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Strengthening Nutrition Security 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, 2]

And there are widespread disparities in access to foods that support health. Racial disparities in nutrition-related chronic disease rates stem in part from generations of discriminatory policies that create barriers to land ownership and economic resources.[3, 4] Targeted food industry marketing to people with low incomes and people of color compounds disparities.[5, 6]

These forces contribute to a serious social, economic, and health problem: poor diet quality and diet-related diseases are leading contributors to death and disability in the United States. The COVID-19 crisis underscored the issue as obesity is a significant risk factor for hospitalization and death from the virus.[7] Further, people with low-incomes and from racial minority backgrounds are more likely to suffer from diet-related diseases, compared to those with higher incomes and non-Hispanic White individuals.[8-12]

The Supplemental Nutrition Assistance Program (SNAP) is well positioned to play a role in addressing these inequities.[13] As the nation's largest federal nutrition assistance program – with more than 240,000 participating retailers and accounting for eight percent of all foods purchased for home consumption – SNAP has the potential to leverage the food environment to support healthy eating for all.[14] Alongside healthy food policies throughout the food system – such as in schools, hospitals, and correctional facilities – nutrition-oriented SNAP strategies should be considered.

How does SNAP address food and nutrition insecurity?

SNAP helps to alleviate poverty and food insecurity, especially when benefits are adequate.[16] There is substantial evidence that SNAP benefit levels are insufficient and that offering additional benefits is associated with increased food security.[17] Further reducing barriers to accessing the program and permanently increasing benefits should remain a priority.

Yet evidence does not show that a benefit increase alone would significantly improve nutrition insecurity, as measured through diet quality, nutritional intake, and diet-related disease. Nutrition strategies are also needed.

The communities in which SNAP participants live may be ***uniquely exposed to the worst of our food system***, including unhealthy food marketing, widespread availability of unhealthy options, and lack of affordable food options.[6, 15]

Piloting SNAP pricing strategies

The following chart indicates nutritional gaps that may remain following a benefit increase and the potential benefits of layering an additional nutrition strategy on top of a benefit increase: combining incentives for fruits and vegetables with an intervention aimed at reducing consumption of sugar-sweetened beverage (SSBs). This approach could generate significant nutritional health benefits and cost savings. Importantly, surveys suggest that most individuals that participate in SNAP support this combined strategy.[a]

Intervention	Peer-Reviewed Research (n = 17; see Appendix for complete table of research studies)	National Peer-Reviewed Surveys (n = 5; see Appendix for complete table of surveys)
Benefit Increase	Food Security: • very low food security: decreased [18]/ % food insecure: decreased [18], no change[19] Overall Diet Quality: • HEI: no change[19], decreased[20] Fruits & Vegetables (F/V): • F/V intake: increased[18], no change[20] Discretionary Items: • SSB intake: no change[18, 20] • Added sugar intake: no change[18] Health and Economic Impact: • Diabetes person-years averted over 10 years: no change[19] • CVD deaths averted over 10 years: no change[19] • QALYs saved over 10 years: no change[19] • Total costs over 10 years: -$5.2B[19] • Cost-effectiveness ratio over 10 years: N/A[19]	• 82% support providing SNAP participants with more dollars to guarantee that they can afford a healthy diet[21] • 89% support providing SNAP participants more benefits to guarantee enough to eat and good nutrition[22] • 86% support providing SNAP participants with additional benefits[23] • 87% support increasing benefits by 15%[24] • 90% support increasing the minimum from $16 to $30[24]
Combined Incentive & SSBs not in SNAP (note: Harnack & French also do not include candy, baked goods)	Food Security: • % food insecure: decreased[25] Overall Diet Quality: • HEI: increased[25] Fruits & Vegetables (F/V): • Fruit intake: increased[25] /Fruit purchases: increased[26] • Vegetable intake: no change[25] Discretionary Items: • SSB intake: decreased[25]/ SSB purchases: decreased[26] • Added sugar intake: no change[25] Health and Economic Impact: • Change in diabetes events over 10 years: -65K[27] • Total CVD events over 10 years: -182K[27] • CVD deaths over 10 years: -20K[27] • QALYs saved over 10 years: +156K[27] • Healthcare cost savings over 10 years: $9B[27]	• 75% would support the policy if it included additional money to SNAP participants that can only be used on fruits, vegetables, or other healthful food in addition to the removal of sugary drinks[21] • 76% supported pairing monetary incentives for fruits and vegetables with exclusions for sugary beverages[22]

[a] The full research chart focuses on studies from the past ten years that assess the impact of four distinct interventions – benefit increase, incentive, SSB reduction strategy, and combined incentive/ SSB reduction – on additional nutritional outcomes beyond just food insecurity. 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).

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SSBs account for nearly half of all added sugar intake and are linked to heart disease, diabetes, and tooth decay.[28-32] The average child consumes triple the recommended amount of added sugars, and half of that comes from SSBs.[33]

USDA has yet to approve state waivers to test SNAP strategies to reduce SSB consumption, so 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.

USDA should consider approving waivers – and dedicating research funds – for well-designed pilots that are informed by the best available evidence and SNAP participant input. Model pilot designs will vary by state to best suit each state's needs and SNAP infrastructure, and could take in to account the following considerations:

- **Center the voices of SNAP participants.** Individuals that participate in SNAP should be involved in design, implementation, and evaluation of the pilot.
- **Define target foods.**
    - GusNIP defines qualifying fruits and vegetables as "any variety of fresh, canned, dried, or frozen whole or cut fruits and vegetables without added sugars, fats, or oils, and salt (i.e., sodium)." A broad definition such as this would maximize fruit and vegetable consumption.
    - SSBs are a logical choice for a reduction target as they have no nutritional value and are linked to numerous poor health outcomes. The pilot should clearly define SSBs to help retailers and participants differentiate between SNAP eligible and non-eligible products, as they do for hot food and non-food items. The SWEET Act offers a model for how to define SSBs.[36] Researchers could also see how SSBs are defined through state sales tax laws.
- **Consider optimal incentive and SSB reduction models.** Research indicates the following optimal designs, if possible:
    - Incentives: instant electronic incentive (in contrast to a physical rebate that relies on tokens or coupons and can lead to "incentive loss" through lower redemption rates). 100% (dollar-for-dollar) match rate.[37]
    - SSB reduction strategies might include: SSBs are not included as SNAP-eligible foods or participants receive $0.30 less per $1 spent on SSBs.[25, 27]
- **Include a robust evaluation plan.** Evaluation metrics might include participant feedback, food insecurity, diet and other health outcomes; participation; retailer operability; broader food system impact, and cost effectiveness.

Additional fruit and vegetable benefits: ***"It would benefit me a lot because no matter how much I try and make it stretch, it doesn't ever seem to stretch."***

Testing not including SSBs in SNAP: ***"It would help to keep me more health conscious because that way my kids and husband won't buy sodas anymore."***

Quotes from North Carolina and Iowa focus groups. Participants were asked to respond to proposed nutrition-oriented SNAP strategies.[2, 34, 35]

Nutrition Security and SNAP: seeing what works

USDA has made incredible progress in the first half of 2021 to lay the groundwork to further improve food security through SNAP and address inequitable barriers to accessing the program. To make significant progress towards reducing nutrition insecurity through SNAP, USDA should consider piloting nutrition-oriented strategies. This brief outlines the state of the evidence of the impact of a SNAP benefit increase, fruit and vegetable incentives, and SSB reduction strategies on nutritional outcomes. Research shows the combined incentive and SSB reduction strategy is widely supported by SNAP participants and has the potential to significantly reduce costs and improve nutritional outcomes. Additional briefs may focus on other nutrition-oriented SNAP strategies, such as ones that incentivize participating retailers to stock and promote healthy foods.

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