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# THE IMPACT OF THE SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM ON LOW INCOME REGIONS

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# THE IMPACT OF THE SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM ON LOW INCOME REGIONS

by

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A.S., A.A., Shawnee Community College 2016 B.S. Southern Illinois University 2018

A Research Paper Submitted in Partial Fulfillment of the Requirements for the Master of Science

> Department of Agriculture Economics College of Agriculture Sciences Graduate School Southern Illinois University Carbondale May, 2020

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A Research Paper Submitted in Partial

Fulfillment of the Requirements

for the Degree of

Master of Science

in the field of Agribusiness Economics

Approved by:

Dr. Charles M Rendleman, Chair

Graduate School Southern Illinois University Carbondale April 8, 2020

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### **HEADING 1**

#### INTRODUCTION

In over eight decades, billions of individuals have benefitted. This social welfare governmental program that appears to surge with growth each decade throughout its history has reached multitudes of Americans in need. The numbers are astounding as documented by the USDA (United States Department of Agriculture):

- 20 million total participants were reached by 1943
- 18.5 million participants in 1976
- 27.5 million in 1994
- 28.2 million in 2008
- 47.6 million in 2013, a record high
- 42.1 million in 2017, currently on a decline

There is continual discussion about America's need for food security and whether or not the program is actually attacking the real issue of feeding the population who need it most. There seems to be discrepancies over the distribution of benefits and areas of concern over whether or not the benefits are utilized as the program requirements initially intended.

#### **BACKGROUND**

SNAP (Supplemental Nutrition Assistance Program) is a program that evolved from the Food Stamp Program. The Food Stamp Program was started 1939 after the Great Depression to combat food insecurity in the United States. Food insecurity occurs when an individual is without access to enough affordable and nutritious food. According to the USDA, the concept was developed by Henry Wallace, the Secretary of Agriculture and Milo Perkins who became the first administrator of the program. The initial concept was to allow participants in need the

opportunity to purchase food, some of which was deemed as surplus. Some think it was 'as much a farm price support program as an anti-poverty one' (Tanner, 2013).

In 1943 the program was halted due to reduced food surplus going towards the war effort. It took nearly eighteen years of research and proposals before President Lyndon Johnson requested that a permanent supplemental nutrition program be implemented in 1964 (Caswell, 2011). The purpose was intended to bring improved nutrition to low-income participants as well as strengthening the agriculture economy. Into the 1970's and 80's the program continued to grow and develop, moving from eligibility determined by each state to national eligibility standards (Caswell, 2011). By the year 2011, the cost of the SNAP program had grown to a cost of more than seventy-five billion dollars and providing assistance to forty-six million participants seeking food security (Caswell, 2011).

One major change that failed to be implemented was a restriction on what type of foods participants could buy with food stamps. Participants started purchasing unhealthy, nutrient poor foods with their food stamps. In the 1980's there was concern about the size and cost of this Food Stamp Program and so the government, in the following years, started requiring households to meet a monthly income level to be eligible.

This program has evolved tremendously over the last 50 years. When the program started, it was very simple. Eligible participants received physical food stamps from the government to spend on nutritional food. Now participants can apply online and receive a credit card with a monthly balance deposited on it. The convenience of the program is what has changed the most. Today's SNAP program is now highly complex with many different aspects ranging from full household assessment to optional personalized food plans. It is all necessary to keep this seventy billion dollar a year program stable.

#### STATEMENT OF THE PROBLEM

The SNAP program is very necessary for us to combat food insecurity in the United States. "Food insecurity is associated with poorer health consequences among adults, including obesity, systemic inflammation, and diabetes, and it is considered a serious public health challenge" (Leung 2). It provides assistance to people who would otherwise be unable to maintain a nutritious diet. However, this program has many loopholes and inefficiencies that must be addressed.

The SNAP program is without question one of the most expensive government programs that the United States offers. The program had nearly 48 million recipients in 2013. With millions of tax dollars being spent on it each year, it is pertinent that we do our best in making it as efficient as possible. The program has huge potential to positively affect the diets of millions of people and their general wellbeing. Currently, research shows that participants of SNAP generally eat less nutrient rich foods compared to non-participants. SNAP is also very attractive to prospective participants which can be a problem; a Link Card is provided free of charge and funds are automatically deposited. The convenience of this program has caused many people to opt in and self-select into the program although some eligible participants choose not to enroll. The SNAP program also has an undetermined level of fraud that is very difficult to track. Fraud within the program can consist of participants using the program in unintended ways such as converting benefits to cash. Participants can do this by purchasing groceries for non-participants at a discount and then receiving cash in return. This type of fraud could potentially emerge if a tracking system is not implemented. Millions of people rely on this program for assistance but there are also many participants that use it in unintended ways.

#### PURPOSE STATEMENT

This research will seek to identify the most prominent problems that the SNAP program currently has and shed light on all the opportunities of the program. This research also aims at showing the impacts that SNAP has on individual's health and wellness. Once these are identified this paper will give recommendations to increase program efficiency and ensure that the program is functioning in the most optimal way to meet the needs of the intended, eligible recipients.

#### **HEADING 2**

#### REVIEW OF LITERATURE AND PROBLEMS

#### **OVERVIEW OF SNAP TODAY**

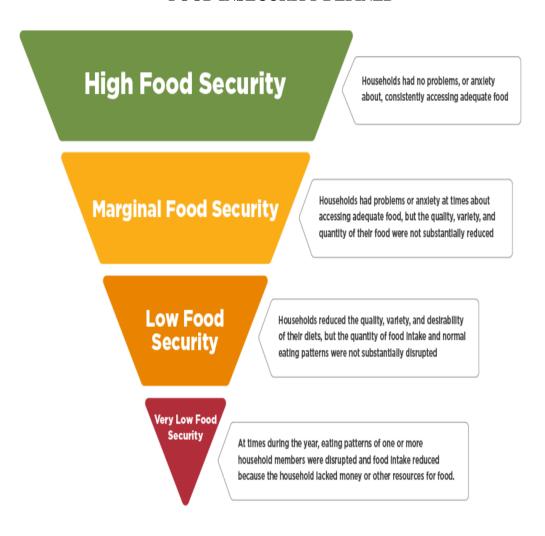
The Supplemental Nutrition Assistance Program (SNAP) is a program that was originally known as the Food Stamp Program. Costing the taxpayers around seventy billion dollars a year this is the largest food assistance program that the United States has. Although the program is a federal program, the determination of a participants' eligibility is handled by each state. Requirements can differ from state to state. In Illinois, for example, approved participants are issued an Illinois Link Card that is used like a debit card

SNAP benefits are intended to increase the access of eligible low income households to food and a nutritious diet - to improve the food security (Nord and Golla). Currently the Link card is how participants receive benefits. Participants can buy most all grocery items at the local stores near them for convenience. There is no doubt that this program does provide financial assistance to low income households but what is the true impact on overall food security? It is difficult to identify the impact that the SNAP program has on its participants and overall food security for them.

The United States has one of the highest standards of living in the world, yet nearly 15% of all U.S. households and 40% of its near-poor households (below 130% of the poverty threshold) were food insecure in 2009 (Nord et al. 2010). Lower food security comes with several negative effects. Children that are in these lower food secure households tend to be more vulnerable to depression, poor health, and low academic performance. In the long term these problems arisen because of food insecurity and, if not supplemented, will reduce an individual's overall satisfaction. We need to address the effectiveness of the SNAP program but it is very

difficult to measure the effects of the SNAP program because all households vary. Homes that are more food insecure and have higher needs than other households are the ones that are intended to receive SNAP benefits.

#### FOOD INSECURITY DEFINED



Source: Adapted from the USDA Economic Research Service.

Figure 1 – Food Insecurity Levels

The definition of food insecurity changes over time and is dependent on location, country, and culture. Some areas may seem very food secure until they are compared with other areas. The United States Department of Agriculture defines food insecurity as a lack of consistent access to enough food for an active, healthy life. It is important to note that food

insecurity and hunger are similar but distinctly different. Hunger is a discomfort that is physically felt, whereas food insecurity in this case refers—to the lack of financial resources for nutrition on the household level. Food insecurity is a highly complex concept because there are so many factors that contribute to it. Figure one shows and defines the four different levels of food security that the USDA uses.

#### THE DETERMINANTS OF FOOD INSECURITY

"At the micro level, food insecurity is a function of earned income, public and private transfers, and household composition and food needs (e.g., household size, age/gender composition)" (Ratcliffe, Mckernan, & Zhang, 2011). These components can be adjusted by the SNAP prospective participants to allow for more or less benefits. Having small children greatly increases your food insecurity. Children require more time from parents or guardians which reduces the amount of time that parents or guardians can go to work. If the household has more working capable adults, this will decrease food insecurity but if these adults do not work or are disabled it will greatly increase food insecurity. "Being young, a minority, a noncitizen, and/or female is hypothesized to lower income through the negative effects of such status on wages and thus increase food insecurity" (Ratcliffe, Mckernan, & Zhang, 2011). Even the state of the overall economy can affect whether or not lower income households are food insecure. In some instances, low income households can self-select into the program by controlling the variables of earned income and household composition that were listed above. Once participants are enrolled, the amount of benefits received can be controlled by changing those same variables. A household that has all the resources they need may then decide that it is acceptable to reduce their amount of income/labor because there is no longer a need for that extra income if the SNAP program is covering the food expenses. Many variables determine food insecurity and

individuals/households have the ability to change those variables to reduce or increase their own food insecurity.

Along with those simple determinants of food insecurity we also have one that can't be controlled by the participant which is state and federal legislation. Legislation changes over time and what may have been considered food insecure twenty years ago may be completely different from today's definition of food insecure. All these variables make it hard to determine true food insecurity. If an individual or household is determined food insecure they will still have to meet the requirements. According to Ratcliffe, Mckernan, & Zhang these are the main factors affecting the insecurity level; (a) age, (b) race/ethnicity, (c) educational attainment, (d) household composition (number of adults and children, household structure), (e) disabled person in household, (f) metropolitan area, and (g) state economic characteristics (2011).

A study conducted by Mabli, James, Jim Ohls, Lisa Dragoset, Laura Castner, and Betsy Santos from the USDA measured the effect that the SNAP program has on food insecurity. Their findings showed that the SNAP program does produce an improvement in food security. In the first six months the SNAP program showed an increase in food security. "SNAP was associated with a decrease in the percentage of households that were food insecure by 4.6 percentage points in the cross-sectional sample and 10.6 percentage points in the longitudinal sample" (Mabli, Ohls, Dragoset, Castner and Santos). The findings also showed a decrease in very low food insecurity of around fourteen percent. Along with those reductions in food insecurity a reduction is observed in children who are food insecure, as well as children who are "very" food insecure. The improvements from the SNAP program generally did not show a difference when comparing household income levels but in the case that a household has an elderly member, it was not shown to make a significant difference. This study found that there was not an extensive increase

in weekly food expenditures which more or less stayed the same throughout six months of program participation. Comparing this study to other studies on the SNAP program this study shows the program has much less of an impact on food security. "Although this provides some evidence that our estimates might be conservative, differences in observable and unobservable characteristics between households that had and had not yet received benefits prevent us from being able to definitively conclude that our associations are underestimated" (Mabli, Ohls, Dragoset, Castner and Santos).

#### BENEFITS PARTICIPANTS RECIEVE AND THE STIPULATIONS

Most all low-income households can receive SNAP benefits, but the stipulations and benefits vary by state. In general, the top determinants of benefits are income, expenses, disabilities, numbers of persons living in the household, and age. Some people are not eligible for benefits such as certain non-citizens, most strikers, and some people that live in specific institutions. These benefits are given to participants on a Link Card in the state of Illinois and can be used to buy unprepared food and food products. Items that cannot be purchased with SNAP consist of hot meals that are already prepared, vitamins/medicines, pet foods, alcohol, and tobacco.

Table 1 – Households Without Disabled or Elderly Persons

Households without Disabled or Elderly Persons (age 60 or over) Maximum Monthly Income Allowable

Household Size	1	2	3	4	5	6	7	8	9	10
Gross Monthly Income Limit (165% FPL)	\$1,670	\$2,264	\$2,858	\$3,452	\$4,046	\$4,640	\$5,234	\$5,828	\$6,422	\$7,016

For household with more than 10 persons, add \$594 for each additional person. (Updated 10/1/2018)

Table 2 – Age 60 & Over or Disabled Households

Age 60 & Over or Disabled Households Maximum Monthly Income Allowable

Household Size	1	2	3	4	5	6	7	8	9	10
Gross Monthly Income Limit (For those Age 60 or older OR Disabled) (200% FPL)	\$2,023	\$2,743	\$3,463	\$4,183	\$4,903	\$5,623	\$6,343	\$7,063	\$7,783	\$8,503

For each elderly and disabled household with more than 10 persons, add \$720 for each additional person. (Updated 10/1/2018)

Table 3 – Maximum Gross Monthly Benefits

Number of People in Your Household	Maximum Gross Monthly Benefits
1	\$ 192
2	\$ 353
3	\$ 505
4	\$ 642
5	\$ 762
6	\$ 914
7	\$ 1,011
8	\$ 1,155
9	\$ 1,299
10	\$ 1,443

Tables 1, 2 and 3 are provided by the Illinois Department of Human Services and show the maximum amount of income that is allowed to receive SNAP benefits the number of people in the household and the maximum benefits.

#### **SELF-SELECTION INTO SNAP**

A program such as SNAP does provide extra income for food, but surveys have shown that when comparing low income participants and low income non-participants, non-participants generally have higher nutritional security. The reason for this issue could be self-selection into

the SNAP program. It is voluntary to participate in this program. Although eligibility may be determined for many, not everyone chooses to self-select into the program. In some cases, participants may take themselves off the program. In some low-income households, food security might not be a problem. The people who do not participate may have enough income to be self-sufficient and provide for their own food needs. In this case food insecurity would be lower in these households thus showing statistically that SNAP non-participants have higher food security.

People that may not want to allocate their resources to food or may have other expenses will participate in this program causing food insecurity to look lower among SNAP participants (Nord and Golla). In their study examining the issues of self-selection, Nord and Golla found that household choose 'self-selection into SNAP at a time when they are more severely food insecure. The results are consistent with a moderate ameliorative effect of SNAP—reducing the prevalence of very low food security among recent entrants by about one-third' (Nord and Golla). Self-selection into SNAP is very common and people will take full advantage of the program because it is convenient and highly attractive. Participants are receiving, in some cases, a few hundred dollars a month on a credit card to spend on whatever they choose at the grocery store. For a significant reduction in the amount of participants self-selecting into the SNAP, the program needs to be made less attractive and potentially more regulated.

#### **DIETARY IMPROVEMENT**

In a study conducted in 2012 by the American Journal of Clinical Nutrition (Leung, et al.) the dietary intake of SNAP participants versus non-participants was analyzed. Many low income adults in general fail to meet the requirements of a healthy diet. There was very low consumption of fruits, vegetables and healthy foods. "Relative to national dietary guidelines, we

found that low-income adults had low intakes of whole grains, fruit, vegetables, fish, and nuts/seeds/legumes and high intakes of processed meats, sweets and bakery desserts, and sugarsweetened beverages" (Leung et. al. 2012). It also shows that SNAP participants still do not meet the healthy diet guidelines but, the income eligible non-participants show a much healthier diet. Basically, two groups with the same financial ability differ in their overall diets. The group with the healthier diet is the group that does not receive SNAP benefits and is financially stable on their own. These findings are consistent with prior studies. "An analysis of the 1994–1996 Continuing Survey of Food Intakes by Individuals showed that participation in the FSP was positively associated with the consumption of meat, added sugars, and total fat, although not with the consumption of fruit, vegetables, total grains, and dairy products" (Leung et. al. 2012). Data from the California Health Interview Survey in 2007 showed that SNAP participants had a much higher consumption of soda than eligible non-participants. The research of Lueng et al. concluded that SNAP benefits can have a negative influence on the dietary choices of these individuals by providing an increase in food spending. In a series of experiences labeled "Cash-Out" experiments, SNAP benefits were replaced by increase in income. With this increase of income, participants spent less on food than when the benefits were given as SNAP assistance. Participants on SNAP would tend to spend more on food, which in many instances causes them to buy sugar rich, nutrient low food. It appears the focus in policy is now shifting to not only provide financial assistance for low-income participants but to promote healthy diets as well. "Our results show that low-income adults receiving SNAP benefits have diets that are poorer in quality than those of income-eligible nonparticipants, which may contribute to the higher prevalence of obesity and obesity-related complications in this population" (Leung et. al. 2012).

## **SNAP BENEFITS TO LOCAL FARMERS**

Recently legislation has been passed to allow for SNAP benefits to be used at local farmer's markets. If a local farmers market is authorized by the Food and Nutrition Service (FNS) the vendor will be then allowed to accept SNAP Link Cards. FNS then sends the retailers at the farmer's market the necessary Link Card EBT reader. This opens up a large market for local farmers to provide healthy and nutritional food. In a study conducted by the Journal of Academy of Nutrition and Dietetics it was concluded for farmers' markets to sell more products through the SNAP program they need more vendor-operated, wireless, POS (point of sale) terminals. It was significantly shown that having more POS terminals creates an increase of EBT/SNAP sales at the market. The other hurdle that must be overcome to continue EBT/SNAP sales at farmer's markets is the cost of using these POS terminals. "The monthly costs associated with wireless POS terminals include the fixed expenses of terminal rental (\$30 per terminal per month) and wireless fees (\$18.75 per terminal per month); and the variable expenses of EBT transaction fees (\$0.10 per transaction) and credit and debit processing fees (3% of each transaction)" (Buttenheim 3). Only farmers that sell in large quantities and have high profit margins will benefit from using the POS EBT terminals for SNAP. It was concluded that continued use of POS terminals for the SNAP program does increase sales by a significant amount but for continued use of the terminals they will have to be subsidized.

#### INITIATIVES TO RESTRUCTURE SNAP

Significant ideas are proposed by DS Ludwig from Harvard University to restructure the SNAP program. The author states that there is no way for regulators to adequately document what foods are purchased within the SNAP program. Without definitively knowing how much money is spent on what items, it would be challenging for regulators to restructure the program. "Presently, the exact types and amounts of food purchased in SNAP remain largely unknown, so

strengthening of the program must begin with a more systematic approach to data collection by the US Department of Agriculture (USDA)" (Ludwig). The approach to restructuring needs to start with a systematic collection of data that can be analyzed to show accurate statistics on where SNAP money is spent and on what items. Ludwig also suggested that special efforts need to be increased for the promotion of healthy foods. The recipients need to be educated on health effects of this food and efficient ways to spend their benefits. SNAP plays a very important role in increasing food security but it also comes with a lot of responsibility in terms of an individual's overall health. SNAP has the ability to influence millions of Americans diets which is directly related to their health. More progress needs to be made to understand what products users are purchasing and how to promote healthy diets, he says.

#### **VENDOR PARTICIPATION**

In 2018 the USDA implemented a new eligibility rule for vendors participating in the SNAP program. This new rule required vendors to provide three of four staple food varieties including, meat/fish/poultry, cereal/bread, fruits/vegetables, and dairy. According to research conducted at the University of Albany, "before the rule's implementation, the business sector voiced concern that the new rule would disproportionately burden small food stores, which might lack space or equipment to stock required items, resulting in fewer numbers of SNAP vendors," (Hasler 2). Further research indicates that this new rule did influence vendor participation especially with convenience stores. According to Hasler there was a ten-fold increase in withdrawals from the program within the 2015-2018 time period of program implementation. The reason for the large amount of withdrawals was due to the cost of meeting the new requirements. Small businesses could not afford to expand to meet the requirements of the new rule. Although there has been a decrease in vendors at the convenience store level, there has

been an increase in farmers' market participation. This was due to the availability of mobile EBT technology. According to Hasler, "As SNAP's mission has expanded from temporary relief of hunger and food insecurity to assuring the dietary quality of its recipients, the need to study the program from multiple perspectives and levels of influences has grown," (18).

#### **HEADING 3**

#### RESEARCH FINDINGS

#### SUPPORTIVE FINDINGS

The benefits that the SNAP program provides are unparalleled. Participants of the program that are food insecure are provided with the necessary benefits to ensure a nutrient dense diet. With over 40 million participants, the program provides relief to those in need, from the elderly to children who otherwise would have limited to no ability to purchase necessary foods without the program. Dietary improvement is the goal of the SNAP program and the benefits offered can provide that, assuming they are used as intended. Access to these benefits can also give food insecure participants a sense of security which in turn can boost morale and help establish more stability in their lives.

With the new technology of Link Cards, participants are provided with easy and efficient access to their benefits. Funds are instantly transferred to the card which is a huge benefit for elderly and participants with disabilities. Having a link card could reduce the potential for benefits to be traded as a type of currency and therefore increasing the overall security of the benefits. This Link Card opens more possibilities for users as well as vendors. Local farmers markets and small businesses that adopt POS terminals can increase their local market share as well as provide more natural/nutrient dense products. The products that can be purchased with Link Cards have the potential to be monitored and exclude many items that are not related to or determined to be healthy foods. This reduces the likelihood of the program having a negative effect on one's health. The Link Card is an essential step in the right direction for documenting purchasing behaviors of participants.

#### **CONTRARY FINDINGS**

Along with the benefits of the SNAP program there are some negative issues. Self-selection into the program may be an issue. People who have the ability to work and make more money will tend to carefully watch their monthly income so that they may stay within the income requirements for the program. There are countless examples of people who choose to work part time instead of full time so that they may still receive benefits. College students are another example of self-selection. They choose to live off campus and stay unemployed to receive SNAP benefits when many campuses around the U.S. provide food assistance programs internally.

Another negative of the current program is fraud. There are countless examples of SNAP participants using their benefits to purchase friends' groceries and discount them in return for cash. This is a very common occurrence and to some individuals it may not seem like fraud at all, but it can be a very real, punishable offense. The level may be undefined, but fraud is one of the major problems within the SNAP program.

There currently is very minimal health education within the SNAP program. Participants can receive their benefits with little to no health education requirements. Without knowledge of what goods are best to be purchased SNAP benefits cannot efficiently be applied. Participants may only buy their favorite food products instead of purchasing a proper balanced diet. Without proper education, benefits will not be used to their full potential reducing program efficiency.

Constant changes in legislation on the federal level and state level make it hard for vendors to participate in the program. More recently vendors have been required to carry three out of the four staple food items. Some vendors may not be able to provide this for their customers, further increasing the difficulty level of participation. Small businesses and farmers markets may not participate in the program because of changing legislation and that the costs of participation outweigh the benefits.

#### **HEADING 4**

#### **CONCLUSION AND SUGGESTIONS**

Food assistance has been around since 1939 in some form or another and it is a vital part of public health and well-being. It has many benefits and directly provides food security to the citizens of the U.S. It is a necessary part of the U.S. legislation and saves countless lives every year. The SNAP program acts as a security blanket for millions of Americans and provides a boost to our economy in the process. We have made great progress with the SNAP program formerly known as "Food Stamp." The program now has the ability to give participants an EBT card instead of physical food stamps. This card can be used at any vendor who participates in the program. The U.S. is constantly making revisions and the overall goal is to make SNAP as efficient as possible, but there are revisions that need to be made. Educational programs will deter self-selection and overall increase participants' knowledge in regard to health.

Self-selection and fraud must be combatted. The program must be less attractive to possible participants. The USDA would do well to need to implement monthly required education to be eligible for the program which would consist of online or in person meetings with SNAP representatives. This would at the minimum make the program less attractive for participants who want to self-select into the program. This would also give participants much needed health education consisting of dietary and physical content.

Fraud reduction must also be the next step in refining the SNAP program. It is a very prevalent side effect of the SNAP program. Fraud is defined as simply using benefits for unintended purposes and encompasses many different aspects. The implementation of the Link Card provides greater security to the program itself and opens many doors for future rectifications of the program. Data tracking should be the next step for the program. With nearly

all products in stores marked it will be much easier for tracking the purchasing behavior of participants. Data collection will allow program regulators to see the statistics of what products are being purchased. Regulators can then put products that are not to be purchased with the Link Card on a blacklist of products that cannot be purchased with the card. Providing data feedback should make an impact on the current levels of fraud within the program.

Overall, the Supplement Nutrition Assistance Program is a program that will likely be implemented for many years to come. It provides benefits to U.S. citizens that keeps them healthy and reduces food insecurity throughout the country. The program is continually being evaluated and constantly being improved. It would be beneficial to implement the measures suggested to increase efficiency and provide assistance to as many people as possible.

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Research Paper Title:

The Impact of the Supplemental Nutrition Assistance Program on Low Income Regions

Major Professor: Charles Rendleman