Strengthening Healthy Food Access through SNAP: Building the Evidence

Background

Everyone deserves access to delicious, affordable, nutritious food.

Yet we have a food system designed to push profits, often at the expense of our health. Food manufacturers make more money by marketing and selling unhealthy food and ensuring these products are cheap and available in bulk wherever we shop.1-3

And there are widespread disparities in access to foods that support health. For example, six out of 10 people who participate in the Supplemental Nutrition Assistance Program (SNAP) point to cost as a major barrier to healthy eating.7 SNAP participants and other people with low incomes may also be disproportionately exposed to unhealthy food marketing and lack of quality, affordable, nutrient-dense food in nearby stores.8, 9

How does SNAP impact healthy food access?

SNAP aims to improve participants’ food security and their purchasing power to access a nutritious diet.10, 11 SNAP has many positive public health impacts; the program helps to reduce poverty, food insecurity, and health care expenditures, and it lowers the risk of chronic conditions later in life.12-17

Yet nearly nine in ten SNAP participants still report some type of barrier to achieving a healthy diet.7 Additional strategies could further strengthen the nutritional and broader public health impacts of SNAP.

In polling and focus groups, SNAP participants have expressed interest in numerous strategies, including increasing overall benefits, strengthening nutrition incentives, testing not including sugar-sweetened beverages (SSBs) in SNAP, and ensuring healthy options are available and promoted in SNAP retailers.
Piloting SNAP strategies

The following table presents the results of a literature review of peer-reviewed research between 2010 and March 2021 that assessed the impact of four specific interventions in SNAP: 1) benefit increases, 2) fruit and vegetable incentives, 3) removing SSBs as a SNAP-eligible item, and 4) combined incentives/ removing SSBs as a SNAP-eligible item. The interventions were measured on the following outcomes: diet quality; fruit and vegetable intake or purchases; SSB intake or purchases; and diabetes or cardiovascular disease events or deaths.\(^a\) The table also shows national peer-reviewed surveys in the same timeframe that assessed support for these four strategies among SNAP participants and other respondents with low incomes. In the subsequent section, we discuss further research needed to evaluate the potential of these and additional strategies more fully.

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\(^a\) Appendices to these materials can be shared, including the search methodology, exclusion criteria, and complete tables of research and survey studies (which note magnitude of change).
## Intervention

<table>
<thead>
<tr>
<th>Benefit Increase</th>
<th>Peer-Reviewed Research Findings (n = 10; see Appendix for complete table of research studies)</th>
<th>National Peer-Reviewed Survey Findings (n = 4; see Appendix for complete table of surveys)</th>
</tr>
</thead>
</table>
| **Overall Diet Quality** | - HEI: no change\(^2\), decreased\(^1\)  
  - Fruits & Vegetables (F/V):  
    - F/V intake: increased\(^4\), no change\(^3\) | - 82% support providing SNAP participants with more dollars to guarantee that they can afford a healthy diet\(^6\)  
  - 89% support providing SNAP participants more benefits to guarantee enough to eat and good nutrition\(^5\)  
  - 86% support providing SNAP participants with additional benefits\(^6\)  
  - 87% support increasing benefits by 15%\(^7\)  
  - 90% support increasing the minimum from $16 to $30\(^7\) |
| **Fruits & Vegetables (F/V):** | - Fruit intake: increased\(^11\), 12  
  - Fruit purchases: increased\(^9\) |  
| **Discretionary Items:** | - SSB intake: no change\(^8\)  
  - Added sugar intake: no change\(^8\) |  
| **Health Impact:** | - Diabetes person-years averted over 10 years: no change\(^2\)  
  - CVD deaths averted over 10 years: no change\(^2\) |  
| Combined intervention: fruit & vegetable incentives + SSBs removed as a SNAP-eligible item | **Overall Diet Quality:** |  
| (note: Harnack & French studies also do not include candy, baked goods) | - HEI: increased\(^8\)  
  - Fruits & Vegetables (F/V):  
    - F/V intake: increased\(^11\), 12  
    - Fruit intake: increased\(^11\), 12  
    - Fruit purchases: increased\(^9\)  
    - Vegetable intake: no change\(^8\)  
  |  
| **Discretionary Items:** | - SSB intake: decreased\(^9\)/ SSB purchases: decreased\(^9\)  
  - Added sugar intake: no change\(^8\) |  
| **Health Impact:** | - Change in diabetes events over 10 years: -65K\(^10\)  
  - Total CVD events over 10 years: -182K\(^10\)  
  - CVD deaths over 10 years: -20K\(^10\) |  
| F/V Incentive | **Overall Diet Quality:** |  
| **Fruits & Vegetables (F/V):** | - HEI: increased\(^2\), 11 no change\(^8\)  
  - F/V intake: increased\(^11\), 12  
  - Fruit intake: increased\(^11\), 12  
  - Fruit purchases: increased\(^9\)  
  - Vegetable intake: no change\(^8\)  
  |  
| **Discretionary Items:** | - SSB intake: decreased\(^9\)/ SSB purchases: no change\(^9\)  
  - Added sugar intake: no change\(^8\) |  
| **Health Impact:** | - Diabetes person-years averted over 10 years: no change\(^2\)  
  - Diabetes incidence per 100,000 over 10 years: decreased\(^2\)  
  - Obesity prevalence over 10 years: decreased\(^12\)  
  - CVD deaths averted over 10 years: no change\(^2\)  
  - Change in diabetes events over 10 years: -56\(^10\)  
  - Total CVD events over 10 years: -72K\(^10\)  
  - CVD deaths over 10 years: -6K\(^10\) |  
| SSBs removed as a SNAP-eligible item | **Overall Diet Quality:** |  
| (note: Harnack & French studies also do not include candy, baked goods) | - HEI: increased\(^2\), no change\(^8\)  
  - F/V intake: N/A\(^12\)  
  - Fruit intake: no change\(^8\)/ Fruit purchases: no change\(^9\)  
  - Vegetable intake: no change\(^8\)  
  |  
| **Discretionary Items:** | - SSB intake: no change\(^8\), decreased\(^14\)/ SSB purchases: decreased\(^9\)  
  - Added sugar intake: no change\(^8\) |  
| **Health Impact:** | - Diabetes person-years averted over 10 years: 506K\(^2\)  
  - Diabetes incidence per 100,000 over 10 years: decreased\(^2\)  
  - Obesity prevalence over 10 years: decreased\(^13\)  
  - CVD deaths averted over 10 years: 51.8K\(^2\) |  
| 54% support removing sugary drinks from the list of products that can be purchased with SNAP\(^4\)  
  | 54% support removing sugary drinks from products allowed under SNAP\(^5\)  
  | 48% support removing sugary drinks from the allowable products for purchase with SNAP benefits\(^6\)  
  | 44% support removing SSBs from list of foods eligible for purchases through SNAP\(^7\) |
Conclusion

Among the four interventions, survey respondents were most supportive of a benefit increase and fruit and vegetable incentives, followed closely by the combined model. The removal of SSBs as a SNAP-eligible item was the least popular strategy. The combined model demonstrated the largest potential nutritional impact. However, in our review of the literature we found that across all four intervention strategies, rigorous evaluation research on their effectiveness is limited.

Below, we indicate high-level takeaways from our review, future research needs related to these four interventions, and additional strategies to explore. Researchers and policymakers should consider prioritizing well-designed SNAP pilots informed by the best available evidence and input from SNAP participants. However, model pilot designs will vary to best suit each state’s needs and SNAP infrastructure.

- **SNAP benefits:** There is limited research on the impact of a SNAP benefit increase on fruit and vegetable intake, diet quality, and other health outcomes, and studies varied widely in the extent of a benefit increase. Recent temporary pandemic benefit boosts offer ripe areas for research, including the level of a boost that would impact nutritional and other health outcomes meaningfully. Even with the 2021 Thrifty Food Plan update, SNAP benefits fall short of the cost of a meal in 21% of U.S. counties. 18

- **The combined model:** Combining incentives for fruits and vegetables and not including SSBs in SNAP may generate significant nutritional health benefits and cost savings. Most individuals that participate in SNAP support this combined strategy. Yet, current research is limited to simulation studies or studies conducted among non-SNAP participants. A pilot among SNAP participants would offer valuable insight into this strategy’s health potential, technical feasibility, cost-effectiveness, and possible unintended consequences.

- **SNAP incentives for fruits and vegetables:** There is limited research on the impact of SNAP incentives on dietary intake and nutritional outcomes. The Nutrition Incentive Hub will play a critical role in filling in research gaps related to SNAP incentives in the coming years. The Hub plans to conduct “rigorous, systematic, comprehensive, and shared evaluation of participant-level outcomes across GusNIP nutrition incentive projects” and “disseminate key findings to grantees, nutrition incentive practitioners, policymakers, USDA, and Congress”. 19, 20

- **Retail strategies:** Future studies could explore how SNAP participants interact with the food environment—including whether participants are disproportionately targeted by

Evaluation metrics may include:
- Impact on SNAP participation
- Food security status
- Diet quality and other health outcomes
- Retailer operability
- Broader food system impact
- Cost-effectiveness
- SNAP participant feedback
unhealthy food marketing in-store and online—and the potential of retail strategies to support nutritional outcomes.

- Polling and focus groups with SNAP participants in Arkansas, Iowa, Massachusetts, and North Carolina indicate support for ensuring SNAP stores stock and promote a variety of nutrient-dense options at affordable prices. Strategies of particular interest include removing unhealthy items at point-of-sale displays, reducing price promotions on less healthful foods, and offering 2-for-1 specials and coupons for healthy food.\(^4, 6, 21\)

- Researchers can partner with retailers to pilot and evaluate healthy marketing interventions that could be integrated into SNAP policies. Behavioral economic strategies might include placement, price, and promotion strategies. For example, a checkout aisle that features healthy foods could reduce unhealthy impulse purchases, and prominent placement of healthier items and a nutritionally balanced default online shopping cart could make it easier for shoppers to find healthy options online.\(^22, 23\)

- **Inclusion of hot prepared foods:** Future research could assess the inclusion of nutrient-dense hot prepared foods in SNAP. In a national survey of 1,808 adults in the United States with household income below 250% of the federal poverty level, nearly 85% support allowing the purchase of hot prepared foods with SNAP.\(^24\)

For more information, please contact the Center for Science in the Public Interest at policy@cspinet.org.

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**References in Research Table**


**References in Text**


11. 7 U.S.C §2011.


