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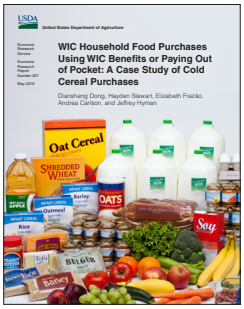

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WIC Household Food Purchases Using WIC Benefits or Paying Out of Pocket: A Case Study of Cold Cereal Purchases

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What Is the Issue?

USDA's Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is the Nation's third-largest food and nutrition assistance program. WIC participants typically receive Food Instruments that they can exchange for foods like infant formula, fluid milk, and cold cereal at authorized retail stores. These foods are carefully chosen to provide nutrients missing in the diets of the target population. Cold cereals provided through the WIC program must contain a specified minimum of iron, for instance, and not too much sugar. Regulations also stipulate that at least half of the cereals authorized on a State agency's food list be whole-grain.

The WIC program served about 8 million participants per month in fiscal year (FY) 2015 at a total cost of $6.2 billion. Food costs, mostly incurred when State agencies reimburse authorized retailers for WIC participants' purchases, represent about 70 percent of WIC's overall budget. Since participants incur no out-of-pocket costs when purchasing WIC foods, economic theory suggests they may be less sensitive to prices when using their benefits, which may increase the program's total costs. To control costs, WIC State agencies may restrict the types of products that participants can buy and the types of stores they can patronize. In this study, ERS analyzes purchases of cold cereal by WIC and non-WIC households and between WIC households that pay for cereal out of pocket and those using their WIC benefits. A better understanding of the shopping habits and food choices of WIC households may help State agencies develop effective cost-containment strategies.

What Did the Study Find?

USDA's National Household Food Acquisition and Purchase Survey (FoodAPS), conducted between April 2012 and mid-January 2013, offers unique insights into the food-shopping behavior of U.S. households. Among the 4,826 households who participated in the survey, 973 provided complete information on their purchases of 1,905 boxes of cold cereal. Of these households, 136 were participants in the WIC program. Analysis of the data confirms that WIC households are less price-sensitive when using benefits:

- When using WIC benefits, program participants spent $0.24 per ounce for cold cereal, on average, significantly more than WIC households paying out of pocket ($0.19 per ounce) and than non-WIC households ($0.20 per ounce).

Although WIC-allowed cold cereals must satisfy specific nutritional requirements, this does not explain why participating households buy relatively more expensive products when using their benefits. Considering all the cold cereals allowed by at least 1 of the WIC State agencies in the 48 contiguous States and the District of Columbia, our analysis shows that WIC-allowed cereals were no more expensive than other cold cereals purchased by FoodAPS households:

- Cold cereals allowed by at least one WIC State agency cost about $0.20 per ounce, roughly equal to the price paid for other brands of cold cereal. Indeed, after controlling for whether cereals were actually purchased using WIC benefits, among other factors, the study found that WIC-allowed cereals cost 1.5 cents less per ounce than other cereals.

To control costs, WIC State agencies may restrict participants' brand and package-size choices. Private-label cereals may cost less than national-brand cereals, and cereal packed in larger boxes may cost less per ounce than cereal in smaller containers. Simulations based on an economic model show that:

- Requiring WIC participants to purchase cold cereal in 18-ounce boxes might lower the cost of cereals purchased with WIC benefits by 1 cent per ounce (a 4.3-percent price decrease).

- Requiring WIC participants to choose a private-label product might lower the cost of cold cereals purchased with WIC benefits by 5 cents per ounce (a 22-percent price decrease).

WIC participants can generally use their benefits at both small and large stores, even though smaller stores tend to charge higher prices. However, simulations show that this may have little impact on average food costs, since most WIC households reflected in the data already purchase their cold cereal at a large store.

When considering restrictions on participants' choices of WIC foods, WIC State agencies balance the benefits of cost savings against the potentially negative impact of such restrictions on participants' access to food and satisfaction—and therefore consumption—of the food, as well as overall participation and satisfaction with the program. The need to strike this balance has led USDA to consider behavioral economic strategies, rather than actual restrictions, to nudge WIC participants to voluntarily choose less expensive items, package sizes, and/or stores. To this end, USDA has funded the Duke-University of North Carolina Center for Behavioral Economics and Healthy Food Choice Research (BECR), which has devoted some of its resources to promoting behavioral economics research for improving food-cost efficiency within the WIC Program.

How Was the Study Conducted?

Data from the National Household Food Acquisition and Purchase Survey (FoodAPS) were used in this study. Households participating in FoodAPS reported all the foods they acquired over a 7-day period between April 2012 and mid-January 2013. Detailed information such as price, brand, package size, and payment method was available on each item acquired. We first compared cold cereal purchases by WIC households when they paid out-of-pocket, WIC households when they paid with program benefits, and non-WIC households. For our main empirical analysis, we then estimated a model that predicted the average price paid per ounce for cold cereal by households while controlling for a large number of potentially confounding factors. Explanatory variables accounted for whether the purchasing household participated in WIC, whether the cereal was WIC-allowed, whether WIC benefits were used to pay for the cereal, whether the cereal was a private-label or national-brand product, and the package size. We also used retail scanner data to create a local price index, which we then used to control for geographic differences in retail food prices. Finally, using our model results, we performed simulations to measure the likely impact on food costs of requiring participants to patronize only large retail stores or of restricting their brand and package-size choices.