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Could Behavioral Economics Help Improve Diet Quality for Nutrition Assistance Program Participants?

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Abstract

Findings from behavioral and psychological studies indicate that people regularly and predictably behave in ways that contradict some standard assumptions of economic analysis. Recognizing that consumption choices are determined by factors other than prices, income, and information illuminates a broad array of strategies to influence consumers' food choices. These strategies expand the list of possible ideas for improving the diet quality and health of participants in the U.S. Department of Agriculture's (USDA) Food Stamp Program; the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); and the National School Lunch and School Breakfast Programs.

Keywords: behavioral economics, food consumption, obesity, food stamps, National School Lunch Program, nutrition assistance, WIC

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Summary

As obesity has come to the forefront of public health concerns, there is growing interest in finding ways to guide consumers' food choices to be more beneficial for their long-term health. About one in five Americans participates in at least one of the nutrition assistance programs sponsored by the U.S. Department of Agriculture. This study uses behavioral economics, food marketing, and psychology to identify possible options for improving the diets and health of participants in the Food Stamp Program; the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); and the National School Lunch and School Breakfast Programs.

What Is the Issue?

USDA and other public health agencies historically have provided recommendations on how to make food choices that promote health and prevent disease. Food manufacturers and marketers, on the other hand, have discovered that certain psychological cues, such as packaging and presentation, are efficient ways to increase consumption of their products. Could similar marketing approaches be used in public health efforts to improve diet quality and reduce body weight among U.S. food assistance program participants? Insights from behavioral economics shed light on several factors that could help economists and policymakers better understand food choices. In 2005, over half of all nutrition assistance program participants were children. Many notions about what is good or acceptable to eat are determined in childhood. Improving diet quality among these nutrition program participants has the potential to guide food choices at a critical time, when a child's dietary preferences are being defined.

What Did the Study Find?

This study incorporates findings from behavioral economics, food marketing, and psychology to propose insights into how people make food decisions. Recognizing that consumption choices are determined by factors other than prices, income, and information broadens the array of strategies that could influence consumer food choices and improve diet and health. This exploration of new ideas, however, is by no means a recommendation or endorsement of any of them. A thorough analysis of costs, benefits, and potential impacts would be needed before any strategy could be considered as a policy option.

People have problems of self-control when choosing food, either because they prefer immediate gratification or because they are under the influence of a visceral factor, such as feeling hungry. Allowing them to preselect more healthful choices may be effective. For example, letting students preselect menu options in the National School Lunch or School Breakfast Programs or giving food stamp participants the option to preorder groceries by telephone or online may improve the healthfulness of their food choices.

People place more weight on “default options.” Another idiosyncrasy of consumer choice frequently observed in experimental studies is that individuals exhibit an asymmetry in how they value gains relative to losses. This asymmetry gives rise to anomalous behavior, where individuals are willing to pay much less to acquire an item than they are willing to accept to part

with it. It also makes them much more likely to choose the default options, even when the costs of switching to an alternative are low or even zero. Making the default menu option of school meals more healthful, such as a fruit salad instead of French fries may increase the likelihood that they will choose more healthful foods.

People categorize income into mental accounts. “Mental accounting” helps explain why coupons that can be used only for food purchases have been shown to be more effective at raising food spending among food stamp participants than an equal benefit amount of cash. If funds are earmarked for a specific purpose, recipients spend within a certain category until funds are entirely depleted. Specifying amounts of food stamp allotments that go toward the purchase of healthful foods, such as fruits, dark green vegetables, and whole grains, may be another option for improving diet quality of program participants.

People undervalue fixed costs relative to variable costs. When only certain items can be selected using prepayment (fixed costs), those items will be chosen more often than those that can be purchased only with cash (variable costs). In the school meals programs, for instance, students, in conjunction with parents or guardians, could specify that only more healthful items be purchased with prepaid cards.

Food decisions are often based more on emotion than rational thought. Impulsive behavior, such as choosing less healthy foods over healthier foods, may result from how the food is presented, the presence of stress, or other demands on an individual’s “processing” ability. When processing resources are low, it is more likely that an individual will make consumption choices based solely on immediate considerations. Drawing attention to more healthful foods—by making them more accessible or displaying them more prominently in school cafeterias—might mitigate the effects of a distracting environment and increase the likelihood that students choose more healthful menu options.

External cues can have a major effect on the food selected, the amount consumed, and the eater’s perception of how much was consumed. Noise levels, lighting, and distractions, as well as the size and shape of foods and food containers, affect how much people eat. Adjusting these factors can have a major impact on how much is eaten for a meal or snack. Reducing the number of students seated at each table or making school cafeterias more brightly lit are possible options that might help students better monitor their actual consumption.

How Was the Study Conducted?

This study incorporates findings from behavioral economics, food marketing, and psychology to explore various methods of improving individuals’ diets and health. Within the context of USDA nutrition assistance programs, such as food stamps, WIC, and the school meals programs, these findings provide an opportunity to begin thinking of new ways to encourage program participants to choose diets that are better aligned with their own goals for future health.