

The World's Largest Open Access Agricultural & Applied Economics Digital Library

# This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<a href="http://ageconsearch.umn.edu">http://ageconsearch.umn.edu</a>
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.





# Improving Food Choices—Can Food Stamps Do More?

Joanne F. Guthrie, jguthrie@ers.usda.gov Elizabeth Frazão, efrazao@ers.usda.gov Margaret Andrews, mandrews@ers.usda.gov David Smallwood, dsmallwd@ers.usda.gov

- Proposed strategies for improving diets of Food Stamp Program participants include restricting the types of foods purchasable with food stamp benefits and offering bonuses or vouchers for buying healthful foods such as fruits and vegetables.
- Offering bonuses or vouchers for specific foods essentially lowers their price and gives the household additional income for food purchases.
- Prices and income can influence consumer spending decisions, but effective policies also need to account for the role of consumer preferences and foods available in the marketplace.

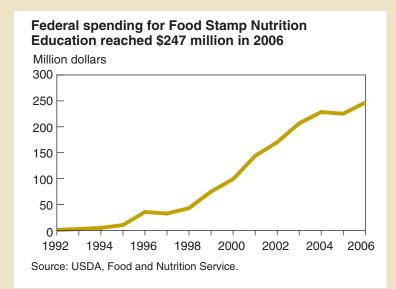
When the Food Stamp Program began, its primary purpose was to enable low-income Americans to get enough to eat, providing "stamps" usable only for food but permitting each household its own choices of which foods to buy. Over time, the program has changed from primarily focusing on getting a sufficient *quantity* of food to an increased emphasis on also choosing healthful foods with high nutritional *quality*. This reflects the nutrition-related health problems now facing more and more Americans of all income levels. The prevalence of obesity and diabetes is growing. Nutrition and health experts point to excessive intakes of saturated fat and added sugars, coupled with low intakes of healthful foods such as fruit, vegetables, and whole grains, as major contributing factors.

## **Nutrition Education Reaching Out to Food Stamp Participants**

Food Stamp Nutrition Education (FSNE) is an optional component of the Food Stamp Program conducted via a partnership and joint funding between USDA and States. Between 1992 and 2006, total annual Federal spending for FSNE increased from \$661,076 to \$247 million, and State participation expanded from 7 States to all 50 States, 2 Territories, and the District of Columbia.

To operate FSNE, State food stamp offices subcontract with one or more FSNE-implementing agencies. More than half of these are the Cooperative Extension Service of the State's land-grant university. Other implementing agencies include State or Territorial health departments and other public organizations.

Implementing agencies have considerable flexibility in the types of educational activities they conduct. Activities range from small group classes and cooking demonstrations for adults, to classroom activities in schools serving predominantly low-income children, to public service announcements in media outlets that serve mostly low-income audiences. Within this broad range of activities, USDA requires that all education be behaviorally focused, with a goal of encouraging participants to voluntarily make healthful, economical food choices for themselves and their families.



To help food stamp participants make more nutritious food choices, USDA has expanded its investment in nutrition education (see box, "Nutrition Education Reaching Out to Food Stamp Participants"). State governments and health advocates are looking at additional modifications to the Food Stamp Program that could reinforce nutrition education, including restrictions on the foods allowable for purchase with food stamp benefits and expanded benefits to buy more of healthful foods, such as fruit and vegetables.

The success of either restrictions or targeted benefits depends on a number of economic factors: the *food stamp budget share* (the share of the food budget covered by food stamps); the *food spending patterns* of program participants; participants' *response to changes in food prices* and their *response to increased income*; and, finally, *food manufacturers' response* to Food Stamp Program changes. Research conducted by ERS on these economic factors provides insight into the likely effectiveness of these program modifications in improving the diets of program participants.

### Can Limiting Food Choice Improve Diets?

Food Stamp Program benefit levels are set to allow households to purchase a set of low-cost foods that meet current Federal nutrition recommendations. Program benefits are provided through electronic debit cards that recipients can use to buy just about any foods sold in participating grocery stores, with the exception of hot prepared foods such as rotisserie chicken.

Restricting food stamp participants' purchases of foods and beverages high in calories, fats, and/or sugars has been proposed as a strategy to combat obesity. In 2004, the State of Minnesota unsuccessfully requested permission from USDA to prohibit the purchase of candy and soft



Targeting food stamp benefits toward healthful but underconsumed foods, such as fruits and vegetables, has been suggested as a way to improve participants' diets.

drinks with food stamp benefits. The proposed modification was clearly intended to promote diet quality by limiting purchase of "empty calorie" foods.

While it may seem obvious that disallowing an "unhealthful" food item would necessarily limit its consumption, in practice such a policy may have limited effectiveness. The issue turns on whether food stamp recipients would continue to purchase the restricted items, using their own funds. This is likely to depend on the food stamp budget share. The larger the share of the food budget that is covered by food stamps, the more influence program changes can be expected to have. For most food stamp households, the food stamp

budget share is a sizeable part of their food budget, but it is not the whole amount. For a family of four in fiscal year 2004, monthly benefit amounts varied from almost nothing to as much as \$471, with the average benefit at \$326. At the same time, a four-person, low-income household spent an average of \$462 per month on food, including both food from grocery stores and food prepared away from home. Such a household could continue to buy at least some of the prohibited items with the \$136 cash portion of its current food expenditures. Even if the cash devoted to foodstore purchases is relatively small under current policies, households might use some of their cash income currently being used for nonfood purchases to buy prohibited foods.

The impact of a food restriction will also depend on the amount of banned foods consumed by food stamp recipients. ERS research on *food spending patterns* shows that of the \$462 spent on food each month by the average low-income, fourperson household, \$334 was spent on food from the grocery store. Of this, \$11 was spent on sugars and sweets and \$30 was spent on nonalcoholic beverages. Depending on how much of the spending in these categories is devoted to potentially prohibited items, such as candy and soft drinks, the average family might or might not be able to buy the same mix of foods

#### FEATURE

using their cash resources. They might have to adjust their purchasing behavior to limit prohibited items and shift their food stamp purchases to other items.

But does it necessarily follow that they would shift to purchasing fruits and vegetables, low-fat milk, and other healthful foods? Consumers who love candy might choose the natural sweetness of fruit. Or they might switch to cakes, cookies, chocolate-coated granola bars, or any of a number of items that might have only minimal nutritional differences from banned items. In denying Minnesota's request for authority to ban certain candies, USDA noted that the request would prohibit the purchase of Hershey chocolate bars but allowed Kit-Kat and Twix candies (because they contain flour).

The effectiveness of limiting food choices also depends on food manufacturers' response. Limiting purchases of less-healthful foods might encourage manufacturers and retailers to develop more healthful products—like snack packs of baby carrots and pre-cut apple slices—and promote them more vigorously. Or food manufacturers and retailers might develop or promote sweets or snack foods very similar to the prohibited items. For example, they might develop a sweet, fruit-flavored drink that is very similar nutritionally to a prohibited soft drink.

The U.S. food market is extremely dynamic, with more than 20,000 new food and beverage products introduced in 2006 alone. It is likely that the market would respond with both healthful, innovative products that nutritionists would applaud

and products that differ little from banned items. In this dynamic food environment, implementing restrictions on foods allowable with food stamp benefits would require continually updating regulations, issuing guidance, and making specific decisions where necessary (for example, is this a prohibited candy bar or an allowable breakfast bar?). More detailed regulations regarding allowable foods also could make food stamp purchases more complicated both for program participants and for the stores that accept food stamps.

## Can Expanding Benefits for Healthful Foods Improve Choices?

Rather than restricting choice, another policy suggestion is to encourage positive choices through targeting food stamp

#### Low-income households of four spend \$54 per month on fruit and vegetables

	Average spending for a household of four, 2004-05			
Food expenditures	Low-income (\$10,000- \$29,999)	Middle-income (\$30,000- \$49,999)	Higher-income (\$50,000 and more)	All
	Dollars per month			
Total food spending	462	527	816	700
Food away from home	129	195	374	298
Food at home	334	332	441	402
Meat/poultry/fish and seafood				
Fruit and vegetables	54	50	71	64
Cereals/bakery products	46	46	61	56
Dairy products	38	40	51	46
Other:				
Sugars/sweets	11	10	17	15
Fats/oils	10	10	11	10
Nonalcoholic beverages	30	31	40	37
Miscellaneous	52	56	81	72

Note: Amounts may not add up due to rounding.

Miscellaneous includes frozen and canned meals and soups; chips, nuts, and other snacks; condiments, etc. Source: Consumer Expenditures Survey, Bureau of Labor Statistics.



Food companies have responded to increased interest in health and diet with a myriad of products.

benefits toward healthful but underconsumed foods. This might be particularly useful for fruits and vegetables, underconsumed foods for which a perceived high cost is a commonly cited barrier to increased consumption. In 2004-05, on average, low-income, four-person households spent \$54 per month on fruit and vegetables, \$17 less than higher income, four-person households. Furthermore, an ERS study found that in 2000, approximately 19 percent of low-income households bought no fruit or vegetables in any given week, compared with 9 percent of higher income households.

Food stamp benefits can be designed to increase fruit and vegetable consumption via vouchers redeemable for fruit and vegetable purchases, as is currently done in the WIC Farmers' Market Nutrition Program. Or bonuses tied to the purchase of fruit and vegetables can be offered to program participants. California has passed legislation to conduct a "Healthy Purchase" pilot program. Under this program, for every \$1 of food stamps spent on fresh produce, participants will receive a specified portion back, as a bonus. These bonus or voucher approaches could be expected to influence food choice through

a price effect—they effectively lower the price of the targeted food—and through an income effect—they give the participant additional income to spend on food.

California's approach of tying a bonus to fruit and vegetable purchases has the effect of lowering the cost of produce relative to other foods. If price is the barrier to fruit and vegetable consumption, lower prices should result in food stamp households' purchasing more of the "cheaper" fruit and vegetables. But how much more? This depends on the extent to which participants respond to changes in price, as well as the size of the price change. The more strongly food stamp participants react to lower prices, the larger the effect on diet quality.

Consumer response to price varies for different types of goods, and even different types of foods. ERS research indicates that demand for fruit and vegetables appears to be somewhat more responsive to lower prices than other food categories. For example, a 10-percent discount in the price of fruit and vegetables would be expected to increase the amount purchased by about 6 to 7 percent. Given that estimated fruit and vegetable consumption of the average food stamp participant

#### FEATURE

is about 1.95 cups per day, a 20-percent reduction in the price of fruit and vegetables would be estimated to raise consumption to about 2.2 cups—an improvement, although still below the recommendation for typical adults of 3.5 to 5 cups per day. (The estimation procedure does not allow extrapolation beyond a 20-percent price reduction.)

Rather than offering a bonus, another approach could be offering participants a voucher that can be used only to buy fruit and vegetables, lowering their price to zero for participants. This approach offers an incentive even to those households currently buying little or no fruit and vegetables.

Lowering the cost of fruit and vegetables either by offering a bonus or by providing a voucher also provides participants with additional food income. Under the bonus scenario, the bonus income adds to overall food purchasing power. Under the voucher scenario, households would likely substitute the vouchers for some of the fruit and vegetable purchases they would have made with food stamps. Again, the result is to increase household income available for food purchases.

What effect will this increased income have on diet quality? It depends on the choices made—more fruit and vegetables, low-fat milk, or whole grains? Or extra sweets and high-fat snacks? Previous ERS research found that receiving food stamps led participants to consume larger amounts of added sugars and total fats, not fruit and vegetables. Coupling a fruit and vegetable incentive program with nutrition education may increase the likelihood that food stamp participants use additional income to make healthful choices. Also, to the extent that the program provides incentives for food manufacturers and retailers to develop and promote appealing fruit and vegetable options, this may influence choice. The California pilot program includes a plan to



Companies act on consumers' wishes for convenient, healthy food options.

work with small stores in low-income neighborhoods to increase produce offerings and market them appealingly.

## Changing Consumer Preferences—The Ultimate Challenge

Given that poor diets exert heavy costs in increased medical expenditures and lost productivity, effective policies for promoting healthful food choices among the 26 million low-income Americans participating in the Food Stamp Program could yield considerable benefits. Currently debated options include both restrictive policies that would prohibit buying some less-nutritious foods with food stamps and policies that would target expanded benefits to purchase of selected healthful foods.

Whether policies aim to restrict or expand food stamp participants' choices, it is ultimately the choices participants make that will dictate success in improving diet quality. A restrictive policy may limit purchase of some less nutritious foods, but, given America's diverse and dynamic food industry, it would still be up to the consumer to choose either more healthful products or ones that, although not restricted, are essentially similar to the prohibited item.

Expanding benefits for healthful foods such as fruit and vegetables would be likely to increase their purchase. However, given existing consumer preferences, the predicted increase may not be strong enough, by itself, to bring purchases up to levels in line with current dietary recommendations. The challenge of changing consumer preferences remains. Coupling targeted benefits with nutrition education may increase effectiveness, as could a response by food manufacturers and retailers that resulted in more attractive, highly promoted fruit and vegetable options.

USDA recognizes the challenge. As part of the 2007 farm bill, USDA has recommended strengthening the nutrition education component of the Food Stamp Program. In particular, USDA has proposed investing \$100 million over 5 years to develop and test solutions to the rising rates of obesity. Potential approaches include providing incentives to food stamp participants to buy fruit and vegetables, as well as integrated nutrition education programs to promote healthful diets and physical activity. These efforts would include rigorous independent evaluations to identify effective ways to improve food choice. W

#### This article is drawn from ...

Nutrition and Health Characteristics of Low-Income Populations: Volume I, Food Stamp Program Participants and Nonparticipants, by Mary Kay Fox and Nancy Cole. ERS project representative: Biing-Hwan Lin, E-FAN-04014-1, USDA, Economic Research Service, December 2004, available at: www.ers.usda.gov/ publications/efan04014-1/

Understanding Fruit and Vegetable Choices: Economic and Behavioral Influences, by Joanne F. Guthrie, AIB-792-1, USDA, Economic Research Service, November 2004, available at: www.ers.usda.gov/ publications/aib792/aib792-1/

Estimation of Food Demand and Nutrient Elasticities From Household Survey Data, by Kuo S. Huang and Biing-Hwan Lin, TB-1887, USDA, Economic Research Service, September 2000, available at: www.ers.usda.gov/publications/tb887/

The Effect on Dietary Quality of
Participation in the Food Stamp and WIC
Programs, by Parke E. Wilde, Paul E.
McNamara, and Christine K. Ranney,
FANRR-9, USDA, Economic Research
Service, September 2000, available at:
www.ers.usda.gov/publications/fanrr9/

#### You may also be interested in ...

"Pros and Cons of Proposed Interventions to Promote Healthy Eating," by Eric Finkelstein, S. French, J.N. Variyam, and P. Haines, in *American Journal of Preventive Medicine*, Vol. 27, No. 3S, 2004.

"Food Assistance: How Strong Is the Safety Net?" by Michael LeBlanc, Biing-Hwan Lin, and David Smallwood, in *Amber Waves*, Vol. 3, No. 3, USDA, Economic Research Service, September, 2006, available at: www.ers.usda.gov/amberwaves/september06/features/foodassistance.htm