

Is MyPlate really Affordable? An analysis of SNAP Benefits and the actual cost of eating according to the dietary guidelines

Authors

Kranti Mulik
Union of Concerned Scientists
1825 K St. NW
Washington, DC 20006
202-331-5434
kmulik@ucsusa.org

Lindsey Haynes-Maslow
Department of Youth, Family & Community Sciences
North Carolina State University
Raleigh, North Carolina 27695
Lhaynes6@email.unc.edu

Selected Paper prepared for presentation at the 2016 Agricultural & Applied Economics Association Annual Meeting, Boston, Massachusetts, July 31-August 2

*Copyright 2016 by [Kranti Mulik and Lindsey Haynes Maslow]. All rights reserved.
Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.*

Background

In the past 30 years, obesity rates among adults in the United States have more than doubled and approximately two-thirds of adults are currently overweight or obese [TFAH 2013]. Consuming healthy foods, including fruits and vegetables, whole grains, and lean proteins, can help prevent weight gain and reduce the risk of chronic diseases, including heart disease, diabetes, and some cancers [CDC 2009]. Due to limited resources, low income individuals are particularly vulnerable to diet-related chronic disease. They are less likely than higher income individuals to adhere to federal dietary guidelines—presumably because they cannot afford to purchase healthier foods [Haynes-Maslow 2013]. To help support low-income households in consuming healthier food and to alleviate food insecurity, the federal government created the Supplemental Nutrition Assistance Program (SNAP).

SNAP is a vital federal food assistance program under The Farm Bill that offers benefits usable as cash for the purchase of food by lower-income individuals [USDA 2015]. SNAP was first piloted in the 1960s by President Kennedy and later signed into law by President Johnson. Today, it is the largest federal food assistance program. Generally, households whose income are less than 130 percent of the poverty level and pass an asset test are eligible for SNAP. Families can spend their benefits on foods to be eaten at home. The average monthly benefit per person is \$125 – and nearly all benefits are spent by the end of the month. In 2015, SNAP provided more than \$75 billion dollars in benefits to approximately 47 million people [CBPP 2015]. Most of these people lived in households with children.

Generally, research shows that SNAP is effective at reducing food insecurity; some estimates indicate that SNAP reduces food insecurity by approximately 30 percent [Mabli et al 2014]. There is also research that shows SNAP improves children's and adult's health outcomes, including physical and mental health [Gregory & Deb 2015]. Unfortunately, many families receiving SNAP still report significant financial barriers to purchasing healthy food with their benefits [Haynes-Maslow 2015; Mush et al. 2007] This may partially explain why studies on SNAP participants' diets show that compared to non-participants, SNAP participants have lower diet quality [Fox et al. 2004; Gregory et al. 2013]. The monetary amount of SNAP benefits may

be insufficient support a healthy diet recommended by federal nutrition guidelines (known as “MyPlate”).

In 2011 the USDA calculated the cost of various food plans (low-cost, moderate cost, and liberal) based on federal dietary guidelines (USDA 2011). They determined that adhering to a nutritious “low cost” diet would cost \$175 per week for a family of four (two adults between the ages 20-50 and two children between the ages 6-8 and 9-11). The report concluded that it would possible for people to eat healthier, including more vegetables and fruits, and spend less on food. However, the USDA based their dietary guidelines calculations on the 2005 Food Pyramid instead of the more recent MyPlate, which replaced The Food Pyramid in 2010. MyPlate focuses more heavily on fruits and vegetables and less on grains than The Food Pyramid. Therefore, their totally weekly amount calculations underestimate the cost of a nutritious “low cost” diet.

More recently, the USDA estimated the cost of satisfying fruit and vegetable requirements under MyPlate guidelines based on 2013 retail scanner data [USDA 2016]. Researchers found that consuming MyPlate levels of fruits and vegetables (fresh, canned, frozen, dried, and 100-percent juice) would cost between \$2.10 to \$2.60 per day – or 47 to 57 cents per cup-equivalent. For those following a low cost diet, the USDA found that a family of four would need to spend, on average, 50 cents or less per cup-equivalent. A family of four following a low cost budget would need to budget carefully in order to meet MyPlate’s fruit and vegetable recommendations. To meet these recommendations, the USDA suggested that families consume less expensive foods overall.

To date, there are no studies that calculate the cost of following MyPlate’s dietary recommendations for all food groups (fruits, vegetables, grains, dairy, and protein). To address this knowledge gap, the purpose of this paper is to 1) estimate the funds required to support a MyPlate diet, and 2) estimate the current budgetary shortfall in the SNAP program needed for recipients to adhere to a nutritionally sound diet.

Methods

Data Sources

This analysis uses data from the USDA's retail prices, the Current Population Survey, and SNAP eligibility data. The retail price data for beef, poultry cuts and eggs were from the USDA's Economic Research Service (ERS) (see Table 1). The data were monthly retail prices for 2015 which we averaged over the 12 month period. The average meat price was the average of lean beef¹, poultry², turkey, and eggs³. All prices were in \$/lb and converted to \$/oz. The price for whole grains⁴, other grains⁵ and dairy⁶ were obtained from the USDA's quarterly data for grains and dairy. The data were for 2010 and spanned across 99 market groups, 4 regions and 9 divisions. The prices were adjusted for inflation using the 2015 GDP deflator and converted from \$/100g to \$/oz. The prices for fruits and vegetables were from USDA's Fruit and Vegetable Prices data set for 2013 and in \$/cup which were adjusted to 2015 dollars using the GDP deflator. We averaged prices of all fresh⁷, frozen⁸ and canned⁹ fruit, all fresh¹⁰, frozen¹¹ and canned¹² vegetable and all frozen¹³ canned¹⁴ and dried¹⁵ beans. Potatoes and fruit cocktails were

¹ Beef price was for lean and extra lean ground beef in \$/lb.

² The retail price for poultry was the average of chicken fresh whole, chicken breast, bone-in, chicken legs bone-in, chicken boneless breast and turkey frozen, whole prices. All prices were in \$/lb.

³ Egg prices were for Grade A eggs and in cents/dozen.

⁴ We took the average of the whole grain bread, rolls, rice, pasta, cereal, whole grain flour and mixes, and whole grain frozen/ready to cook

⁵ We took the average of other bread, rolls, rice, pasta, cereal, other flour and mixes and other frozen/ready to cook grains.

⁶ Dairy prices were the average of low fat milk, low fat cheese and low fat yogurt & other dairy.

⁷ Average prices of apples, apricots, bananas blackberries, cantaloupes, grapefruit, grapes, honeydew, kiwi, mangoes, nectarine, oranges, papaya, peach, pear, pineapple, plums, pomegranate, raspberries, strawberries, tangerines, watermelon.

⁸ Average prices of Apples, mixed berries, blackberries, grapefruit, grapes, oranges, peach, pineapple raspberries, strawberries,

⁹ Average prices of apples, peach, pear and, pineapple.

¹⁰ Average of acorn Squash, artichoke, asparagus, avocados, broccoli, brussell sprouts, butternut squash, cabbage, carrots, cauliflower, corn sweet, cucumbers, green peppers, kale, lettuce iceberg, lettuce romaine, mushrooms, mustard greens, okra, onions, radish, red pepper, spinach, summer squash, sweet potatoes, tomatoes and turnip greens

¹¹ Average of artichoke, asparagus, broccoli, brussell sprouts, corn sweet green peas,, kale, mixed vegetables, mustard greens, okra, spinach, and turnip greens.

¹² Artichoke, asparagus beet cabbage corn sweet, green peas, kale, mixed vegetables, mustard greens olives, pumpkin, spinach, tomatoes and turnip greens.

¹³ Average price of lima beans

¹⁴ Average price of black beans, blackeye peas, great northern beans, kidney beans, lima beans, navy beans and pinto beans.

¹⁵ Average price of black beans, blackeye peas, great northern beans, kidney beans, lentils, lima beans, navy beans and pinto beans

eliminated from our price estimate due to their low nutritional quality. To estimate the number of people eligible for SNAP, we used the 2013 Current Population Survey-Household Size and composition (gender and age) and SNAP eligibility data by income and by household size from the USDA's Food, Nutrition, and Consumer Services.

Data Analysis:

Using the USDA's Economic Research Service Food Availability Data we create the following MyPlate food groups: fruits, vegetables, protein, grains, and dairy. Using USDA's MyPlate dietary guidelines (Table 2), that specify the nutritional needs for individuals based on age and gender and retail price data from USDA, we estimated the cost of following USDA's MyPlate guidelines for consuming three meals daily for the following individuals¹⁶: children (ages 2-4), children (ages 5-7), girls (ages 8-11), girls (ages 12-15), girls (ages 16-17), boys (ages 8-11), boys (ages 12-15), boys (ages 16-17), female adults (ages 18-50), male adults (ages 18-50) and female seniors (ages 51+), and male seniors (ages 51+). In addition, we also estimated the costs for a family of four with the following composition: family of four consisting of one male and female (ages 18-30), and two children (ages 2-4 and 5-7) and another family of four consisting of one male and female (ages 31-50), and two children (ages 8-11 and 12-17). We compared this to the average monthly SNAP allowances by age and gender (Table 6) and estimated the difference between the cost of eating three meals daily according to MyPlate guidelines and the allowance provided by SNAP for each age and gender category. We then estimated the amount of funding increase in SNAP budget needed for SNAP recipients to adhere to a nutritionally sound diet. This was estimated for the number of people enrolled in SNAP and also the number of people eligible but not enrolled in SNAP.

To estimate the number of people eligible for SNAP but not enrolled, we first estimated the total number of people eligible for SNAP. This was done by sorting the Current Population Survey data based on the number of people that met the corresponding threshold income level for each household size (based on the number of people in the household ranging from 1 to 13). The total number of people eligible was subtracted from the number of people currently enrolled.

¹⁶Because the USDA's age categories are different from the SNAP recipient age categories, we adjusted the USDA age categories to correspond to the SNAP recipient age categories. See Table 3 for details.

Description of scenarios:

While MyPlate guidelines encourage the intake of fresh, frozen, and canned fruits and vegetables, we estimate the cost of these separately since the nutritional comparability between canned, frozen, and fresh fruits and vegetables is debatable. Canned fruit and vegetable processing can often lower their nutritional content, such as having high sodium levels [Rickman et al 2009]. Therefore, to estimate the cost of eating three meals daily according to MyPlate guidelines for individuals and families we created six scenarios (see Table 4). The first scenario estimated the cost of adhering to a nutritionally sound diet if the recommended daily consumption of fruits and vegetables were all sourced fresh. The second scenario estimated the cost of adhering to a nutritionally sound diet if half of the daily recommended servings of fruits and vegetables (excluding beans) were sourced fresh and the other half were sourced frozen. We did another variation of Scenario 2 where daily recommended servings of fruits and vegetables included beans. Scenario 3 estimated the cost of adhering to a nutritionally sound diet if one-third of the daily recommended servings of fruits and vegetables (excluding beans) were sourced fresh, one-third were frozen and one-third were canned. Similar to Scenario 2, we calculated two variations of Scenario 3: one which did not include beans and one which included beans. Scenarios 4, 5 and 6 were similar to Scenarios 1, 2 and 3 but catered to a vegetarian diet where the main source of lean protein was beans instead of lean meat/eggs.

Results:

Tables 5 and 7 show the monthly cost required to support a MyPlate diet by age, gender and family size for Scenarios 1 through 6. They also show the monthly budgetary shortfall SNAP recipients if they were to adhere to a nutritionally sound diet. We discuss our estimates for Scenario 1. Our estimates show that if SNAP recipients were to eat a MyPlate diet consisting of fresh fruits and vegetables, the monthly budgetary shortfall on an individual basis is the largest for boys ages 12-17 (\$61/month) and men ages 18-50 (\$74/month), since they have the largest quantity of food consumed compared to all other gender and age groups.

The scenario with the largest budgetary across all individuals by gender, age and family size was Scenario 1 due to the higher cost of eating fresh fruits and vegetables. Amongst families, a family of four with two adults (ages 31-50) and two children (one child ages 8-11 and another

ages 12-17) were the most financially vulnerable and would face a budgetary shortfall of \$297/month to eat a nutritionally sound diet. Similarly, the monthly budgetary shortfall for a family of four with two adults (ages 18-30) and two children (one ages 2-4) and another ages 5-7) would be \$174/month.

Table 8 shows the additional funds needed across all eligible and enrolled SNAP recipients to support a MyPlate Diet. Additionally, it documents the economic activity generated¹⁷ and jobs created¹⁸ if additional funds¹⁹ were invested. Over 62 million people were eligible for SNAP benefits in 2014. Of these 72% were enrolled in SNAP. Thus, almost 18 million people, though eligible, are not enrolled in SNAP. If all eligible and enrolled SNAP recipients were to adhere to a nutritionally sound diet, the SNAP budget would need to increase by \$16.7 billion annually (Scenario 1). If an additional \$16.7 billion was invested in SNAP, it would generate between \$29-31 billion in economic activity and create between 148,000 and 298,000 jobs. If the additional 18 million people that are currently eligible but not enrolled in SNAP were to enroll in SNAP, even at the current level of support, an additional \$29 billion would be needed to support these individuals²⁰.

Discussion

Since the 1970s, the United States has experienced an increase in largely preventable chronic diseases, including obesity, diabetes, and heart disease that are associated with poor diets. It is estimated that the direct medical costs of heart disease in the United States account for nearly \$270 billion annually (Heidenreich et al. 2011). Research has shown that increased consumption of fruits and vegetables according to MyPlate guidelines, could prevent over 127,000 deaths annually from heart disease and the value of this increased longevity would exceed \$11 trillion (USC 2013). For lower-income families, SNAP benefits help provide assistance to consume

¹⁷ The economic activity was calculated using high and low estimates from Zandi (2009) and Hanson (2010). The high estimate based on Zandi (2009) study estimates that each dollar in SNAP benefits generates \$1.84 in economic activity. The low estimate based on Hanson (2010) study estimates that each dollar in SNAP benefits generates \$1.79 in economic activity

¹⁸ The number of jobs created was calculated based on Hanson (2010) study which estimated that for every \$1 billion in SNAP benefits between 8,900-17,900 jobs are created.

¹⁹ This was estimated by multiplying the budgetary shortfall for each age/gender group by the number of individuals enrolled in that age/gender group and summing the additional funds needed across all age/ gender groups.

²⁰ This was estimated by dividing the current funding for SNAP - \$ 72 billion/year by the number of people currently enrolled in SNAP – 62.15 million. Thus, the amount allocated to each individual is \$1619 person/year. We multiply this by the number of people currently eligible BUT not enrolled in SNAP – 17.68 million

heathy foods. However, current benefits from SNAP are insufficient for to support a diet recommended by MyPlate.

To our knowledge, this is the first study to calculate the cost of following MyPlate's dietary recommendations for all food groups (fruits, vegetables, grains, dairy, and protein), including the cost of consuming fresh, frozen, and canned produce. Results from our analysis indicate the current SNAP allowance is insufficient and increased funding (between \$6.2 billion to \$16.6 billion) is necessary to assist low income families in healthy food consumption as recommended by the federal dietary guidelines. However, the additional funding can generate between \$11.2 - \$31 billion in economic activity and create between 56,000 to 298,000 jobs. The analysis can also foster discussion on how increased investment in SNAP could be a strategy to reduce diet-related chronic disease prevalence in this country.

References

1. Centers for Disease Control and Prevention (CDC). Chronic diseases: The power to prevent, the call to control: At a glance 2009.
<http://www.cdc.gov/chronicdisease/resources/publications/aag/chronic.htm>. Updated 2009. Accessed September 17, 2013.
2. Center on Budget and Policy Priorities Policy Basics: Introduction to the Supplemental Nutrition Assistance Program (SNAP). 2015. <http://www.cbpp.org/research/policy-basics-introduction-to-the-supplemental-nutrition-assistance-program-snap?fa=view&id=2226>
3. ERS USDA. 2016. Retail Prices for Beef, Pork, poultry cuts, eggs and dairy products.
www.ers.usda.gov/datafiles/Meat_Price_Spreads/cuts.xls
4. ERS USDA. 2015. Fruit and Vegetable Prices.
<http://www.ers.usda.gov/data-products/fruit-and-vegetable-prices.aspx>
5. ERS USDA. 2012. Quarterly-Food-at-Home-Price-Database 2 (QFAHPD- 2).
<http://www.ers.usda.gov/data-products/quarterly-food-at-home-price-database.aspx>
6. Fox, M.K., Hamilton, W., Hwan-LIn, B., 2004. Effects of Food Assistance and Nutrition Programs on Nutrition and Health, Food and Nutrition Research Service, US Department of Agriculture.

7. FNS. USDA. 2016 Supplemental Nutrition Assistance Program (SNAP)) Eligibility <http://www.fns.usda.gov/snap/eligibility#Income>
8. Gregory CA, Deb P. Does SNAP improve your health? *Food Policy*. 2015. 50:11-19.
9. Gregory, C.A., Ver Ploeg, M., Andrews, M., Coleman-Jensen, A., 2013. Supplemental Assistance Program (SNAP) Participation Leads to Modest. Changes in Diet Quality. Economic Research Report 147, US Department of Agriculture, Economic Research Service.
10. Hanson K. 2010. The Food Assistance National Input-Output Multiplier (FANIOM) Model and Stimulus Effects of SNAP. *Economic Research Report No. (ERR-103) 50 pp, October 2010.* <http://www.ers.usda.gov/publications/err-economic-research-report/err103/report-summary.aspx>
11. Haynes-Maslow, L., Parsons, S.E., Wheeler, S.B., & Leone, L.A. (2013). Understanding barriers to fruit and vegetable consumption among low-income individuals: A Qualitative Study. *Prev Chron Dis, 10*, 1202-1206.
12. Heidenreich, P.A., J.G. Trogon, O.A. Khavjou, J. Butler, K. Dracup, M.D. Ezekowitz, E.A. Finkelstein, Y. Hong, S.C. Johnston, A. Khera, D.M. Lloyd-Jones, S.A. Nelson, G. Nichol, D. Orenstein, P.W.F. Wilson, and Y.J. Woo. 2011. Forecasting the future of cardiovascular disease in the United States: A policy statement from the American Heart Association. *Circulation* 123(8):933–944.
13. Mabli, James and Julie Worthington. 2014. “Supplemental Nutrition Assistance Program Participation and Child Food Security.” *Pediatrics* 133(4): 1-10.
14. Mushi-Brunt, C., D. Haire-Joshu, and M. Elliot (2007). “Food Spending Behaviors and Perceptions Are Associated With Fruit and Vegetable Intake Among Parents and Their Preadolescent Children,” *Journal of Nutrition Education and Behavior* 39:26-30.
15. Rickman JC, Bruhn CM, Barrett DM. Nutritional comparison of fresh, frozen, and canned fruits and vegetables II. Vitamin A and carotenoids, vitamin E, minerals and fiber. *Journal of the Science of Food and Agriculture*. 2007;87(7):1185-1196.
16. Trust for America’s Health. F as in fat: Obesity 2013 report. <http://healthyamericans.org/report/108/>. Washington (DC): 2013.
17. Union of Concerned Scientists. The \$11 trillion dollar reward. How Simple Dietary Changes Can Save Lives and Money, and How We Get There. Washington (DC): 2013.

18. United States Census Bureau 2016. Current Population Survey Household Size and Income. <http://www.census.gov/cps/data/cpsstablecreator.html>
19. USDA. 2015. Supplemental Nutrition Assistance Program. <http://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program-snap>
20. USDA. 2011. Eating Healthy on a Budget The Consumer Economics Perspective.
19. USDA. 2016. The Cost of Satisfying Fruit and Vegetable Recommendations in the Dietary Guidelines. ERS.
20. Zandi M. 2009. The Economic Impact of the American Recovery and Reinvestment Act. https://www.economy.com/mark-zandi/documents/Economic_Stimulus_House_Plan_012109.pdf

Table 1: Average Price of Fruits, Vegetables and Grains.

Food Type	\$/cup	\$/oz
Protein (Lean Beef, Poultry and Eggs)	0.21	
Protein (Beans - frozen, canned, dried)	0.49	0.08
Protein (Beans - frozen)	0.64	0.10
Protein (Beans - canned and dried)	0.62	0.10
Fruits (fresh)	0.82	
Fruits (frozen)	0.72	
Fruits (canned)	0.91	
Fruits (dried)	0.84	
Vegetables (fresh)	0.91	
Vegetables (frozen)	0.95	
Vegetables & beans (frozen)	0.80	
Vegetables (canned)	0.82	
Vegetables & beans (canned and dried)	0.72	
Low fat dairy	0.27	
Whole Grains	0.21	0.21
Non-Whole Grains	0.12	0.12

Table 2: MyPlate Daily Nutrition Guidelines by Age Group

Group	Age	Fruit (cups)	Vegetables (cups)	Grains (ounces)	Whole Grains (ounces)*	Protein (ounces)	Dairy (cups)
Children	2 to 3	1	1	3	1.5	2	2
Children	4 to 8	1.25	1.5	5	2.5	4	2.5
Girls	9 to 13	1.5	2	5	3	5	3
Girls	14 to 18	1.5	2.5	6	3	5	3
Boys	9 to 13	1.5	2.5	6	3	5	3
Boys	14 to 18	2	3	8	4	6.5	3
Women	19 to 30	2	2.5	6	3	5.5	3
Women	31 to 50	1.5	2.5	6	3	5	3
Women	51+	1.5	2	5	3	5	3
Men	19 to 30	2	3	8	4	6.5	3
Men	31 to 50	2	3	7	3	6	3
Men	51+	2	2.5	6	3	5.5	3

Table 3: Corresponding Age Groups SNAP and My Plate

Age Group (SNAP Recipient Data)	Corresponding MyPlate Age Group
Children 2 to 4	Children 2 to 3
Children 5 to 7	Children 3 to 8
Girls 8 to 11	Girls 9 to 13
Girls 12 to 15	Girls 14 to 18
Girls 16 to 17	Girls 14 to 18
Women 18 to 50	Average Women 19 to 30 and Women 31 to 50
Women 51+	Women 51+
Men 18 to 50	Average Men 19 to 30 and Men 31 to 50
Men 51+	Men 51+

Table 4: Description of Scenarios

Scenario No.	Scenario Description				
	<i>Fruits and Vegetables Consumed</i>			<i>Protein</i>	
	Fresh	Frozen	Canned	Beans Counted as Vegetable	Vegetarian Diet
1	100%	0%	0%	No	No
2	50%	50%	0%	No	No
2a	50%	50%	0%	Yes	No
3	33%	33%	33%	No	No
3a	33%	33%	33%	Yes	No
4	100%	0%	0%	No	Yes
5	50%	50%	0%	No	Yes
6	33%	33%	33%	No	Yes

Table 5: Monthly Cost and Budgetary Shortfall to Support MyPlate Diet (Scenarios 1 to 3a)

Age-gender groups	Monthly Cost					Monthly Budgetary Shortfall				
	Scenario 1	Scenario 2	Scenario 2a	Scenario 3	Scenario 3a	Scenario 1	Scenario 2	Scenario 2a	Scenario 3	Scenario 3a
<i>Children</i>										
<i>Ages 2 to 4</i>	\$89.00	\$88.16	\$85.99	\$88.44	\$86.06	(\$69.72)	(\$70.56)	(\$72.73)	(\$70.28)	(\$72.66)
<i>Ages 5 to 7</i>	\$132.09	\$131.18	\$127.92	\$131.27	\$127.70	(\$26.63)	(\$27.54)	(\$30.80)	(\$27.45)	(\$31.02)
<i>Girls</i>										
<i>Ages 8 to 11</i>	\$161.40	\$160.42	\$156.08	\$160.32	\$155.56	\$2.68	\$1.70	(\$2.64)	\$1.60	(\$3.16)
<i>Ages 12 to 15</i>	\$177.50	\$176.80	\$171.37	\$176.19	\$170.24	\$18.78	\$18.08	\$12.65	\$17.47	\$11.52
<i>Ages 16 to 17</i>	\$177.50	\$176.80	\$171.37	\$176.19	\$170.24	\$18.78	\$18.08	\$12.65	\$17.47	\$11.52
<i>Boys</i>										
<i>Ages 8 to 11</i>	\$177.50	\$176.80	\$171.37	\$176.19	\$170.24	\$18.78	\$18.08	\$12.65	\$17.47	\$11.52
<i>Ages 12 to 15</i>	\$219.64	\$218.52	\$212.01	\$218.06	\$210.92	\$60.92	\$59.80	\$53.29	\$59.34	\$52.20

Monthly Cost						Monthly Budgetary Shortfall				
Age-gender groups	Scenario 1	Scenario 2	Scenario 2a	Scenario 3	Scenario 3a	Scenario 1	Scenario 2	Scenario 2a	Scenario 3	Scenario 3a
<i>Ages 16 to 17</i>	\$219.64	\$218.52	\$212.01	\$218.06	\$210.92	\$60.92	\$59.80	\$53.29	\$59.34	\$52.20
<i>Women</i>										
<i>Ages 18 to 50</i>	\$184.68	\$183.63	\$178.21	\$183.35	\$177.40	\$50.38	\$49.33	\$43.91	\$49.05	\$43.10
<i>Ages 51+</i>	\$161.40	\$160.42	\$156.08	\$160.32	\$155.56	\$27.10	\$26.12	\$21.78	\$26.02	\$21.26
<i>Men</i>										
<i>Ages 18 to 50</i>	\$215.26	\$214.14	\$207.63	\$213.67	\$206.53	\$73.84	\$72.72	\$66.21	\$72.25	\$65.11
<i>Ages 51+</i>	\$191.87	\$190.47	\$185.05	\$190.52	\$184.57	\$50.45	\$49.05	\$43.63	\$49.10	\$43.15
<i>Family of Four Male (18-30) Female (18-30) 1 child (2-4) 1 child (5-7)</i>	\$632.60	\$628.33	\$610.97	\$628.29	\$609.25	\$173.60	\$169.33	\$151.97	\$169.29	\$150.25
<i>Family of Four Male (31-50) Female (31-50) 1 child (8-11) 1 child (12-17)</i>	\$756.38	\$752.81	\$730.03	\$750.85	\$725.86	\$297.38	\$293.81	\$271.03	\$291.85	\$266.86

Table 6: Average SNAP Monthly Benefit for Individuals in 2015\$

Age-gender groups	Estimated Average SNAP Monthly Benefit for Individuals in 2015\$
<i>Children</i>	
<i>Ages 2 to 4</i>	\$158.72
<i>Ages 5 to 7</i>	\$158.72
<i>Girls</i>	
<i>Ages 8 to 11</i>	\$158.72
<i>Ages 12 to 15</i>	\$158.72
<i>Ages 16 to 17</i>	\$158.72
<i>Boys</i>	
<i>Ages 8 to 11</i>	\$158.72
<i>Ages 12 to 15</i>	\$158.72
<i>Ages 16 to 17</i>	\$158.72
<i>Women</i>	
<i>Ages 18 to 50</i>	\$141.42
<i>Ages 51+</i>	\$141.42
<i>Men</i>	
<i>Ages 18 to 50</i>	\$141.42
<i>Ages 51+</i>	\$141.42
<i>Family of four</i>	\$459.00

Source: Center on Budget and Food Policy Priorities, 2015

Table 7: Monthly Cost and Budgetary Shortfall to Support MyPlate Diet (Scenarios 4 to 6)

Age-gender groups	Monthly Cost			Monthly Budgetary Shortfall		
	Scenario 4	Scenario 5	Scenario 6	Scenario 4	Scenario 5	Scenario 6
<i>Children</i>						
<i>Ages 2 to 4</i>	\$81.86	\$81.02	\$81.30	(\$76.86)	(\$77.70)	(\$77.42)
<i>Ages 5 to 7</i>	\$117.81	\$116.90	\$116.99	(\$40.91)	(\$41.82)	(\$41.73)
<i>Girls</i>						
<i>Ages 8 to 11</i>	\$143.55	\$142.57	\$142.47	(\$15.17)	(\$16.15)	(\$16.25)
<i>Ages 12 to 15</i>	\$159.65	\$158.95	\$158.34	\$0.93	\$0.23	(\$0.38)
<i>Ages 16 to 17</i>	\$159.65	\$158.95	\$158.34	\$0.93	\$0.23	(\$0.38)
<i>Boys</i>						
<i>Ages 8 to 11</i>	\$159.65	\$158.95	\$158.34	\$0.93	\$0.23	(\$0.38)
<i>Ages 12 to 15</i>	\$196.44	\$195.32	\$194.85	\$37.72	\$36.60	\$36.13
<i>Ages 16 to 17</i>	\$196.44	\$195.32	\$194.85	\$37.72	\$36.60	\$36.13
<i>Women</i>						
<i>Ages 18 to 50</i>	\$165.94	\$164.89	\$164.61	\$31.64	\$30.59	\$30.31
<i>Ages 51+</i>	\$143.55	\$142.57	\$142.47	\$9.25	\$8.27	\$8.17
<i>Men</i>						
<i>Ages 18 to 50</i>	\$192.94	\$191.82	\$191.36	\$51.52	\$50.40	\$49.94
<i>Ages 51+</i>	\$172.24	\$170.84	\$170.88	\$30.82	\$29.42	\$29.46

Age-gender groups	Scenario 4	Scenario 5	Scenario 6	Scenario 4	Scenario 5	Scenario 6
<i>Family of Four Male(ages 18-30) Female (ages 18-30) 1child (ages 2-4) 1 child (ages 5-7)</i>	\$568.35	\$564.08	\$564.03	\$109.35	\$105.08	\$105.08
<i>Family of Four Male(ages 31-50) Female (ages 30-50) 1child (ages 8-11) 1 child (ages 12-17)</i>	\$678.74	\$675.17	\$673.21	\$219.74	\$216.17	\$214.21

Note: Numbers in red indicate that monthly SNAP allowance exceeds monthly cost.

Table 8: Additional Investment needed across all eligible and enrolled SNAP Recipients to support a MyPlate Diet and the economic activity generated and jobs created from the investment

Scenario	Additional Funds Needed	Economic Activity		Jobs Created	
		<i>High Estimate</i> ¹	<i>Low Estimate</i> ²	<i>High estimate</i> ³	<i>Low Estimate</i> ⁴
1	\$16,657,846,753.85	\$30,650,438,027.09	\$29,817,545,689.40	298,175.46	148,254.84
2	\$16,119,021,348.35	\$29,658,999,280.96	\$28,047,097,146.13	288,530.48	143,459.29
2a	\$13,375,797,713.82	\$24,611,467,793.44	\$23,942,677,907.74	239,426.78	119,044.60
3	\$15,984,789,248.26	\$29,412,012,216.81	\$28,612,772,754.39	286,127.73	142,264.62
3a	\$12,976,092,358.78	\$23,876,009,940.16	\$23,227,205,322.22	232,272.05	115,487.22
4	\$6,923,448,125.21	\$12,739,144,550.38	\$12,392,972,144.12	123,929.72	61,618.69
5	\$6,384,622,719.70	\$11,747,705,804.25	\$11,428,474,668.27	114,284.75	56,823.1
6	\$6,250,390,619.62	\$11,500,718,740.09	\$11,188,199,209.11	111,881.99	55,628.48

¹ This was estimated by multiplying the budgetary shortfall for each age/gender group by the number of individuals enrolled in that age/gender group and summing the additional funds needed across all age/ gender groups.

²Using Zandi (2009) estimate that each dollar in SNAP benefits generates \$1.84 in economic activity

³ Using Hanson (2010) that each dollar in SNAP benefits generates \$1.79 in economic activity

⁴ Using Hanson (2010) low estimate of 8,900 jobs created for every \$1billion in SNAP benefits

⁵ Using Hanson (2010) high estimate of 17,900 jobs.