

**Promoting Dietary Quality in SNAP
While Maintaining Emphasis on Preventing Hunger**

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ABSTRACT

Innovations have been proposed and piloted to increase the impact of the Supplemental Nutrition Assistance Program (SNAP) on healthy diets while simultaneously preserving its central role in protecting against hunger. This short discussion paper reviews the rapidly growing research and evaluation literature on these SNAP innovations. SNAP-based incentive programs provide SNAP participants with a considerable financial incentive and generate revenue for farmers' markets. The Summer EBT pilot showed that additional benefits had a beneficial effect in reducing very low food security among children, and also that comparatively more targeted benefits had a bigger impact on fruit and vegetable intake than less targeted benefits have. The Healthy Incentives Pilot showed that a 30% financial incentive could have a positive and statistically significant impact on daily fruit and vegetable intake for adults. New Food Insecurity Nutrition Incentive pilots are evaluating a wide variety of benefit enhancements in a wide variety of retail settings.

Promoting Dietary Quality in SNAP While Maintaining Emphasis on Preventing Hunger

Introduction

The primary goals of the Supplemental Nutrition Assistance Program (SNAP) are (a) above all to protect household food security and prevent hunger and (b) also to promote dietary quality. Program innovations have been proposed and piloted to increase the program's impact on healthy diets while simultaneously preserving its central role in protecting against hunger. This paper briefly reviews the rapidly growing research and evaluation literature on these SNAP innovations.

SNAP is the nation's largest nutrition assistance and anti-hunger program. The program provided \$73.9 billion in targeted benefits to 45.8 million low-income Americans per month on average in fiscal year (FY) 2015. SNAP participants receive benefits through an Electronic Benefit Transfer (EBT) card, similar to a debit card, allowing them to make grocery food and non-alcoholic beverage purchases at authorized retailers.

Previously, a large body of research demonstrated the positive impact of SNAP on household food security. For example, researchers have found that SNAP increased food consumption as the program expanded in the 1970s (Hoynes and Schanzenbach, 2009), raised food security during a period of increased program benefits beginning in 2009 (Nord and Prell, 2011), and increased food security during the 6-month transitional period as individual households began a spell of program participation (Mabli et al., 2013). Yet, even with the beneficial reduction in food insecurity that is attributable to SNAP participation, household food insecurity remains high in SNAP participant households. The most recent USDA estimates show 53.7% of SNAP households were food insecure in 2014 (Coleman-Jensen et al., 2015).

Some have suggested that the federal government should consider enhancements to program benefits, making it easier for participant households to achieve the twin goals of greater food security and improved dietary quality. These two goals may be synergistic rather than competitive; quite plausibly, enhanced household food security could enable greater success in achieving dietary quality. The Institute of Medicine (IOM) recommended that the federal government consider the potential need for benefit adjustments to account for (1) the time needed for at-home food preparation, (2) geographic variation in prices, and (3) differences in neighborhood access to adequate food retail options (Caswell and Yaktine, 2013). A December 2015 report from the Council of Economic Advisers argued that the Thrifty Food Plan, on which the maximum SNAP benefit is based, "may underestimate need among families" (Council of Economic Advisers, 2015). A bi-partisan Congressionally-appointed National Commission on Hunger in January 2016 recommended measures to support state initiatives to enhance food security, and it also recommended measures to ensure that SNAP promotes improved nutrition (National Commission on Hunger, 2016).

This paper reviews some recent research on initiatives or policies to provide low-income households with additional resources to improve their success in achieving high-quality diets. For example, the Summer EBT for Children demonstration, in the summers of 2011 and 2012

offered \$30 or \$60 in additional benefits through the SNAP EBT card or through WIC (the Supplemental Nutrition Program for Women, Infants, and Children) to compensate for the absence of school meals programs in the summer months. SNAP-based incentive programs (SBIP), starting in 2005 have matched funds for SNAP benefits spent at farmers' markets, giving SNAP participants greater purchasing power in direct-to-consumer retail settings (King et al., 2014). The Healthy Incentives Pilot (HIP) in Hampden County, Massachusetts, in 2012 provided a 30% incentive for fruit and vegetable purchases with SNAP benefits (Bartlett et al., 2014). Newer Food Insecurity Nutrition Incentive (FINI) pilots, in 2015 and 2016 will test a variety of incentive programs in a wide range of farmers' markets and other retail settings.

Though not covered in this paper, there also have been proposals for restrictions on sugar-sweetened beverage purchases with SNAP benefits (most recently, National Commission on Hunger, 2016), but to date USDA has declined to approve State-level waiver requests to allow such restrictions, expressing concern that restrictions could increase stigma and deter participation by eligible families (Caswell and Yaktine, 2013). A recent USDA report notes that some policy-makers and researchers have suggested such a policy could directly address overconsumption of SSBs among low-income populations who receive program benefits, while "others have argued that such restrictions would have little impact on consumption patterns because SNAP benefits only cover a portion of the household's total food spending for most SNAP participants" (Todd and Ver Ploeg, 2015). Survey evidence has found that some SNAP participants would support restrictions on benefit use (Long et al., 2014). It may be worthwhile to conduct a pilot jointly addressing food security, program participation, and nutrition outcomes -- not beverage consumption outcomes alone -- but such a pilot has not yet been done.

We focus in this brief paper on selected recent initiatives or policies that work through the household budget constraint, providing additional resources or incentives that could be used for purchases of healthy foods and beverages, in a manner that also directly preserves and supports the program's food security objectives. For recent reviews of the larger relevant research literature, with a wider variety of policy options, see Caswell and Yaktine (2013) and Council of Economic Advisers (2015). The initiatives we review are diverse in terms of their degree of targeting toward particular products. In the first section, we review the potential impact on nutrition quality of increased SNAP resources. In the second section, we review benefits or incentives targeted more specifically toward particular healthy foods, such as fruits and vegetables.

Less-Targeted Initiatives and Policies

The Thrifty Food Plan (TFP) is USDA's lowest-cost model food budget, which serves as a benchmark in SNAP policy. At its heart, the TFP recognizes that low-income households must make tradeoffs between diverse goals: controlling food costs, achieving a healthy diet, and choosing foods and beverages that are well-liked (Wilde and Llobrera, 2009).

In principle, simply having a higher food budget could allow households to purchase healthier foods. The TFP analysis in **Figure 1** illustrates combinations of budgets based on their daily per capita cost (on the horizontal axis) and their difference or "distance" from current average consumption (which may serve as a measure of consumer acceptability, on the vertical axis). For

example, holding the “distance” value constant at 4 units, it would be very inexpensive just to get enough food energy (calories); it would be more expensive to get enough food energy and other important nutrients; and it would be yet more expensive to achieve all of our nutrition goals at once, getting enough food energy, nutrients, and having access to the right amount of foods from each of USDA’s food categories (Wilde and Llobrera, 2009). Thus, more food resources might permit households to achieve more nutritional goals.

As an alternate benchmark for SNAP policy, the IOM urged consideration of using USDA’s Low-Cost Food Plan, which has a higher dollar value than the TFP has, (Caswell and Yaktine, 2013; Council of Economic Advisers, 2015). Similarly, the National Commission on Hunger (2016) recommended that a pilot program test the adoption of the Low-Cost Food Plan.

Whether greater benefits would affect the healthfulness of food purchasing decisions remains an empirical question. An important and intentional feature of SNAP is that it empowers households to purchase their own preferred foods and non-alcoholic beverages through ordinary retail channels. SNAP already does impose some nutritionally relevant restrictions, such as prohibiting restaurant foods in most cases (Wilde, Troy, and Rogers, 2009), but the program permits grocery foods and non-alcoholic beverages with a wide variety of nutrition qualities. Compared with income-eligible nonparticipants, SNAP participants have lower average consumption of several healthy food categories (including fruits, vegetables and whole grains), as well as a lower average value of USDA’s Healthy Eating Index (Condon et al., 2015; Andreyeva et al., 2015). In general, these participant/nonparticipant comparisons do not demonstrate the effect of SNAP on dietary quality, but they do temper expectations that additional untargeted SNAP benefits will necessarily improve nutrition outcomes.

The Summer EBT for Children demonstration, mentioned earlier, tested the impact of \$60 per month in additional nutrition assistance benefits for low-income households with children in 2012 (Collins et al., 2013). Like the proof of concept project that preceded it, the demonstration included two variations or “models” for benefit delivery. In the less targeted SNAP model, EBT benefits could be used for a wide variety of grocery foods and non-alcoholic beverages. In the more targeted WIC model, EBT benefits could be used for particular WIC foods, such as milk, eggs, juice, and fruits and vegetables. Households were randomly assigned to the treatment group, which received additional benefits, or to the control group, which did not. Households participating in the study were surveyed at three time points, answering questions about food security, children’s food and beverage intake, and other topics. Although evaluation of the demonstration also included implementation and cost-effectiveness components, this paper highlights the impact of the Summer EBT demonstration.

The additional resources in Summer EBT in 2012 reduced the prevalence of food insecurity among children in study households, compared to the control group. On average, receiving additional benefits lifted almost one in three children in the treatment group out of very low food security (Collins et al., 2013). Within the treatment group, the magnitude of this decline was similar, regardless of benefit delivery model. An extension to the study found that the impact of Summer EBT in 2013 on food security from a \$60 benefit was not significantly different from the impact from a \$30 benefit (Collins et al., 2014). The impact of the Summer EBT pilot for comparatively healthy food categories depended on the model of benefit delivery. For example,

the Summer EBT in 2012 increased daily fruit and vegetable intake for children by almost 13%. This increase was statistically significant but smaller in the SNAP model than in the more targeted WIC model (see **Figure 2**) (Collins et al., 2013). Such differences in impact were not necessarily due to different levels of targeting toward particular products alone. Demonstration site-specific factors may also explain why the WIC model had larger effects for certain outcomes (Collins et al., 2013). Despite these differences, both the SNAP and WIC models had positive effects on food security and children's dietary intake.

More-Targeted Initiatives and Policies

SNAP-based incentive programs (SBIP) vary in terms of incentive structures, implementation strategies, and evaluation indicators (King et al., 2014). Operating at farmers' markets across the country, SBIPs match SNAP benefits, for example, with one dollar of incentives for every SNAP dollar spent. Incentives may be earmarked for fruits and vegetables or may be redeemable for any SNAP-eligible items sold at farmers' markets. In a study of 103 SBIP organizations, only 14 reported tracking farmers' market-level indicators (King et al., 2014), so available evaluation data do not capture the full breadth of SBIP activities and impacts. Data on over 179 farmers' markets demonstrate that the median values of SNAP redemptions and redeemed incentives in calendar year (CY) 2012 were \$1,122 and \$565 respectively (King et al., 2014). These outcomes suggest that SBIPs play a role in attracting SNAP participants to farmers' markets and generating revenue for farmers. Several organizations that have been operating SBIPs were awarded grants in FY 2014 and FY 2015 to expand their programs to additional farmers' markets (USDA Office of Communications, 2015).

The Healthy Incentives Pilot (HIP), in Hampden County, Massachusetts, randomly assigned SNAP households to receive or not receive a 30 percent incentive for purchases of Targeted Fruits and Vegetables (TFVs). Unlike SBIPs, which take place exclusively at farmers' markets, HIP was carried out in several types of food retailers, including supermarkets, superstores, and convenience stores (Bartlett et al., 2014). The TFVs included the same types of fruits and vegetables eligible for WIC's Cash Value Voucher (CVV).

The main impact of HIP was to increase daily fruit and vegetable intake for adults by 0.24 cup-equivalents, an increase of 26% over the control group (**Figure 3**). That overall increase was about what one would expect from a 30% incentive. This impact would be enough to reduce the "fruit and vegetable intake gap" -- the difference between current consumption and federal recommendations for total fruit and vegetable intake -- by 18 percent. In other words, the HIP impact was large enough to matter, but it would not on its own bring diets into agreement with nutrition recommendations. A follow-up study, considering the pilot costs and the expected health outcomes from increased fruit and vegetable intake, concluded that HIP was highly cost-effective (An, 2015).

The HIP pilot included some surprises, which may have implications for thinking about extending such a policy nationwide. Although the total impact on fruit and vegetable intake was about what one would expect, the impact more specifically on fruit and vegetable purchases that earned the incentive was smaller than expected, so the amount of incentives earned also was smaller than expected (Wilde et al., 2015). Fruits and vegetables might be acquired in several

ways that did not earn the incentive: purchases from retailers that did not elect to participate in HIP accounted for about 40% of SNAP redemptions in Hampden County; purchases with cash income rather than EBT benefits did not earn the incentive; and some fruit and vegetable sub-categories (such as white potatoes and fruit juices) were not eligible for incentives. It is not clear why HIP had a positive effect even on fruit and vegetable spending that was ineligible. One possibility is that participants misunderstood which stores were participating or which fruits and vegetables were eligible. If so, a longer-term national program might have larger effects than the pilot had, because participants would learn over time how to use the incentive more effectively. Another possibility is that HIP had an indirect marketing or nutrition education impact, encouraging participants to improve their fruit and vegetable consumption in multiple ways, including ways that did and did not earn the incentive. In this sense, HIP might be similar to the long tradition in food marketing of combining advertising communication with a coupon or other concrete financial incentive.

Building on this line of research, the 2014 Farm Bill (the Agriculture Act of 2014) authorized new Food Insecurity Nutrition Incentive (FINI) pilots (USDA National Institute of Food and Agriculture, 2015). This program includes 16 pilot projects, seven multi-year community projects, and 8 multi-year large-scale projects. These larger FINI projects were awarded to grantees, including Wholesome Wave, the Fair Food Network, the state of Massachusetts, and the American Association of Retired Persons Foundation, which are testing a wide variety of incentive programs. Project sites include farmers' markets, community supported agriculture programs, and supermarkets owned by large food retail chains. Five of the larger FINI projects each are focusing efforts within a single state, whereas three large-scale grantees each are targeting locations in multiple states. In addition to using grant money toward incentives for SNAP-participating consumers, grantees like the Fair Food Network are investing funds in EBT technology (USDA National Institute of Food and Agriculture, 2015). A forthcoming national evaluation of the larger projects will assess changes in fruit and vegetable purchasing and intake, food security, and dietary quality (USDA Food and Nutrition Service, 2015).

Conclusion

Recent and ongoing research is investigating methods for enhancing SNAP benefits in ways that promote dietary quality while at the same time preserving the program's main goal of protecting household food security. SNAP-based incentive programs provide SNAP participants with a considerable financial incentive and generate revenue for farmers' markets. The Summer EBT pilot showed that additional benefits had a beneficial effect in reducing very low food security among children, and also that comparatively more targeted benefits had a bigger impact on fruit and vegetable intake than less targeted benefits have. The Healthy Incentives Pilot showed that a 30% financial incentive could have a positive and statistically significant impact on daily fruit and vegetable intake for adults. New Food Insecurity Nutrition Incentive pilots are evaluating a wide variety of benefit enhancements in a wide variety of retail settings.

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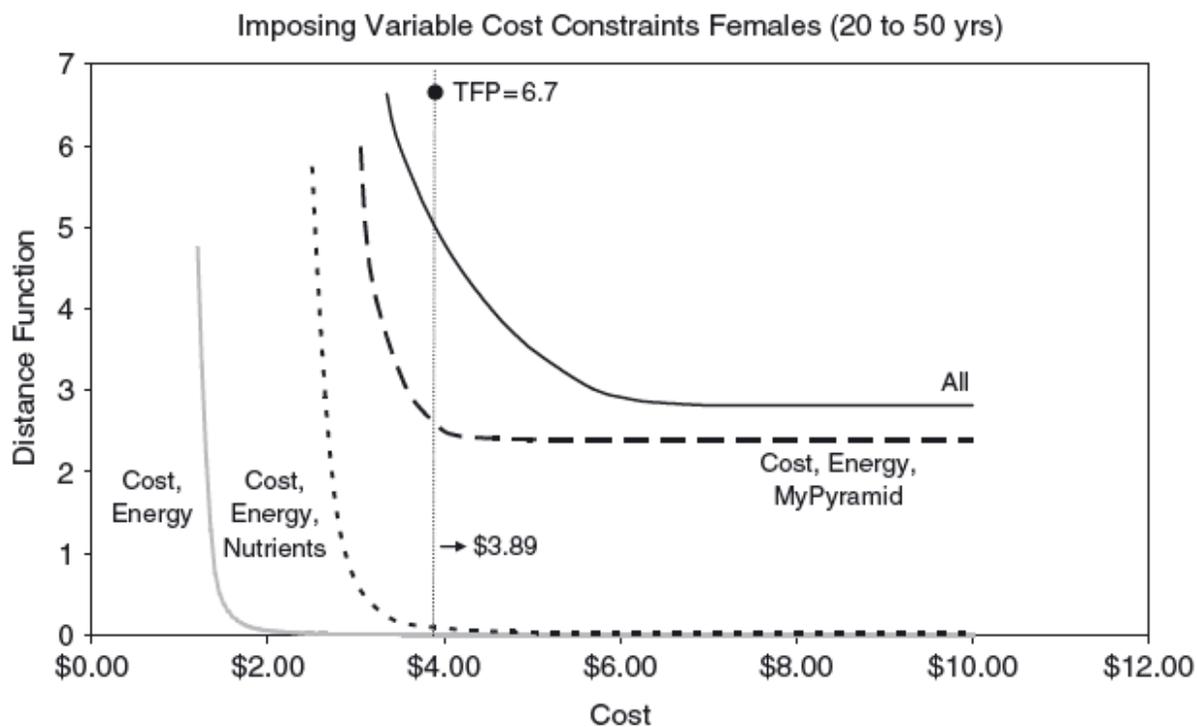
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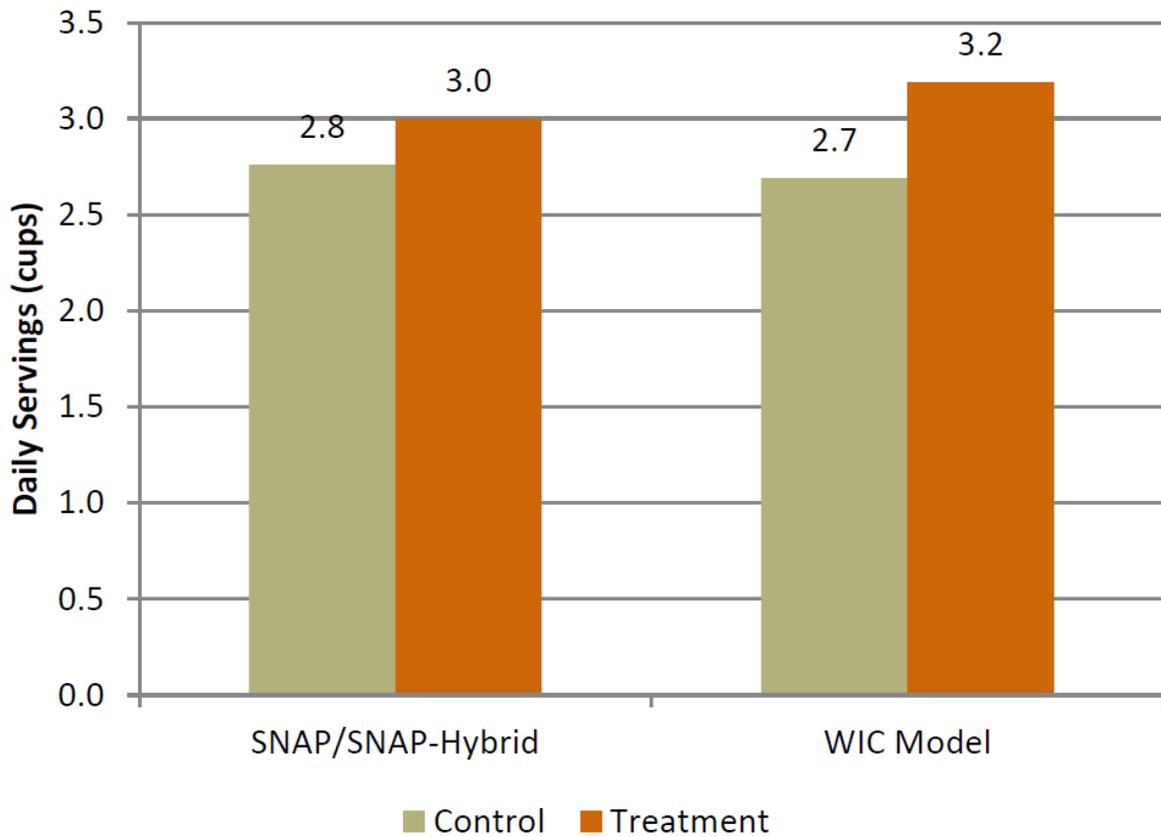
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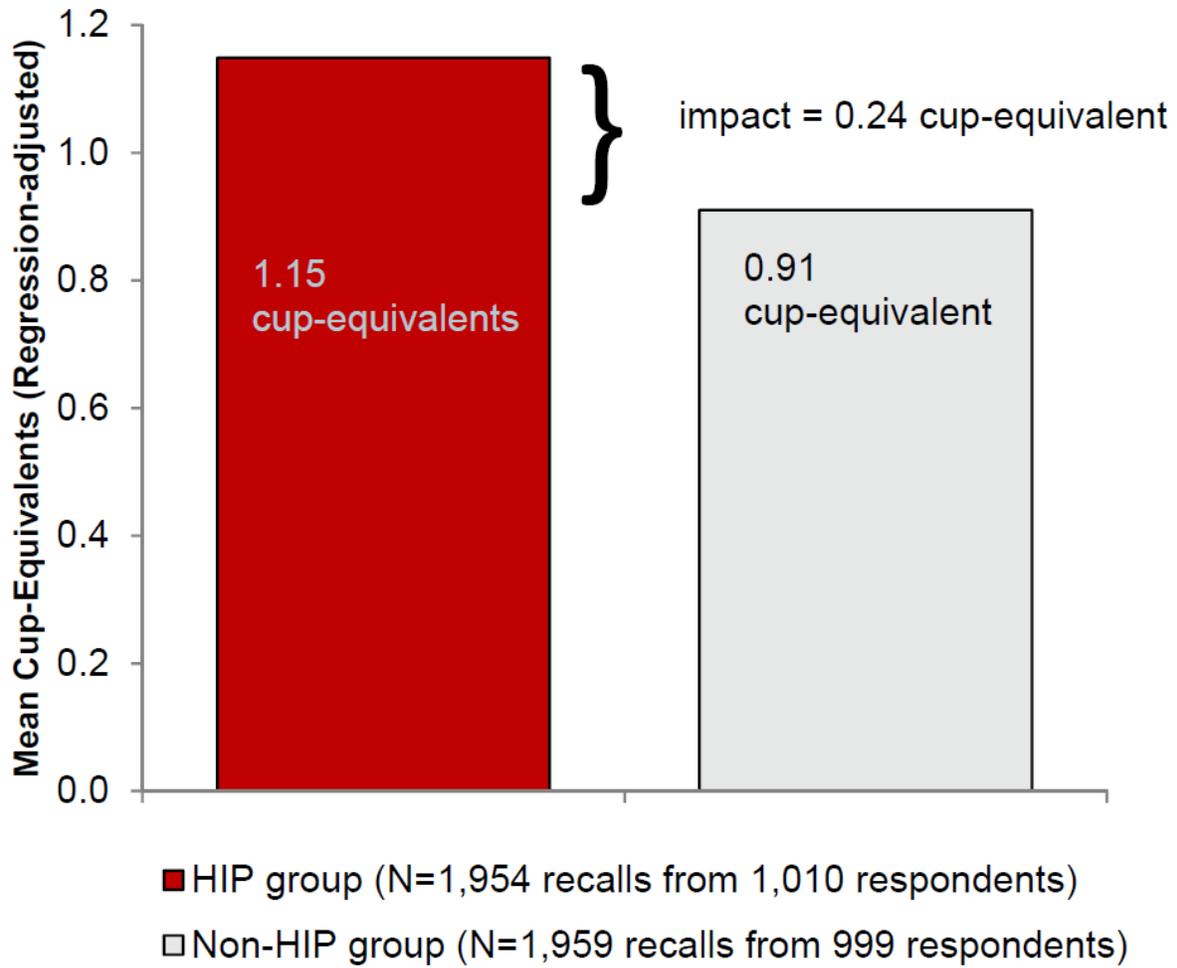
Source: Wilde and Llobrera, 2009. Note: the “distance function” shows how different a model diet is from current average consumption. Four scenarios show the cost of additional nutrition constraints: (1) Energy, (2) Energy and MyPyramid Categories, (3) Energy and Nutrients, (4) All of the Preceding Constraints.

Figure 1. The daily per person cost of a model diet increases as more nutritional goals are considered.



Source: Collins et al., 2013. Note: Daily fruit and vegetable intake increased by 0.2 servings with \$60 in the SNAP model, and by 0.5 servings with \$60 in the WIC model.

Figure 2. In the Summer EBT Pilot, a \$60 monthly EBT benefit had a larger impact on daily fruit and vegetable intake in the WIC model than in the SNAP model.



Source: Bartlett et al., 2014.

Figure 3. HIP participants consumed 0.24 cup-equivalents more fruits and vegetables per day.