Importance of the Supplemental Nutrition Assistance Program in Rural America

There is great interest in reshaping the Supplemental Nutrition Assistance Program (SNAP) so that it better supports family nutrition, and an array of program changes have been proposed.

We note the importance of considering the unique needs of rural SNAP participants when considering and implementing these changes. We also describe the SNAP-related needs and challenges unique to rural SNAP participants, and through this lens we discuss changes to SNAP that have been proposed and special considerations related to each. The special considerations we identified include allowing canned, frozen, and dried fruits and vegetables as eligible items in financial incentive programs in rural areas; changing direct education programming to address transportation-related barriers many rural families face in attending in-person classes; and supporting rigorous research to evaluate the potential benefits and unintended consequences of proposed program changes for which scant high-quality evaluation data exist.

Evaluation studies should include rural SNAP participants so that effects in this important population group are known. (*Am J Public Health*. 2019;109: 1641–1645. doi:10.2105/AJPH.2019.305359)

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See also the *AJPH* Supplemental Nutrition Assistance Program section, pp. 1631–1677.

The Supplemental Nutrition Assistance Program (SNAP) is often thought of as a program that primarily supports Americans living in urban areas. But in actuality the program is vital to Americans residing in rural areas. Both poverty[1] and SNAP participation[2] rates are higher in rural than urban areas. In addition, there are rural disparities in morbidity and mortality[3,4] that are believed to be in part attributable to higher rates of obesity[5] and poorer diet quality[5] among those living in rural compared with those living in urban areas.

We describe the SNAP-related needs and challenges unique to rural SNAP participants, and through this lens we discuss changes to SNAP that have been proposed so that it better supports family nutrition. In addition, we provide recommendations that may serve as a roadmap for policymakers and program administrators as they consider and implement program changes.

POVERTY AND SNAP IN RURAL UNITED STATES

Since the 1960s, when the US government began systematically recording poverty rates, there has been a higher prevalence of poverty in rural than in urban areas. This disparity persists, with the 2017 American Community Survey finding a nonmetropolitan poverty rate of 16.4% compared with 12.9% for metropolitan areas.[1]

Concomitant with a higher poverty rate, SNAP participation is higher in rural than in urban areas. An analysis of 2012–2016 American Community Survey data and US Department of Agriculture's (USDA) *Characteristics of Supplemental Nutrition Assistance Program Households: Fiscal Year 2016* data found that SNAP participation was higher in households in nonmetropolitan (16%) counties than in with households in metropolitan counties (13%).[2]

RURAL HEALTH DISPARITIES IN THE UNITED STATES

Numerous studies have documented higher rates of morbidity and mortality among Americans residing in rural than in urban areas. For example, a Centers for Disease Control and Prevention report of leading causes of death in rural and urban areas in the United States from 1999 to 2014 found higher age-adjusted death rates in rural areas for all five of the leading causes of death.[3]

Rural–urban health disparities are believed to be in part attributable to nutrition-related risk factors, including higher rates of obesity and poorer diet quality among those living in rural than those living in urban areas. For example, data from the 1999–2006 National Health and Nutrition Examination Survey show a higher prevalence of obesity among adults in rural (35.6%) than in urban (30.4%) areas.[5]

FOOD ACCESS IN RURAL AREAS

Those in rural areas are among the population groups most affected by poor access to supermarkets,[6] and this is concerning because supermarkets are generally a better source of healthful foods than are other food stores, such as convenience stores, and food prices tend to be lower at supermarkets.[6]

Findings from nearly all qualitative studies of low-income rural adults suggest that supermarkets are the preferred source of groceries despite access issues,[7–11] but transportation time and costs (e.g., cost of gas) are challenges reported in accessing supermarkets.[7,9–11] Also, being able to afford food remained a challenge even when shopping at supermarkets.[7,9,11]

A variety of food procurement and storage strategies are

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used by low-income rural residents to address supermarket access and food affordability challenge, including using deep freezers to accommodate less frequent visits to supermarkets or to take advantage of sales (i.e., stocking up on sale items)[7]; carefully planning shopping trips to take advantage of sales at different stores[9–11]; and going to retailers such as convenience stores for filler items needed between visits to the supermarket.[7,9,10] A variety of nonretail sources of food are also used, including hunting and fishing,[7,11] foraging (e.g., picking wild berries),[7] home gardening,[7,11,12] raising livestock,[7] and direct farm to customer sales (e.g., orchards, farm stands, flea markets, buying a side of beef directly from farmer and farmers markets).[7,11,12]

RESHAPING SNAP FOR RURAL PARTICIPANTS

There has been growing interest in considering ways to reshape SNAP so that it better meets its objective to help families buy the food they need for good health, and a wide variety of program changes have been suggested or are in the process of being implemented. Although program changes are needed to optimize it, policymakers and program administrators need to carefully consider the unique needs of rural SNAP participants in the process of planning changes (see the box on page 1643).

Incentives for Fruit and Vegetable Purchases

Offering a financial incentive for the purchase of fruits and vegetables (F&V) using SNAP benefits is a promising approach for increasing fruit and vegetable intake. Findings from community-based experimental trials support this approach.[13–15] One of the trials included participants from both urban and rural areas,[13] which provides a modicum of support for using this approach in the rural context.

Currently, federal funding is available through the Food Insecurity Nutrition Incentive Program to support a limited number of state and local F&V incentive programs. The Food Insecurity Nutrition Incentive Program was launched by the USDA in 2015, and in 2018 funding for the program became permanent as part of the 2018 Farm Bill. In 2018, 24 projects totaling $21 million were funded.[16] Food Insecurity Nutrition Incentive Program–funded projects aim to increase fruit and vegetable purchasing by lower-income families by offering financial incentives in various ways through various channels. Most of the programs provide incentives for fresh F&V only.

When designing F&V incentive programs for rural residents, several rural-specific factors should be considered. Most notably, because of the food procurement and storage practices used by rural families to minimize food transportation and food costs, it is important to include canned, frozen, and dried F&V as eligible for incentives.

Also, Food Insecurity Nutrition Incentive Program funding should be increased to expand program reach. Alternatively, F&V incentives could be incorporated into the SNAP electronic benefit transfer system so that all program participants can benefit from this proven approach to improving nutrition.

Expand Acceptance at Farmers Markets

The USDA and many states have been working with farmers markets to increase the number that are able to accept (process) SNAP payment by electronic benefit transfer. Concomitant with these efforts, SNAP benefits expended at farmers markets have increased, but spending at farmers markets ($24 million in 2017) remains a small fraction of total SNAP spending ($70 billion in 2017).[17] It is not known whether acceptance of SNAP electronic benefit transfer at farmers markets leads to improvements in diet quality because rigorous trials evaluating this approach are lacking.

Because direct farm to customer sales are among the food sources rural residents report using,[7,11,12] efforts to increase SNAP electronic benefit transfer acceptance at farmers markets may be a fruitful approach. However, barriers associated with the cost and effort of implementation and use of SNAP electronic benefit transfer at farmers markets in rural communities have been found.[18,19] To address these barriers, the USDA or state governments should increase financial support provided to farmers markets to support the purchase of needed point-of-sale equipment that is capable of handling electronic benefit transfer transactions (currently limited funds are available for this purpose). In consideration of resource constraints, focusing these efforts on farmers markets and food stands most highly used by low-income families in rural communities would be wise.

Allow Purchasing Food From Online Grocers

The way that Americans shop for groceries is undergoing a transformation, with leading food retailers such as Walmart, Kroger, and Target now offering online grocery sales for home delivery or pickup. This marketplace change has led policymakers and program administrators to begin considering whether regulatory changes to allow use of SNAP electronic benefit transfer for online grocery store purchasing are warranted.

Online grocery shopping has the potential to address a variety of barriers some SNAP participants face in accessing healthy affordable food. For example, home grocery delivery could be useful to those who do not have a nearby grocery store, lack reliable affordable transportation, or have health conditions that limit mobility. All of these access issues touch rural SNAP participants, and consequently this program change may benefit rural participants. However, the number of online grocers that deliver to rural homes may be limited or unavailable in some rural areas.

Currently, little is known about the feasibility and usefulness of allowing SNAP electronic benefit transfer for online grocery shopping. The USDA is currently carrying out a pilot study (SNAP online food purchasing pilot) to explore these issues. The pilot is being carried out in eight states, including several states with large rural areas. We recommend that analyses of pilot data include a focus on rural SNAP participants specifically so that feasibility and usefulness in this important population is known.

Prohibit Energy-Dense Nutrient-Poor Foods

Prohibiting the use of SNAP benefits for the purchase of energy-dense, nutrient-poor foods and beverages has been

CHANGES TO SNAP THAT HAVE BEEN PROPOSED OR IMPLEMENTED TO IMPROVE FAMILY NUTRITION AND CONSIDERATIONS OF RELEVANCE TO THE RURAL CONTEXT

SNAP Program Change	Considerations/Recommendations for Change in Rural Context
Offer financial incentives for F&V purchases	Canned, frozen, and dried fruits and vegetables should be eligible for F&V incentive.
	Increase FINI funding to increase the reach of incentive programs, or incorporate incentives into SNAP electronic benefit transfer (universal F&V incentive approach).
Expand SNAP electronic benefit transfer acceptance at farmers markets	Provide additional funds and technical support to reduce barriers to purchasing and operating SNAP electronic benefit transfer machines at farmers markets/farm stands.
	In consideration of resource constraints, focus funds and support on farmers markets/farm stands most highly used by low-income families in rural communities.
Allow SNAP electronic benefit transfer to be used for purchasing food from online grocers	Analyses of data collected as part of the SNAP online purchasing pilot should evaluate feasibility and usefulness in rural SNAP participants specifically.
Prohibit use of program benefits for purchasing energy-dense nutrient-poor foods	Additional rigorous evaluation research is needed, and rural SNAP participants should be included in these studies.
Distribute benefits more than once per month	Research evaluating potential benefits and unintended consequences is needed before this type of program change is made, and rural SNAP participants should be included in these studies.
Increase program benefit level	Additional rigorous research is needed, and rural SNAP participants should be included in these studies.
Expand and enhance SNAP-Ed	Direct education component of SNAP-Ed should be redesigned to take into account transportation-related barriers faced by rural families, and mixed-methods research should be carried out to guide redesign efforts.

Note. FINI = Food Insecurity Nutrition Incentive Program; F&V = fruits and vegetables; SNAP = Supplemental Nutrition Assistance Program; SNAP-Ed = Supplemental Nutrition Assistance Program Education.

widely discussed. Some contend that these types of restrictions may lead to substantial public health benefit, while others argue that minimal benefit is likely because out-of-pocket funds may be used to purchase prohibited foods. Also, ethical concerns with imposing restrictions that do not apply to the general population have been raised, and there is concern that prohibitions may impinge on the dignity of SNAP participants.

Limited data are available on the effectiveness of this potential program change.[14,15] A randomized trial with SNAP-eligible or near eligible adults living in a metropolitan area found promising results, particularly when restrictions were paired with a financial incentive for fruit and vegetable purchases.[14,15]

There is little reason to suspect that food restrictions would have different implications for those living in rural compared with those living in metropolitan areas. But, more research on this program change is warranted to better understand benefits and any unintended consequences.

More Frequent Benefit Distribution

Splitting monthly benefits into multiple allotments rather than one has been proposed as a way to disrupt the SNAP benefit cycle (the expenditure of most SNAP funds in the first week after benefit distribution). The SNAP benefit cycle is of concern because it is associated with decreasing calorie intake[20] and diet quality[21] throughout the course of the month.

It is unknown whether splitting monthly program benefits into multiple allotments would smooth out food spending across the month because no studies have evaluated this program modification, and this approach to smoothing spending could hinder the use of some strategies rural SNAP participants rely on to stretch their food dollars (e.g., infrequent major shopping trips to minimize transportation costs and stocking up on items that are on sale during these trips to increase purchasing power). Use of these strategies may be affected by twice monthly benefit distribution because a new benefit cycle pattern may be instigated, whereby benefit funds are depleted rapidly twice rather than once per month. This spending pattern could lead to more frequent shopping trips, thereby increasing transportation costs and limiting stocking of sale items.

We recommend that research evaluating potential benefits and unintended consequences of twice monthly benefit distribution be carried out, and rural SNAP participants should be included in these studies.

Increase Program Benefit Level

Increasing the SNAP benefit level families receive has the potential to lead to improvements in diet quality because cost is often cited as a barrier to purchasing more healthful foods, and the SNAP benefit amount is based on the premise that the

program is intended to supplement (not fully cover) household food spending.

Research evaluating the effect of a benefit increase on diet quality is scant, with just one study comparing eating patterns before and after a 14% increase in SNAP benefits levels was implemented nationwide in April 2009 as part of the Americans Recovery and Reinvestment Act.[20] The study was designed to evaluate whether an increase in benefit level would ameliorate the SNAP benefit cycle. A decline in energy intake across the benefit month before the act was implemented but not after the increase in benefits owing to the act was found, suggesting that an increase in benefits may even out spending and food consumption across the benefit month. However, the increase in benefit level did not influence the nutritional quality of the diet across the benefit month.

There is little reason to believe that increasing the SNAP benefit level would have different implications for those living in rural compared with urban areas. More research is warranted to evaluate this potential program change, and rural SNAP participants should be included in these studies.

Expand and Enhance SNAP-Ed

SNAP-Ed is a federally funded nutrition education program that targets low-income Americans. In 2019, $433 million dollars was allocated to states for SNAP-Ed.[22] SNAP-Ed aims to improve family nutrition by (1) teaching low-income families about nutrition and how to plan, purchase, and prepare meals on a budget (direct education); and (2) helping communities create and sustain environments that support and promote healthy food and physical activity choices (policy, systems, and environment [PSE] change initiatives). State extension services lead and carry out activities related to these aims.

SNAP-Ed direct education activities center on teaching meal planning, shopping, and food preparation skills, generally through a series of in-person classes held in community locations. Studies evaluating the effectiveness of this type of direct education programming generally show positive effects on dietary behavior; however, serious methodological shortcomings plague this literature,[23] and little is known about effectiveness in rural populations. Haynes-Maslow et al. employed a mixed-methods approach to gain an understanding of the barriers to implementing SNAP-Ed nutrition education programming in rural communities.[24] Major challenges that emerged included lack of healthy food and physical activity infrastructure to reinforce messages taught in class, funding restrictions, and transportation barriers for participants to educational programming sites. Remotely delivering SNAP-Ed programming via mobile phone (e.g., through an app, social media platform) is one potential solution to address transportation barriers for rural participants. But before new programs are developed, we recommend that the education-related needs and perceptions of today's rural low-income families be assessed so that new programming aligns with their needs.

In light of the structural barriers to healthy food access in rural communities, there is great potential for SNAP-Ed PSE change initiatives to improve family nutrition. Haynes-Maslow et al. examined barriers and facilitators to implementing PSE change initiatives in rural communities as part of a mixed-methods study carried out with SNAP-Ed staff who work in rural communities across the United States.[25] A number of opportunities and challenges were identified in this study that should be considered in implementing and expanding SNAP-Ed PSE in rural communities. Also, research is needed to rigorously evaluate the effectiveness of SNAP-Ed PSE efforts in both urban and rural settings.

SUMMARY AND CONCLUSIONS

Policymakers and program administrators should carefully consider the unique needs of rural SNAP participants in formulating strategies to reshape SNAP so that it better supports family nutrition. We have described a number of specific recommendations (see the box on page 1643). These include allowing canned, frozen, and dried fruits and vegetables as eligible items in F&V incentive programs; providing additional funds and technical support to reduce barriers to setting up SNAP electronic benefit transfer at rural farmers markets; changing SNAP-Ed direct education programming to address transportation-related barriers many rural families face in attending in-person classes; and supporting rigorous research to evaluate the potential benefits and unintended consequences of proposed program changes for which scant high-quality evaluation data exists. These evaluations should include rural SNAP participants so that effects in this important population group are known. AJPH

CONTRIBUTORS

L. Harnack wrote the commentary. S. Valluri and S. A. French critically reviewed the commentary. All authors conceptualized the commentary.

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CONFLICTS OF INTEREST

The authors have no conflicts of interest to report.

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