



# Making Healthy Food Choices Easier

## Ideas From Behavioral Economics

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When the Food Stamp Program began, its focus was on providing participants with the purchasing power to get enough to eat. Today, with obesity the most prevalent nutrition problem facing Americans at all economic levels, promoting diets that provide enough nutrients without too many calories is also an important objective. Like most Americans, food stamp participants tend to consume too much saturated fat and added sugars and too few fruits and vegetables. In response, the Food Stamp Program has increased its emphasis on encouraging healthful food choices by participants, primarily through expanded nutrition education efforts.

Identifying effective policies to promote healthful behaviors without limiting individual choice is difficult. Traditional economic thinking assumes that consumers who understand and value the relationship between diet and health will rationally respond by choosing to eat a healthful diet. Yet behavioral economics research finds that people regularly and predictably behave in ways that contradict this assumption. Long-term thinking may not always prevail; people may not always make the decisions that would follow from strict expectations of economic rationality, and they may be unduly influenced by seemingly irrelevant factors like package size and shape. Although this may sound discouraging, behavioral economics may suggest some strategies for bolstering the effects of rational change strategies, such as nutrition education.

Findings from behavioral economics, consumer psychology, and marketing research suggest a new array of strategies that can be tested to determine their effectiveness in improving the diet quality of food stamp participants. Unlike more traditional economic approaches, these strategies do not impose costs on those who currently behave in their best, long-term interest, and unlike arbitrary directives that would ban or impose penalties on the purchase of unhealthy foods, they do not restrict freedom of choice. In addition, they do not necessarily impose additional costs to those who are food insecure or



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living at the margins. However, a thorough analysis of costs, benefits, and potential impacts—a task outside the scope of this discussion—would be needed before any strategy could be considered as a policy option.

### Simple Commitment Devices May Help Increase Self-Control

Do we really behave rationally to maximize our well-being, as economic theory suggests? Not always, according to behavioral economics. One often observed departure from rational economic behavior is the manner in which consumers change how they rank alternatives depending on the delay of economic costs and benefits. For example, consumers often choose a cheaper, less energy-efficient appliance over one that has a higher retail price even when, because of greater energy efficiency, the initial cost difference would be made up in less than a year. Similarly, an individual may prefer \$10 today over \$15 tomorrow but, if asked to choose between the same two alternatives a year ahead of time, would choose to wait the extra day for \$15. Choosing an economically less desirable alternative simply because it is available sooner suggests the difficulties of maintaining the self-control necessary for long-term thinking. Sensory

cues—such as walking past a plate of brownies or smelling freshly baked cookies—can also weaken resolve. Given the difficulty of maintaining self-control, individuals can improve their longrun well-being through some sort of commitment mechanism that sets limits on current consumption levels.

Within the Food Stamp Program, participants may be more likely to choose foods that are compatible with their long-term health objectives if they make their purchasing decisions before going to the store and finding themselves tempted with less healthful food options, such as salty snack chips and soft drinks. One way to do this would be allowing participants to elect an option to preorder a food basket for delivery or pickup, which could be done through local nonprofits or commercial grocery outlets.

USDA’s recent experience with demonstration projects in Connecticut and North Carolina provides some evidence that a segment of elderly food stamp participants does indeed view preordering a commodity foods package as a way of making more healthful dietary choices (Cody and Ohls, 2005).

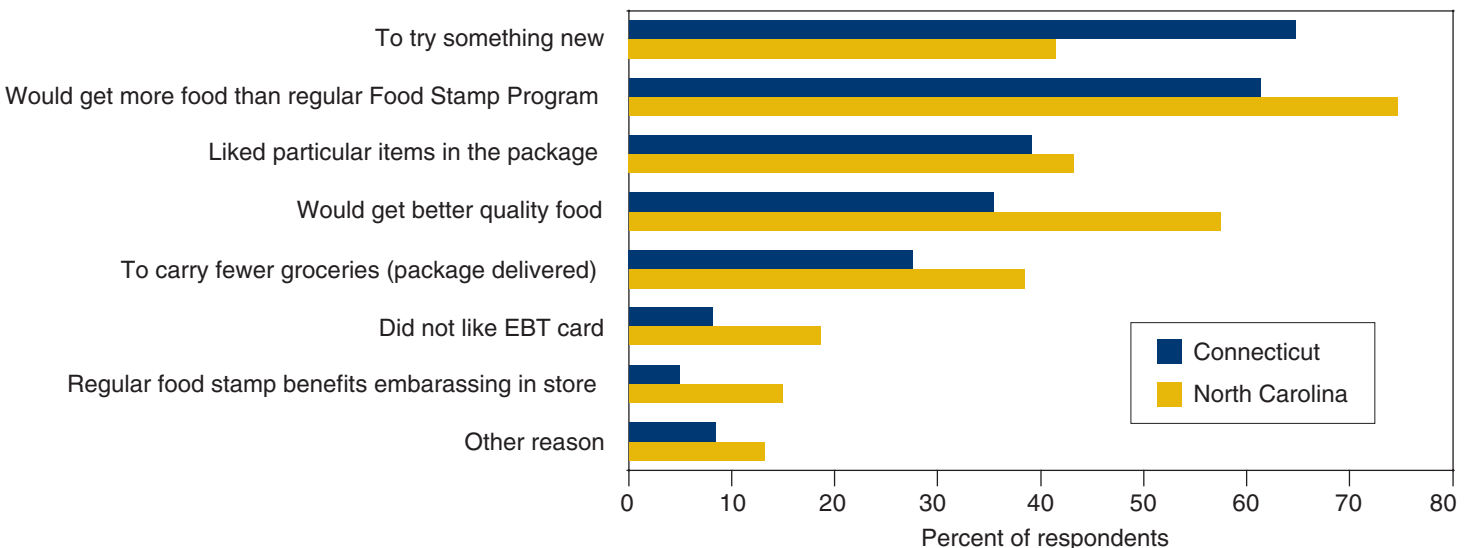
In 2002-04, Connecticut ran a Food Connection demonstration in 10 towns in the Hartford region where, instead of standard food stamp benefits (issued by Electronic Benefit Transfer (EBT)), seniors could elect to receive bimonthly food packages that were available in three commodity combinations—regular, Latino, and items geared towards Meals on Wheels participants. Packages were distributed at various community sites, most commonly senior centers, housing complexes, and churches. In a similar effort, North Carolina ran a Commodity Alternative Benefit program in rural Alamance County in 2002-05, where seniors could elect to

receive one of two commodity food packages each month instead of food stamp benefits. Although the two food packages differed slightly in terms of items or quantities, each monthly package consisted of six bags, five with canned foods and one with butter, cheese, and frozen meat and poultry. For both demonstration sites, the cost of the food packages was limited to that of the average benefit received by senior households—about \$45—which included the cost of the food, shipping, and storage. The comparable price of the package contents at a local grocery store was between \$60 and \$70.

The average elderly participant in the demonstrations got more food than could have been bought with the usual benefit, which was a powerful incentive affecting his or her decision to participate. But, evaluation results from both sites suggest that getting better quality food was also a significant reason for participation among those who elected the commodity alternative. More than half of surveyed participants in North Carolina who elected the commodity alternative mentioned getting better quality food as a reason for participating, as did more than a third in Connecticut (fig.1).

Quality of food was even more frequently mentioned by surveyed seniors who chose not to participate; 59 percent of surveyed households that did not select the commodity option in North Carolina and 69 percent in Connecticut believed that they could get better quality food at stores. Further research is needed to determine the extent to which their perception of the quality of food is associated with nutritional value, whether participants seeking to improve their diets would find it helpful to select a commodity pre-commitment option, and, if so, how much their diets would improve.

Figure 1  
**Reasons correspondents gave for selecting commodities over EBT in elderly nutrition pilot studies in Connecticut and North Carolina**



Note: Clients could provide more than one reason.  
 \*Significantly different from Connecticut (alpha=0.05).

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These findings highlight the different preferences that individuals had for the commodity option: Some felt it improved the quality of their food choices; others did not. Thus, offering food stamp participants options for choosing how and when they receive their benefits may be useful.

Another program change that might help some participants avoid impulsive behavior and make better long-term choices is to allow them to increase the frequency with which their standard food stamp benefits are disbursed. Benefits are distributed only once a month, and evidence shows a period of overconsumption shortly after benefits are distributed, followed by a period of rationing or underconsumption later in the cycle (Wilde and Ranney, 2000). This cycle may be even more pronounced among individuals with self-control problems—they will likely spend too much for current consumption at the expense of future consumption. Increasing the frequency of benefit disbursements could function as another commitment mechanism. Thus, decreasing the amount available for current consumption at each decision period, while leaving total payment amount unchanged, could help some clients make better and more time-consistent decisions.

Of course, some less impulsive individuals may prefer receiving food stamp benefits monthly, which may afford them fewer shopping trips or greater ability to obtain volume discounts. Allowing participants to choose weekly, biweekly, or monthly benefits would ensure that participants who wanted a commitment device could get one, while others could choose to stay with the current monthly payment arrangement.

### **Mentally, We Might Not Be the Most Accurate Accountants**

Economic policy approaches that employ food taxes or subsidies would have both an income and a substitution effect. With the positive income effect of a food subsidy, individuals increase food purchases in response to more room in their budgets. This change in price may also have a substitution effect as well, where people purchase more of the relatively cheaper food. In the case of food, lowering food prices may lead to only a slight increase in total food purchases while generating a much greater increase in expenditures on other items.

A contrasting behavioral view is that individuals use mental accounting to categorize their income, earmarking it into categories for specific purposes or specifying that it be used within a certain timeframe. Mental accounting predicts that, once the income is categorized, one will spend the earmarked amount, irrespective of changing market conditions. Thus, if a portion of increased income is dedicated to current food spending, lowering prices within this category

may not be perceived as loosening one's total budget and instead cause an individual to increase only food purchases. In this case, finding a low price on a consumption item may lead to overconsumption rather than substitution.

The idea of earmarking funds and mental accounts may help explain why many studies have found that food stamp benefits raise food expenditures more than does an equal benefit amount given as cash (Fox et al., 2004). If this is the case, then program modifications that would provide further guidance on the share of food stamp allotments that should go toward purchasing healthful foods, such as fruits, dark-green vegetables, and whole grains, could have the effect of increasing the purchase of more healthful items among program participants.

While there is little direct research that supports this specific application, the general concept of mental accounts has been demonstrated. Thus, it is conceivable that program-selected earmarks, communicated to participants through special vouchers, supermarket-generated coupons, or educational outreach, could be effective. Ongoing Food Stamp Nutrition Education efforts, a component of the Food Stamp Program, may provide some insights in this area. Another similar approach would be to allow individual participants to impose their own earmarks by putting limits on the amount of EBT benefits they could use to purchase less healthy foods. However, monitoring the types of foods and beverages purchased with EBT benefits would require substantial cooperation of food retailers and administrative effort. The complexity and cost of limiting the types of foods allowed for purchase with food stamp benefits have been cited by USDA's Food and Nutrition Service as major barriers to adopting such an approach (USDA, 2007). Certainly, studies assessing cost and feasibility would be needed before implementing such strategies.

### **We Won't Judge a Book by Its Cover, but We Might Judge a Serving by Its Container**

According to ERS data on food consumption, the daily quantity of calories (per capita) available in the U.S. food supply increased by more than 500 calories between 1970 and 2004. Americans are eating more food. For people trying to manage health and weight, choosing the right amount of food may be just as difficult as choosing the right types of foods. Studies find that choosing what to eat and how much to eat may be controlled by separate psychological mechanisms (see Just et al., 2007, for a review of the consumption volume literature).

The increase in portion sizes over the last 25 years or so is often cited as a contributor to the rise in obesity in the United States. Research shows that people eat more when presented with larger portions or packages. They are also less

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accurate in assessing their own intake: They underestimate their own total consumption more when eating from larger packages than when eating from smaller packages.

The shape of serving containers—bowls, plates, and glasses—can significantly affect consumption volume as well. People tend to fill tall thin glasses less than short wide glasses that hold the same volume. Experiments have also shown that, when people were randomly given bigger serving bowls or ice cream scoops, those people unknowingly served themselves (and ate) significantly more ice cream than people who were given smaller bowls or scoops.

Research also shows that other alterations in food packaging or presentation may make assessing consumption volume easier. Introducing more intermediate packaging in containers of chips or other items bought in large quantities appears to draw attention to consumption volume and make it easier for individuals to determine an appropriate stopping point.

Highlighting the effects of container shape and product packaging on consumption volume in Food Stamp Nutrition Education would be one way to incorporate these findings into the Food Stamp Program. Such advice should, of course, be balanced by acknowledgment that single serving sizes or small containers may be a more expensive alternative than buying in bulk.

The Food Stamp Program may have opportunities to apply these findings more directly. For example, the program allows Food Stamp Nutrition Education to provide low-cost “nutrition education and reinforcement materials” (less than \$4 per item). These funds could be used to give interested program participants glasses, dishes, or bowls that contain some sort of visual graphic to indicate appropriate portion sizes. For grocery purchases, lower prices or bonuses for other purchases could be offered to participants for choosing products that are packaged to promote more sensible consumption volume, such as 100-calorie snacks and single-serving soda cans.

## Next Steps

Findings from behavioral economics suggest innovative, low-cost ways to improve the diet quality of food stamp participants. Unlike more traditional interventions, such as

changing prices or banning specific food items, many of the proposed changes could be targeted to only participants who wanted to make choices that are more harmonious with their own long-term health objectives. These changes have the added benefit of being more flexible and less paternalistic than other proposed interventions.

Incorporating some of these techniques, such as increasing the frequency of benefit distributions, into existing programs may require only slight modifications. Other options, like delivering preordered food packages to food stamp households, may be more costly or complicated. As such, an important area for research would be to design experiments and pilot programs to gauge the feasibility and costs of these strategies as well as the potential for change in behavior, and ultimately, improvement in food choices and diet quality.

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