipients' EBT cards; however, research shows that this infrequent distribution of benefits may have a negative influence on participants' nutritional status. It has been shown that some food stamp recipients have cyclical patterns of food consumption, characterized by periods of overconsumption during the first part of the month after receiving benefits when financial resources and food are more abundant.[202,203,204] This is followed by a period of under-consumption at the end of the benefit cycle when the quantity and quality of foods being consumed is reduced due to depletion of benefits.[205,206,207,208,209] Nearly all SNAP participants' benefits (97 percent) are spent by the end of the month. Research shows that cyclical food restriction is associated with physiological responses including increased body fat, decreased lean muscle mass, and rapid weight gain in response to re-feeding.[210] Bi-monthly distribution of benefits has the potential to smooth SNAP participants' eating patterns. However, for some SNAP participants who purchase food in bulk or live far from full-service retailers, more frequent distribution of benefits could be less desirable. Therefore, pilot tests and demonstration projects giving participants the option of a bi-monthly distribution pattern in urban, suburban, and rural areas could provide important information about which demographic groups would be most likely to benefit from such a policy change.

- **Provide additional SNAP benefits to families with school-aged children during summer months when they are not participating in the School Breakfast and National School Lunch Programs.**

For children, hunger is associated with poor health, behavioral problems, and decreased performance in school. Throughout the academic year, 11.7 million children in 87,814 schools

participated in the school breakfast program, and more than 20 million children received free or reduced-price school lunch on an average school day.[211] During summer vacations, millions of low-income children lose access to these supplemental school food programs and are at a heightened risk for food insecurity. Many families are left with only their SNAP benefits, which may already be insufficient to provide adequately nutritious foods for the most vulnerable families.

While two federal nutrition programs, the Summer Food Service Program (SFSP) and the National School Lunch Program (NSLP) exist to fill the gap, these programs are underutilized and underfunded. Only 1 in 7 low-income children who ate a school lunch during the regular school year also participated in the summer nutrition programs.[212] Furthermore, with the recent recession, budget cuts in many states have forced school districts and recreational centers to eliminate and/or reduce their summer programs, leaving kids who rely on school lunch during the year without an alternative for the summer months.[213] Consequently, childhood hunger is exacerbated during the summer.

In response to this problem, the USDA has granted $5.5 million dollars to test innovative ideas to improve low-income children's nutrition access during the summer. One of these innovative approaches is to use the electronic benefit card infrastructure already used in SNAP to give low-income families with school-aged children more benefits for the summer months. Families will receive additional purchasing power to adequately meet their needs when alternative school lunch programs are not in place. The grants have been awarded to Connecticut, Missouri, Oregon, Delaware, and Washington specifically to implement increased SNAP benefits.[214]

While the results of this program still remain to be evaluated, there is large-scale support for this proposal. Children in rural areas, without transportation, or with working parents often do not have access to the summer programs currently in place. Furthermore, with the economic recession and budget cuts, the availability of summer meal programs is limited. For this reason, the most effective solution may be to increase SNAP benefits for families with school-aged children for the summer months. While this may require increased coordination among nutrition programs, data exchange procedures between SNAP and state education agencies now in place for direct certification of school meals could also be used to register children for summer SNAP. Such an initiative would utilize the existing infrastructure to strengthen the safety net for America's low-income children when school is out of session.

During summer vacations, millions of low-income children lose access to federal supplemental school food programs and are at a heightened risk for food insecurity.

CATEGORY V – Collect data on foods and beverages purchased by SNAP beneficiaries to provide critical information about the program's impact on nutrition and health, including obesity rates.

KEY ISSUES:

USDA is prohibited from requiring retailers to report sales information about the foods SNAP participants purchase, and data collected by individual grocery stores are deemed proprietary and not publicly available. As a result, it is difficult to assess the types of food and beverages purchased with SNAP benefits, impeding efforts to effectively design, target, and monitor strategies to improve nutrition for program participants. Collecting food purchase data would fill a significant gap in the program. It would permit an evaluation of SNAP's successes and shortcomings in serving the needs of various constituencies, including low-income populations, farmers, and food retailers. It will also fill a missing link in understanding the program's role in the chain of events that determines food insecurity, nutrition, and health outcomes, including obesity.

Currently, when researchers set out to study food consumption patterns among the general U.S. population they rely on 1) federal health and nutrition data sets such as the National Health and Nutrition Examination Survey (NHANES) that use retrospective recall approaches, 2) proprietary data collected by private market research firms, such as household surveys and barcode-based scanner data collected either in the home or at the point-of-sale, or 3) other federal data sets that do not focus primarily on health and nutrition, such as the Consumer Expenditure Survey.[215]

There is increasing recognition of the need to collect SNAP purchase data to provide a better understanding of how the program is used by participants and its impact on nutrition and health.

While federal data sets such as NHANES provide extensive and important health and nutrition information, food consumption patterns are discerned through 2- or 3-day recalls and food frequencies that are retrospective in nature and may be subject to some misreporting. These data sets are also time-consuming to collect and analyze. Furthermore, these data do not permit sub-national analysis, nor do they link with the food marketplace. USDA's Economic Research Service is attempting to address this gap by conducting a study of food purchases and acquisitions among SNAP recipients through the National Household Food Acquisition and Purchase Survey.[216] While this study will provide data never before available to researchers, it is a one-time survey that is retrospective in nature and will not provide a real-time, ongoing mechanism to evaluate trends in SNAP purchases or the impact of any programmatic changes on SNAP purchasing patterns.[217]

There is increasing recognition of the need to collect SNAP purchase data in real time to provide a better understanding of how the program is used by participants and its impact on nutrition and health. The National Governors' Association has argued that states should be able to track SNAP purchases "to determine if targeted nutrition education messages are effective in changing client behavior."[218] Moreover, in 2005, the National Research Council noted that "scanner datasets contain

several valuable attributes" and recommended that the USDA pursue affordable access to food purchase data.[219]

The USDA could purchase SNAP purchase data from retailers or market research companies, but the agency would most likely not have the funding to make this a sustainable solution. For example, data from the National Survey of Food Stamp Program Participants conducted in 1996 at a cost of $1.7 million[220] are still being cited today, suggesting the difficulty USDA faces from legal challenges and the food industry in obtaining good quality sales data. This was the last time federal data were collected on food purchases, underscoring the urgent need for updated data now.

OPPORTUNITIES FOR PROGRAM IMPROVEMENT:

- **Require that retailers report and the USDA analyze de-identified data on food items bought with SNAP benefits for how they align with recommendations in the *2010 Dietary Guidelines for Americans*. The goal is to develop system improvements that will increase the effectiveness, efficiency, and transparency of SNAP, a critical safety net program.**

Data collection is an integral component of most major federal programs to provide transparency, increase effectiveness, and eliminate fraud and abuse. For example, the Center for Medicare and Medicaid Services (CMS) supports a rigorous data management program called the Integrated Data Repository (IDR). The information collected through this system has assisted federal and state governments in making Medicaid and Medicare program improvements, and continues to aid efforts to improve quality and reduce costs.

Therefore, the Farm Bill should authorize the USDA to collect SNAP transaction data from retailers and require data sharing as a condition of being an authorized SNAP retailer. To protect consumer privacy and address supermarkets' concerns about the proprietary nature of the data, all information would be de-identified by SNAP participant and by store name and be categorized by store type (e.g. supermarkets, grocery stores, convenience stores, and farmers' markets) and location, such as census tract or zip code. Currently, the USDA's Store Tracking and Redemption System (STARS) is the technological mechanism responsible for benefit redemption processing, retailer authorizing, retailer monitoring and other information technology needs related to EBT redemptions. The capacity of this system would be expanded to include collecting and managing data on SNAP food sales and making it publicly available for the purpose of improving program operations.

In this proposed new data collection system, STARS would receive real-time, de-identified data from retailers in a standardized format on all purchases made with SNAP benefits. STARS would integrate this information into databases used by the USDA. The resulting datasets would provide information on the types of foods bought by SNAP recipients, which could be analyzed by household composition, geographic location, time of the month, and a variety of other metrics. In order to protect the privacy of SNAP participants, transaction data would be collected in a way that could not be linked back to a particular SNAP participant's name, but instead to their household characteristics and other demographic indicators.

Some have argued that such large-scale data collection is not technologically feasible. However, USDA's Food and Nutrition Service (FNS) conducted a pilot study in 1999 to examine the



feasibility of collecting and analyzing bar code data on items purchased with SNAP benefits (Kirlin, Cole, Adam & Pappas, 1999). Additionally, the study assessed the feasibility of integrating this purchase information with data from the EBT transaction processing system, now known as STARS. The study demonstrated that aligning these data sets is indeed possible and can be used to improve researchers' understanding of the food purchases of SNAP households. In the two supermarket chains that participated in the study, 98 percent and 96 percent of EBT transactions were matched to scanned bar code data. This study demonstrates the tremendous capacity of the EBT card to be used as a tool to collect important information about how SNAP benefits are used and evaluate the impact of system improvements, including nutrition education and marketing. While these researchers acknowledged that it was difficult to collect purchase data from merchants who did not use scanner systems, it is likely that this technical barrier has significantly decreased as scanning systems have become nearly ubiquitous over the twelve years since the study was completed. It should also be noted that WIC already includes a defined food package, foods are already coded for the program, and it will be moving to EBT cards by 2020.

Collecting SNAP purchase data would improve the program's effectiveness, increase transparency, and further reduce fraud and abuse. It would also provide an important database for the USDA, researchers, and policymakers to evaluate program outcomes and develop recommendations for system improvements in the future.

- **Strengthen the scientific arm of the USDA to conduct comprehensive research on nutrition, food security, and public health outcomes of SNAP and other federal food assistance programs. Analyze data on the types of foods purchased by SNAP recipients as well as the health status and obesity rates of program participants.**

Currently, the USDA's Economic Research Service (See Appendix IV) conducts studies analyzing USDA food assistance programs primarily based on economic indicators. In order to make effective use of food purchase data that would be collected, USDA must strengthen its scientific research arm to include a stronger public health focus. Moreover, a greater focus on marketing science and behavioral economics could enhance SNAP's marketing and promotion efforts geared toward helping lower income clients make healthy food choices when they shop.[221]

CATEGORY VI – Use SNAP-Education (SNAP-Ed) strategically to maximize the public health impact of SNAP for low-income Americans and communities. Fully implement SNAP-Ed provisions in the 2010 *Healthy, Hunger-Free Kids Act* requiring multi-level approaches, coordination with diverse stakeholders, and a variety of new strategies.

KEY ISSUES:

Since 1981, state SNAP agencies have been able to offer nutrition education to SNAP recipients and similar low-income groups as an optional administrative activity. Growing from seven states in 1992, nutrition education has been conducted in all fifty states since 2004. Formerly known as Food Stamp Nutrition Education, SNAP-Ed (renamed in 2008) includes direct education and social marketing nutrition networks to reach eligible persons. Eligibility extends to all persons who are currently or may potentially be eligible for SNAP because their household income falls below 185 percent of the federal poverty level. The purpose of SNAP-Ed is to enable low-income people to manage limited food resources, make healthy food choices consistent with the *Dietary Guidelines for Americans*, promote physical activity, and reduce the risk of chronic disease and obesity. State SNAP agencies contract with a variety of implementing agencies to provide nutrition education including the USDA's National Institute of Food and Agriculture (previously known as the Cooperative State Research, Education and Extension Service), universities, state health departments, non-profit organizations, Indian tribal organizations, and other groups.

SNAP-Ed budgets and activities vary widely among states and range from small group classes to broad, population-based social marketing campaigns operating at organizational, community, or statewide levels. The nature of interventions and their scale, scope, and duration vary considerably. Historically, individual states' ability to raise matching funds ranged from less than $100,000 per year to over $100 million. These differences have made the effectiveness of SNAP-Ed difficult to generalize.

Until 2011, USDA's Food and Nutrition Service reimbursed state SNAP agencies for up to half of their SNAP-Ed allowable costs. The *Healthy Hunger-Free Kids Act of 2010* replaced the incentive-oriented matching mechanism with an annual cap of $375 million plus inflation to be spent on SNAP-Ed nationally through 2018. States are no longer required to provide State Share funds to participate in SNAP-Ed. A formula to gradually reallocate funds based on SNAP participation will go into effect starting in 2014.[222]

Enhancing SNAP-Ed and leveraging its influence to improve community health through education, marketing, environmental change, and policy will strengthen SNAP. Though the operation of SNAP-Ed varies on a state-by-state basis, successful implementation of new federal rules for state and local activities is an essential strategy to help realize the full public health potential of SNAP.



OPPORTUNITIES FOR PROGRAM IMPROVEMENT:

- **Continue building the evidence base for educational, social marketing, and public health techniques that are effective for SNAP-Ed audiences in low-income settings.**

The goal of SNAP-Ed is to increase the likelihood that low-income people will choose foods that contribute to a healthful diet while minimizing the consumption of those that are nutrient-poor or have negative effects on weight and health.[223] Efforts to influence participants' food choices are essentially centered in the nutrition education component of the program (SNAP-Ed). SNAP-Ed is designed to promote healthy food choices consistent with the *Dietary Guidelines for Americans*. New SNAP-Ed *Guidance*, a document providing policy guidance to the states regarding the operation of SNAP-Ed, calls for the use of public health approaches and a social-ecological framework as described in the *Dietary Guidelines for Americans*. This framework includes environmental, policy, and systems changes as well as education and social marketing that aim to make the healthy choice the easy and expected choice. An Institute of Medicine report[224] recommends using a social-ecological approach with mass media and social marketing campaigns as a strategy for preventing childhood obesity.

To be effective for diverse SNAP-Ed audiences and communities, interventions must be carefully targeted, surround consumers with cues to action, use the multiple community channels where food and physical activity decisions are made, and be of sufficient duration and intensity. Statewide social marketing that employs a comprehensive social-ecological approach has been successful among low-income adults in California.[225] Interventions using a comprehensive approach in Somerville, Massachusetts, and a school-based approach in Philadelphia, Pennsylvania, have shown positive behavioral and health outcomes for low-income children.[226,227] The nationwide VERB Campaign using mass media with targeted messages targeted to tweens has proven successful in raising levels of physical activity.[228,229] The evidence base that has accrued through SNAP-Ed over the past decade should be compiled for wide dissemination and augmented with other approaches emerging from public health practice. However, despite these successes, the amount of money spent on marketing unhealthy foods to Americans dwarfs the small amount of funding spent on nutrition education interventions in SNAP-Ed.

- **Devise new targeting criteria to leverage SNAP-Ed dollars by reaching large proportions of low-income people directly, through trusted organizations and in a wide variety of influential locations.**

Historically, SNAP-Ed rules have allowed interventions to be offered only in communities, organizations, and media outlets where at least 50 percent of individuals have incomes $\leq$185 percent of the Federal Poverty Level (FPL).[230] Researchers from the Healthy Hawaii Initiative found that, nationwide, only 27 percent of the SNAP-Ed population lives in such areas.[231] Excluding three-quarters of eligible people limits SNAP-Ed effectiveness and raises per capita costs.

The new SNAP-Ed *Guidance* allows states to propose improved targeting methods. New strategies should be designed to reach more people, increase the impact of SNAP-Ed activities, and involve new partners. Locations should include the geographic areas and sites that will permit targeting the largest numbers of low-income people when the proportion falls below 50 percent. Sites could include low-wage worksites, retail food outlets, recreation and park facilities, school and afterschool

sites, community service centers, and similar community locations. Media outlets with the most-significant reach to low-income audiences should qualify as acceptable channels for SNAP-Ed media campaigns. While the messages and methods should always be tailored to reach low-income audiences, such programming could benefit the general population in communities as well.

- **Focus the evaluation of SNAP-Ed on its impact and outcomes that are mission-driven, important, sustainable, and practical to achieve with available resources.**

Program reporting for SNAP-Ed has focused on process measures that count people and activities rather than results in terms of behavioral, organizational, community, or statewide change. Ongoing impact and outcome evaluation would assure that programs are continually improved, would help determine best practices, and would support the replication of successful activities. The USDA recently released an impact evaluation looking at four SNAP-Ed activities focused on children, parents, and adult women.[232] While this is an important start, a more comprehensive approach to impact evaluation should be conducted.

Outcome evaluation is being undertaken at the state and local levels. In California, biennial statewide surveys found that low-income adults reported higher fruit and vegetable consumption as the scope of SNAP-Ed social marketing campaigns broadened over time.[233] Another approach is to build the capacity of SNAP-Ed implementing agencies to conduct impact evaluations of their own interventions.[234] With the restructuring of SNAP-Ed, reporting systems are needed to systematically collect information about "upstream" changes associated with new partnerships, resources, and initiatives, as well as outcomes such as the creation of new policies and systems that lead to population behavior change at community, regional, and statewide levels. Practical evaluation models are needed that can accommodate the growing diversity in types and sponsors of SNAP-Ed interventions, compare different approaches, and detect the effects of secular trends on population behavior.

- **Incorporate innovative multimedia and technology approaches in SNAP-Ed, including social media, texting, video, as well as personally tailored consumer feedback through innovations in EBT technology.**

Technological approaches, including multimedia, have the potential to improve the reach and effectiveness of SNAP-Ed. Media now used by low-income populations but not yet harnessed for nutrition education include web surfing, social media, video, text messaging, emailing, smart phones, and EBT card technology. Marketers of fast foods, snacks, and sugar-sweetened beverages are already using sophisticated, immersive new media approaches to affect consumers' purchasing behaviors. Therefore, it is a matter of urgency for public health to use innovative multimedia approaches to counteract these forces and to promote media literacy.[235] Although some types of media have been tested in the context of SNAP-Ed, the USDA should make this a future research priority and begin conducting pilot studies on the use of new media and other technologies as nutrition education tools for SNAP recipients.

One study conducted in California using videos in SNAP registration offices to provide short segments on healthy eating, cooking, and shopping found that 62 percent of SNAP applicants recalled seeing the video, and 73 percent of those who watched believed they could make at least one more healthful food choice in the future.[236] Texting has been used in health promotion,



including the "text4baby" campaign to foster healthy pregnancies, and the "text2stop" campaign has helped smokers quit in a randomized controlled trial.[237] Given that all SNAP recipients use EBT cards for shopping, the functions of these cards could be enhanced to collect information on purchases and give personalized feedback with tailored nutrition education messages to participants via grocery receipts, online, or by mobile phone.

- **Encourage community, regional, and statewide partnerships with stakeholders from multiple sectors to drive improvements in food security, healthy eating, active living, and obesity prevention by removing administrative barriers in SNAP-Ed that impede such collaborations.**

Partnerships provide an opportunity to strengthen and magnify the impact of SNAP-Ed initiatives across communities. Collaboration is essential among multiple stakeholders working together across sectors including government, business, civic, service, faith, media, and advocacy sectors. Partnering on comprehensive wellness initiatives with school districts or employers of low-wage occupations can benefit large numbers of low-income people at relatively low cost. In farmers' markets, schools, food banks, and other community locations, restaurant chefs can teach cooking skills on preparing tasty, nutritious dishes along with nutrition education. Collaboration is essential.

Partnerships provide an opportunity to strengthen and magnify SNAP-Ed initiatives across communities.

Current USDA guidance calls for cost allocation of interventions based on the proportion of SNAP-Ed audience documented to be residing in a community or reachable through an intervention channel. Such cost allocation should be waived for partnerships with means-tested programs or for programs funded by other sources that offer public health approaches aimed at reducing health disparities. Examples would include Federally Qualified Health Centers (FQHC) since their sites already serve eligible low-income people, low-income areas served by CDC's *Community Transformation Grants,* worksites with low-wage occupational categories, and other community sites where large numbers of low-income people can be targeted but where it is impractical to separate components of the intervention.

While USDA guidance discourages partnerships with other health care organizations, the California Central Valley Health Network and its FQHC members have been able to successfully implement SNAP-Ed activities.[238] Other health care entities have instituted community change such as farmers' markets and food-oriented economic development projects in low-income communities.[239]

Branded campaigns have also been effective. For example, the *Let's Move* initiative established by First Lady Michelle Obama has fostered a growing number of partnerships for obesity prevention. Some of these partners include health care providers, child care programs, local museums and gardens, recreational sites, faith-based and neighborhood organizations, corporations, chefs, local governments, and tribal leaders. Similarly, USDA's *Know Your Farmer, Know Your Food* initiative offers the opportunity to form strong partnerships that build sustainable local food systems and create jobs in vulnerable communities.[240] Partnerships are a cornerstone in promoting healthier nutrition across low-income communities.

CATEGORY VII – Modernize SNAP by increasing innovation and cross-agency collaboration. Strengthen public health involvement in the administration of SNAP so that the program serves as an important 21st century tool to improve nutrition and health in the United States.

KEY ISSUES:

An increased focus is needed on studying potential innovations to SNAP and other food assistance programs that will improve nutrition and health for beneficiaries. Support is needed to test pilot programs and innovative strategies to improve nutrition. For example, social media and new technologies may help SNAP participants make more nutritious food choices, but there has been little research on personalized messaging and the use of these approaches to improve nutrition among program beneficiaries.

However, currently, there are many barriers to making innovative changes in SNAP. Many states view SNAP as a "one-size fits all" program, because states are given very little flexibility to undertake new approaches that might improve nutrition for recipients, including conducting evaluation studies. To change any programmatic aspect of SNAP, a state must apply for a waiver from the USDA. Only when this waiver has been accepted can the state make the requested programmatic change. The USDA's Food and Nutrition Service is permitted to approve waivers that would result in more effective and efficient administration of the program, but increasing the focus on nutrition is currently not considered by the USDA as a criterion to justify a waiver. In fact, waivers to encourage better nutritional outcomes for SNAP recipients have been consistently denied by the USDA.[241] A recent report describes the food industry's oppositional role in defeating these waivers.[242] The National Governors' Council has called this routine denial of waivers an "extremely restrictive" and "burdensome" process.[243] Giving states more flexibility with programmatic aspects of SNAP could help innovate the program and allow for some regional variations to better respond to the many challenges individuals face in attaining a healthy diet.

OPPORTUNITIES FOR PROGRAM IMPROVEMENT:

- **Establish a Center for Health and Nutrition Innovation at the USDA, headed by a Chief Public Health Officer. This Center would marshal new learning from projects throughout the USDA, stimulate novel approaches, and support pilot projects on strategies to promote healthy nutrition in SNAP, including the application of new technologies and social media.**

A Center for Health and Nutrition Innovation located within the USDA working in partnership with the U.S. Department of Health and Human Services could serve as a testing site for innovations in behavioral economics, social media, and other new approaches that could enhance the effectiveness of SNAP. The Office of Research and Analysis, Agricultural Research Service, Economic Research Service, and National Institute of Food and Agriculture all support research on SNAP, but there is a lack of focus on nutrition and health outcomes, technology transfer, and public health approaches to improve the dietary intake and health outcomes of program participants. This Center could serve as a central source of funding for pilot programs testing the effectiveness of retail incentives, promotions and limitations; EBT technology innovations that could collect data and provide personalized consumer feedback on food purchases; nutrition education; social marketing,



and policy, systems and environmental changes that have been discussed in this report. Similar to how the 2008 Farm Bill established the position of Chief Scientist at the USDA, the creation of a Chief Public Health Officer position could serve as an important source of expertise in the agency for promoting public health goals in federal food assistance programs including SNAP. Another goal of the Center would be broad dissemination of best practices and findings as well as convening of conferences and workshops.

The Center for Medicare and Medicaid Innovation, created by the *Patient Protection and Affordable Care Act*, serves as a model for the role that the proposed Center for Health and Nutrition Innovation might play at the USDA and how it might work to promote innovations in SNAP. The Center for Medicare and Medicaid Innovation's goal is to improve how the U.S. health care system works. Its mission is to move quickly to identify, test, and spread delivery and payment models to help providers cut costs while also improving the quality of healthcare in America.[244] A key element of the Center's work is the support of pilot demonstration programs.

Using a similar approach, the proposed Center for Health and Nutrition Innovation within the USDA would use evidence-based methods to evaluate and test nutrition-improving and obesity prevention strategies. The National Institute for Food and Agriculture (NIFA), established in the 2008 Farm Bill to replace the Cooperative State Research, Education, and Extension Service (CSREES) at USDA, contains some functions of this proposed Center. However, the mission of NIFA is to advance knowledge on agriculture, the environment, and human health, as well as to support research and education. A Center for Health and Nutrition Innovation at the USDA would significantly increase focus on public health *innovation* within federal nutrition assistance programs.

- **Provide states with greater flexibility to apply for waivers to promote change in SNAP to improve the program's focus on nutrition.**

A revised USDA waiver process that specifically provides states with flexibility to test their own innovative ideas could foster policy changes to strengthen nutrition in SNAP at the federal level. Under this process, states could bring together stakeholders from public and private organizations and involve retailers who wish to incentivize healthy foods or dis-incentivize unhealthy foods. Greater flexibility for waivers on the part of the USDA would signal to states that efforts to improve the nutrition of SNAP recipients are viewed positively. Furthermore, the USDA has relied heavily on the nutrition education component of SNAP—SNAP-Ed—as the sole approach to improve the nutritional status of recipients.[245] However, with the very limited amount of funding that states receive for nutrition education and the recent national budgetary cap on SNAP-Ed, additional structural and systems approaches to improving the nutrition of SNAP recipients must be considered. Providing states with greater flexibility to evaluate policies and conduct research on strategies through pilot projects to promote the nutrition of SNAP recipients could produce valuable information to inform subsequent program change. Support for such state waiver authority has come from states and cities across the country including the National Governors' Association and the mayors of Portland, Oregon; New York, New York; Chicago, Illinois; Louisville, Kentucky; Seattle, Washington; Boston, Massachusetts; Philadelphia, Pennsylvania; Baltimore, Maryland; Minneapolis, Minnesota; and Los Angeles, California.

- **Establish a Federal Interagency Task Force on Federal Food Assistance Programs including SNAP with representation from key departments to develop and coordinate a National Strategy to strengthen nutritional policies in SNAP and other food assistance programs.**

Establish a Federal Interagency Task Force on Federal Food Assistance Programs including SNAP to be co-chaired by the senior officials at the US Department of Agriculture (USDA) and the U.S. Department of Health and Human Services (HHS). This Task Force would include representation from agencies including USDA, HHS including the Administration of Children and Families, the Department of Education, the U.S. Department of Veterans Affairs (VA), the U.S. Department of Defense (DOD), and the U.S. Department of Housing and Urban Development (HUD), among others. It would promote the sharing of information among agencies about strategies to improve nutrition in federal food and nutrition programs including identifying key benchmarks for nutrition program outcomes and effectiveness. This Federal Interagency Task Force would provide a forum for evaluating ways to streamline and harmonize nutrition messages and initiatives across programs. The DOD and VA would be important to include since data suggests that about 1.5 million households with a veteran receive SNAP benefits,[246] and nearly $88 million in SNAP benefits were redeemed in military commissaries in 2011.[247] Furthermore, unlike the WIC program, there is minimal input from health experts or agencies in shaping SNAP's design and administration. More consistent and synergistic use of nutrition messaging using the *2010 Dietary Guidelines for Americans* along with coordination in state-level planning, implementation, and evaluation should underpin all federal nutrition assistance programs including SNAP, WIC, and the National School Lunch and Breakfast Programs. Much of the work to improve the nutrition of SNAP participants is not reinforced or synchronized to leverage the combined impact of other federal, state, and private-sector social assistance and public health programs. Instead, a comprehensive integrated National Strategy is needed that fosters a "health in all policies" approach.[248]

Participation from federal agencies that focus on health as well as poverty (e.g. HHS, Administration of Children and Families, VA, and HUD) would provide a broader perspective on what barriers SNAP recipients are facing, improve program design to better respond to participants' needs, and potentially streamline and synergize the administration of multiple federal food assistance programs. The National Strategy will examine how to build efficiencies between all Federal Food Assistance Programs, align them with dietary guidelines and promote and increased focus on nutrition and health.

The Federal Interagency Task Force would develop a National Strategy of Fresh Approaches to Strengthen SNAP within one year. It would work in collaboration with states, localities, and the private sector to develop bold and innovative cross-sector approaches to improve nutrition and prevent obesity for SNAP beneficiaries. This National Strategy would describe the actions needed for research, program interventions and policy change, technology innovation and evaluation to achieve the goal of improving nutrition for SNAP beneficiaries and preventing obesity in this population.

- **Use social media, including the website www.snaptohealth.org, to improve nutrition among SNAP beneficiaries.**

Information technology and social media are powerful tools for innovation that have been underutilized in public health practice and are urgently needed in efforts to reduce food insecurity and prevent obesity. To date, there has been limited scientific, outcome-based evaluation of the effectiveness of existing technologies (apps, games, social networking, text messaging, online interactive tools, websites, and games) to prevent obesity and promote healthy food choices. The potential of social media and new technologies to improve nutrition in SNAP should be explored and applied to modernize the program.

The potential of social media and new technologies to improve nutrition in SNAP should be explored and applied to modernize the program.

A new website, www.snaptohealth.org, was created as a component of this project. The site serves as a "virtual town hall" for dialogue on SNAP and nutrition, as well as provides links to a broad range of nutritional resources. This site should continue to serve as a platform for discussion about innovations in SNAP and ways to improve nutrition and prevent obesity in America in the years ahead.

Figure 8: SNAP to Health Website: www.SNAPtoHealth.org



CONCLUSION

Since the Food Stamp Program's inception more than four decades ago, the triple public health threats of food insecurity, poor diets, and obesity have dramatically increased in America, especially among low-income households. Food insecurity impacts nearly 1 out of 6 Americans with detrimental health and economic effects.[249] The Supplemental Nutrition Assistance Program (SNAP) provides a strong foundation for America's national nutrition safety net, helping to lift people out of poverty. The program has had a critical and beneficial impact on the ability of low-income participants to purchase food, thus helping to reduce food insecurity and hunger in the United States during this and prior economic recessions. However, like other Americans, SNAP participants have experienced rising rates of obesity and overweight over the past thirty years. Sixty-eight percent of adults in the United States are overweight or obese.[250] For most demographic groups, obesity rates are inversely related to income, regardless of SNAP participation, leading to a high incidence and prevalence of multiple chronic health conditions including heart disease, type 2 diabetes, stroke, cancer, and arthritis among low-income populations.

Since the Food Stamp Program's inception in the 1960s, the triple public health threats of food insecurity, poor diets, and obesity have dramatically increased in America, especially among low-income populations.

The increasing prevalence of obesity and its co-morbidities presents a significant financial burden to the U.S. healthcare system. Excess weight is associated with increased medical expenditures among adults, adolescents, and children.[251,252] It also poses a national security threat with 27 percent of young Americans ages 18-24 ineligible to enroll in the military because of their weight.[253]

In recent years, Congressional legislation has addressed the need to improve nutritional health and prevent obesity among children enrolled in federal food assistance programs. Based on scientific evidence, policymakers and the public agree that children need proper nutrition to develop, learn, and thrive. The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), established in 1972, was revised in 2009 to provide a defined food package that aligns with the *Dietary Guidelines for Americans*. In addition, the *Healthy, Hunger-Free Kids Act* in 2010 required that National School Lunch and Breakfast Programs and the Child and Adult Care Food Program be modified to improve the nutritional quality of meals. While this legislation called for enhanced nutrition and public health approaches for SNAP-Ed, the bill capped funding of this sole nutrition education component in SNAP at 2009 levels, thus impeding nationwide nutritional changes for program participants. Furthermore, the USDA does not currently collect data on what foods are being purchased by SNAP beneficiaries. Without this critical information, it is difficult to evaluate the program's impact on participants' food choices, nutrition and health outcomes.

There are significant challenges and missed opportunities that stand in the way of SNAP harnessing its full potential to encourage the consumption of healthy foods by program beneficiaries. At the population level, several factors hinder the adoption of healthier eating practices, such as the lack of

nearby food markets and restaurants that offer a good selection of healthy, value-oriented foods; the marketing of unhealthy foods to program participants; food industry and other corporate interests that push back on program changes; the relatively higher price of some healthier food choices; a lack of time to plan meals and shop; limitations in cooking and food preparation skills; population norms that favor overconsumption; and generally poorer nutrition and lower health literacy among less educated population groups. In addition to these forces, there are broader macro-level factors that shape food production, manufacturing, marketing, and distribution that influence SNAP participants' food choices. However, recent experience from pilot programs and other food assistance initiatives demonstrate the potential of marshaling a set of interconnected strategies to improve the nutrition of SNAP participants that can overcome these challenges.

This policy report describes the history of SNAP and its current performance in addressing food insecurity and nutrition and provides evidence for the program's impact on health outcomes with a focus on obesity. The report also reviews pilot programs that incorporate lessons learned from other federal food assistance initiatives and develops innovative ideas for improving nutrition among SNAP recipients. Building on all available scientific evidence, this document has evaluated proposals for changes in SNAP, including collecting real-time data on food purchased with SNAP benefits, incentivizing the purchase of healthier options, allowing retailers to offer SNAP customers price discounts for healthy foods, considering limitations on purchases made with program benefits for certain products, strengthening certification criteria for SNAP retailers, implementing large-scale nutrition education initiatives, developing information technology innovations for the EBT card to help promote purchase of nutritious products, and applying social media approaches for nutrition education and behavior change. The report also underscores that SNAP is very much a children's health program with nearly fifty percent of beneficiaries under the age of 19. Therefore, adding a component to the program that targets the nutritional needs of children and promotes their health must be a critical priority. This report has identified a set of opportunities to make SNAP—an already successful program—even better.

There are many opportunities for making SNAP—an already successful program—even better.

While significant challenges to strengthening SNAP remain, there are a multiple opportunities to design and implement policies to better align the twin goals of reducing food insecurity and securing healthier nutrition for SNAP beneficiaries. Developing and delivering such innovations requires drawing on the history of the program with careful consideration of enrollment patterns, program structure, and strategies to tailor SNAP to the current economic landscape and beyond. In particular, there are important opportunities to build synergies with other USDA initiatives throughout the lifespan, starting with WIC and the national school meal program, to improve nutrition and help prevent or reduce obesity for children and adults in low-income communities. Additionally, bridges must be built and partnerships strengthened between the USDA and other federal agencies and their initiatives, particularly the U.S. Department of Health and Human Services. The Farm Bill Reauthorization process has focused attention on the need for data collection in the program and pilot studies of promising strategies to improve the diets of SNAP participants and reduce the disproportionate burden of obesity and chronic disease on low-income populations. If strengthened, SNAP has the potential to leverage and synergize the efforts of many different food assistance and public health programs so that the healthy food choice becomes the easy and preferred choice.

The urgent need to address the nation's dual burden of food insecurity and obesity in low-income populations cannot be overstated. One in 7 Americans is enrolled in SNAP. At some time between the ages of 1 and 18, nearly half of all children in the United States will have been a member of a household that participates in SNAP.[254]

As President Franklin D. Roosevelt once said about our nation, "The test of our progress is not whether we add more to the abundance of those who have much; it is whether we provide enough for those who have too little." Implementing innovative policy changes to SNAP represents an opportunity to have a positive influence on the health and economic security of over 46 million Americans, reduce health care costs linked with food insecurity and obesity, and as a result strengthen America's future in the years ahead.

APPENDIX I: PROJECT TEAM MEMBERS AND STAFF

This project is an initiative of the non-profit, non-partisan Center for the Study of the Presidency and Congress's Health and Medicine Program. The views expressed in this non-partisan analysis do not necessarily reflect the views of the institutional affiliations of any or all of the members of the project team. This is not a consensus document; individual members of the team endorsed the general policy direction, assessments and the majority of recommendations in this report, though not necessarily every aspect.

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APPENDIX II: ACKNOWLEDGMENTS

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As Ralph Waldo Emerson once said, "The first wealth is health." We hope that the collaborative work of this initiative, *SNAP to Health: A Fresh Approach to Strengthening the Supplemental Nutrition Assistance Program* and the recommendations it has produced will help to foster a spirit of opportunity, innovation, and cooperation as the President and Congress work with the American people to achieve a healthier and more prosperous nation.



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APPENDIX III: FARM BILL TITLES

The 2008 Farm Bill: Titles and Selected Programs and Policies[255]

• **Title I, Commodities:** Income support to growers of selected commodities, including wheat, feed grains, cotton, rice, oilseeds, peanuts, sugar, and dairy. Support is largely through direct payments, counter-cyclical payments, and marketing loans. Other support mechanisms include government purchases for dairy, and marketing quotas and import barriers for sugar.

• **Title II, Conservation:** Environmental stewardship of farmlands and improved management practices through land retirement and working lands programs, among other programs geared to farmland conservation, preservation, and resource protection.

• **Title III, Agricultural Trade and Food Aid:** U.S. agricultural export and international food assistance programs, and program changes related to various World Trade Organization (WTO) obligations.

• **Title IV, Nutrition:** Domestic food and nutrition and commodity distribution programs, such as food stamps and other supplemental nutrition assistance.

• **Title V, Farm Credit:** Federal direct and guaranteed farm loan programs, and loan eligibility rules and policies.

• **Title VI, Rural Development:** Business and community programs for planning, feasibility assessments, and coordination activities with other local, state, and federal programs, including rural broadband access.

• **Title VII, Research:** Agricultural research and extension programs, including biosecurity and response, biotechnology, and organic production.

• **Title VIII, Forestry:** USDA Forest Service programs, including forestry management, enhancement, and agroforestry programs.

• **Title IX, Energy:** Bioenergy programs and grants for procurement of biobased products to support development of biorefineries and assist eligible farmers, ranchers, and rural small businesses in purchasing renewable energy systems, as well as user education programs.

• **Title X, Horticulture and Organic Agriculture:** A new farm bill title covering fruits, vegetables, and other specialty crops and organic agriculture.

• **Title XI, Livestock:** A new farm bill title covering livestock and poultry production, including provisions that amend existing laws governing livestock and poultry marketing and competition, country-of-origin labeling requirements for retailers, and meat and poultry state inspections, among other provisions.

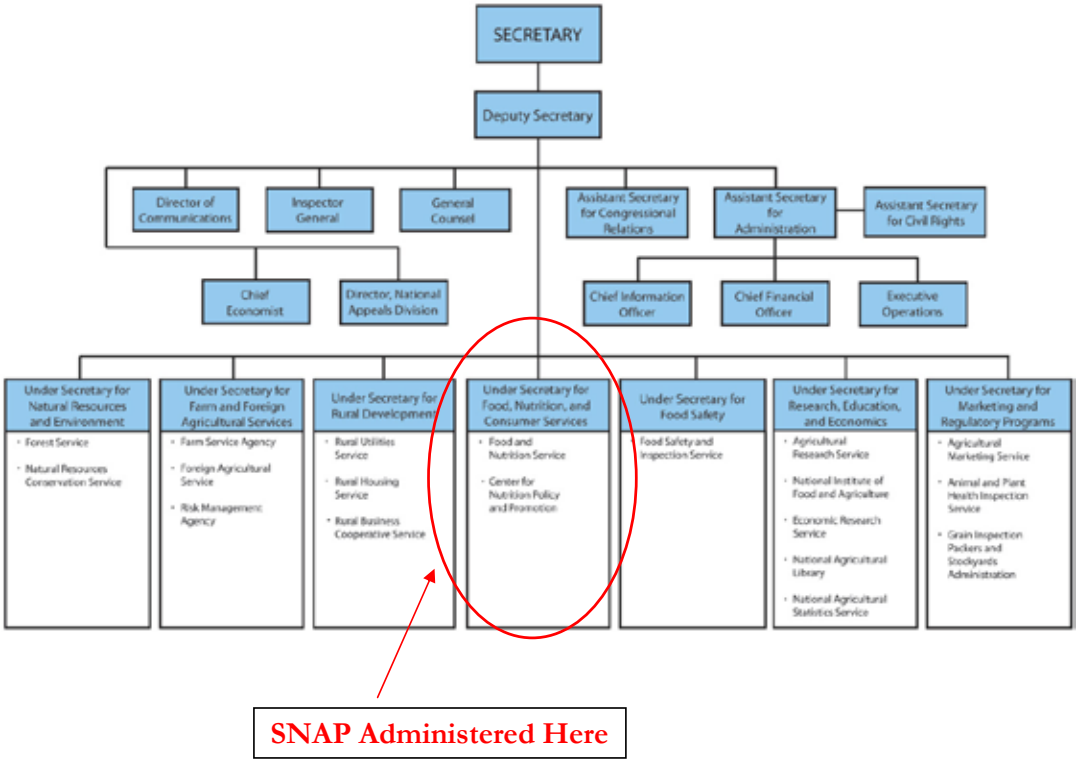
• **Title XII, Crop Insurance and Disaster Assistance:** A new farm bill title covering the federal crop insurance and disaster assistance previously included in the miscellaneous title (not including the supplemental disaster assistance provisions in the Trade and Tax title).

• **Title XIII, Commodity Futures:** A new farm bill title covering reauthorization of the Commodity Futures Trading Commission (CFTC) and other changes to current law.

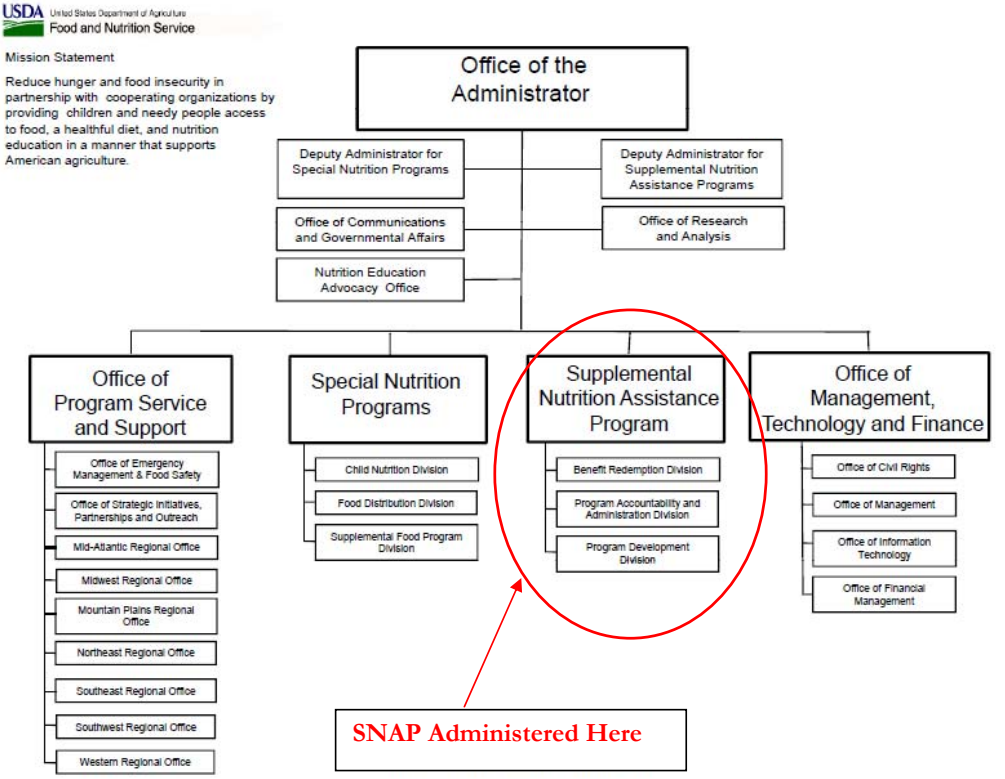
• **Title XIV, Miscellaneous:** Other types of programs and assistance not covered in other bill titles, including provisions to assist limited-resource and socially disadvantaged farmers, and agricultural security, among others.

• **Title XV, Trade and Tax Provisions:** A new title covering tax-related provisions intended to offset spending initiatives for some programs, including those in the nutrition, conservation, and energy titles. The title also contains other provisions, including the new supplemental disaster assistance and disaster relief trust fund, and other tax-related provisions such as customs user fees.

Appendix IV: USDA Organizational Chart



APPENDIX V: FOOD AND NUTRITION SERVICE USDA ORGANIZATIONAL CHART



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