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## Behavioral Economic Concepts To Encourage Healthy Eating in School Cafeterias

### Experiments and Lessons From College Students

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Poor diet quality, overconsumption, and inactivity can lead to poor health. Even with the plethora of weight-loss programs and diet books currently available, diet-related health conditions like obesity and diabetes continue to rise. Traditional economic analyses seem inadequate to explain why so many people choose risky health behaviors. Consequently, some researchers are turning to behavioral economics, which tries to explain why people act as they do and what incentives can modify behavior.

#### **What Is the Issue?**

Experiments have shown that the eating environment, such as the social atmosphere, the presence and level of distractions, or even lighting, can affect people's food choices and how much they eat. Some of those same cues can also be used to help individuals make healthier food choices. Finding successful ways to promote healthier food choices could be an important tool for the school meals programs, for example, which aim to strike a balance between meeting the dietary needs of students who are undernourished and encouraging healthy diets and body weight. Cafeteria administrators are in a unique position to control many of the elements that have been shown to influence food choice. By understanding how these behavioral interventions influence food choice and diet quality, managers of school and workplace cafeterias can devise possible strategies to promote healthy eating. This report describes a behavioral experiment in a college cafeteria, which assessed the effects of various menu selection methods and payment options on food choices. The experiment was designed to apply within the context of any cafeteria—whether college, work, or secondary school.

#### **What Did the Study Find?**

College students who preselected their meals from a menu board before seeing them did not always make healthier food choices than students who made their selections in line where they could see the food. In fact, viewing led to significantly greater consumption of healthier foods—salad and turkey sandwiches—and significantly less consumption of less healthy foods—French fries and caffeine. Viewing brownies, however, also significantly increased brownie consumption. The impact of viewing different foods may have more to do with how attractive they are than how healthy they are.

Students who participated in the experiment could pay for their meals in one of three ways—cash, prepaid cards to be used for any menu item (unrestricted debit cards), or prepaid cards to be used for more healthful items only (restricted debit cards). Their payment method affected the amount

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of money they spent on meals. Those using cash spent more on average than those who used an unrestricted debit card. Students using the restricted debit card spent the least on less nutritious items, whereas those using the unrestricted card spent the most on these foods.

The payment option significantly affected the types of foods chosen as well. College students paying with cash made healthier food choices than those paying with an unrestricted debit card, who were significantly more likely to purchase a brownie and a soda but less likely to buy skim milk and healthful side items and desserts. Paying with cash appeared to force more cognizant decisionmaking. Students using restricted cards made significantly healthier choices than students paying with either cash or unrestricted cards. In many cases, these differences were prominent and suggest that it is possible to change behavior by altering payment methods used for different foods.

Students using the unrestricted debit card consumed significantly more calories than students using either cash or the restricted card, with those using the restricted card consuming the fewest calories. Not only did the number of calories differ by payment method, the calories derived from healthful foods varied as well. Although those using the unrestricted card consumed the most calories, they consumed the least amount of calories from more nutritious foods. Those using the restricted card consumed the fewest calories overall but consumed more calories from more nutritious foods. Students using the restricted card also consumed significantly less added sugar, total fat, saturated fat, and caffeine than those who used the unrestricted card.

### ***How Was the Study Conducted?***

This report presents results from an experiment comparing the effects of various behavioral intervention strategies on the food choices of college students. Participants in the experiment were recruited from Cornell University. The experiment's participants used three types of payment options and two different meal selection methods.