

## Buying Wisely and Well: Managing WIC Food Costs While Improving the WIC Customer's Shopping Experience

### The Duke-UNC USDA Center for Behavioral Economics and Healthy Food Choice Research (BECR)

**Purpose:** BECR facilitates new and innovative research on the application of behavioral economics theory to healthy food choice behaviors that would contribute to enhancing the nutrition, food security, and health of American consumers. BECR is particularly interested in promoting healthy and cost-effective food choices for participants in the Supplemental Nutrition Assistance Program (SNAP) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).

**Vision:** To use behavioral economics principles and strategies to promote healthy, economical food choices among WIC and SNAP recipients and the general public through research, capacity building, and dissemination.

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*In July 2015, the BECR Center hosted a roundtable to discuss exploratory and innovative behavioral economics strategies that might be useful in helping the WIC Program manage food costs without adversely impacting participant redemptions, program satisfaction, and participation. This brief provides a summary of the discussion that took place during the meeting, based on five white papers funded by the BECR Center as well as the accompanying discussion.*

- The WIC shopping experience varies widely in terms of ease of locating and purchasing WIC approved foods, courteous treatment by store staff and a smooth, problem-free checkout experience.
- Difficulties in the shopping experience may adversely affect the full redemption of WIC benefits and discourage continued participation in the program.
- Given that price does not influence WIC participants' ability to purchase WIC foods (except for fruits and vegetables), WIC shoppers may choose to redeem most of their WIC benefits at stores that offer a more positive shopping experience, even if it is not their lowest cost option or their usual food shopping option.
- Difficulties identifying approved WIC food options may limit WIC shoppers' choices.

### Background on WIC

The *Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)* is a nutrition assistance program that serves over 8 million mothers and young children per month, including 51% of all infants and 29% of all pregnant women in the U.S.<sup>1</sup> WIC provides participants with nutritious foods to supplement diets, nutrition education (including breastfeeding promotion and support), and referrals to health and other social services.

Participants receive one of 7 food packages containing a combination of defined amounts of specific selected foods. Both the types of foods and the amounts to be provided in each package are defined by Program regulations after being scientifically selected to provide nutrients that are missing in the

diets of the target populations and meet other nutrition specifications. For example, in order to be authorized by WIC, breakfast cereals must contain a specified minimum of iron and not exceed limits for sugar. Most participants receive their food benefits in the form of food instruments (such as paper vouchers or electronic benefit transfers) which list the amount of each food the participant may purchase. Fruit and vegetable benefits, however, are provided in the form of a cash value voucher with a specified dollar amount.

Participants redeem the food instruments at stores authorized by the State Agency. These stores are referred to as WIC vendors. Because most WIC benefits are quantity-based – that is, participants receive the specified food prescription regardless of the price charged by the store – WIC participants may be less inclined to pay attention to the price of WIC foods than when shopping with their own funds. An exception would be when using the WIC fruits and vegetables benefits, since those benefits are dollar-based. WIC vendors are reimbursed – within limits - for the purchase price of the food by the State agency. However, vendors are not reimbursed for foods purchased with WIC benefits that are not on the State agency’s list of allowed WIC foods. Thus, vendors have a major incentive to ensure that only allowed foods are purchased using WIC benefits. In States that have transitioned to EBT, this reconciliation is done automatically at the checkout with the scanned food being matched to the State agency’s UPC database of WIC-allowed foods. In States using paper vouchers, the cashier is responsible for ensuring that the scanned food is WIC-allowed. In either case, rejecting a food items that is not WIC-allowed during the checkout process requires that the participant decide whether to forego purchasing the item at that time (which, under the paper voucher system, could mean foregoing the item altogether), or hold up the line while going to look for the correct item.

To provide participants easy access to healthy, appealing WIC foods, State agencies make decisions regarding which and how many of the food items that meet WIC specifications they will allow their participants to purchase with WIC benefits. State agencies also authorize, train and monitor WIC vendors, and provide guidance to WIC participants regarding approved products and stores.

Food costs account for about 70 percent of WIC program costs. Since WIC is not an entitlement program, the number of people who can be served may be limited by funding levels appropriated by Congress on an annual basis. Thus, WIC State agencies seek to manage food costs by a variety of mechanisms, among them limiting brands or package sizes for the specific food items they authorize for their WIC participants, limiting some types of vendors, and monitoring pricing of WIC vendors.

Anecdotal evidence suggests that severely limiting participants’ food choices to less expensive items could reduce program effectiveness if participants choose not to purchase or consume those WIC foods. Dissatisfaction with the allowed foods may also decrease program participation.<sup>2-3</sup> In addition, limiting WIC food options too narrowly could also increase WIC costs if retailers perceive the item to be mainly purchased by WIC customers and so raise prices.

## Exploring the Issue

To explore the possibility of using behavioral economics strategies to help WIC manage food costs without adversely influencing program effectiveness, satisfaction, and participation, BECR released a

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call for conceptual white paper proposals in late 2014. The Center funded 5 conceptual white papers, conducted listening sessions with multiple WIC stakeholders across the country, and hosted a 1-day roundtable conference in Washington, D.C. to further discuss WIC cost containment and the WIC customer experience.

Presenters at the roundtable included the white paper authors as well as Collin Payne of New Mexico State University, and Margaret Wilkin of Altarum Institute. Other attendees included staff from the BECR Center, USDA's Food and Nutrition Service, and USDA's Economic Research Service, WIC State Agency staff, representatives of the National WIC Association, software developers, and other researchers. The roundtable concluded with a facilitated discussion focusing on informing future research strategies. This report highlights some of the major themes that emerged from the white paper presentations and discussions.

## Major Themes

A major theme that emerged from the roundtable was related to the complexity of the WIC shopping experience, and the potential of developing effective behavioral economic strategies that improve the WIC shopping experience. Such strategies may have the additional benefits of increasing the likelihood of participants making full use of their food benefits, improving WIC participant satisfaction with the program, and increasing program participation. At the same time, some strategies may also increase the likelihood that participants will shop at lower-price stores or select lower-price WIC foods, helping the program contain food costs.

### WIC Round Table White Papers and Presentations

#### **WIC, Healthy Food Choices, and Cost Containment:**

Perspectives of four key players: participants, program administrators, retailers, and food manufacturers: and behavioral economic strategies to change behavior  
Molly De Marco, Alice Ammerman  
*University of North Carolina at Chapel Hill*

#### **Behavioral Economics and Cost Reductions in the WIC Program**

Andrew S. Hanks, Carolyn Gunther, Rob Scharff, Leslie Stoel  
*Ohio State University*

#### **How Can We Use In-store Promotions to Decrease WIC Program Costs, Maximize Store Profitability and Improve Participant Satisfaction?**

Lucia A. Leone, Lindsey Haynes-Maslow, Leonard Epstein, Samina Raja  
*University of Buffalo*

#### **Well-Spent WIC: Using WIC Participants' Path-to-Purchase to Inform Cost Containment Strategies**

Collin Payne, Mihai Niculescu  
*New Mexico State University*

#### **Entry of Vendors, Cost Containment, and Participants Access in the Women, Infants and Children Program**

Richard J. Sexton, Tina Saitone, Patrick McLaughlin  
*University of California, Davis*

#### **Understanding WIC Purchasing Decisions**

Corliss A Solomon, Ameena Batada, Katelin Hudak, Ashley Kennedy, Elizabeth Racine, Dmitry Shapiro, Arthur Zillante  
*University of North Carolina-Charlotte*

#### **Price Variability in WIC Foods**

Margaret Wilkin  
*Altarum Institute*

#### **Redesign Choice Architecture: Nudging WIC Participants to Lower-Priced Brands**

Qi (Harry) Zhang, Chuanyl Tang, Michael Welch  
*Old Dominion University*

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Focus groups conducted by some of the researchers with WIC participants provided insights into the complexity of the WIC shopping experience, the challenge of correctly identifying the WIC-allowed food item (brand, flavor, package size) and the variation across grocery stores and geographic regions in terms of both visibility and consistency of shelf-labeling of WIC foods.<sup>4-6</sup> Several of the focus group participants reported feeling embarrassed when checking out and realizing that by mistake they had picked a food item that was not allowed by WIC. One reported strategy to avoid this embarrassing situation was to only select items they were sure were WIC-approved, even if that limited their choices unnecessarily.<sup>5</sup> Item selection was also heavily influenced by whether the item was likely to be acceptable to their children.

Focus group participants also cited apprehensions about store staff being inadequately trained on WIC or holding negative perceptions of WIC customers.<sup>4-6</sup> For this reason, WIC participants may prefer to redeem their WIC food instruments at stores they know will provide a positive WIC shopping experience even if its prices are higher than where they usually shop.<sup>7</sup> Negative shopping experiences can impact participant satisfaction with the WIC program. For example, negative shopping experiences may discourage continued participation in the program.<sup>3</sup> It may also add to WIC program per-item food costs if it leads WIC participants to choose a higher-price store that provides a better shopping experience or to stick with a few familiar but higher-priced food items.

The WIC white papers, interviews, and round table discussions further suggested that improving the WIC shopping experience may also benefit WIC vendors in ways that end up benefiting the WIC participant and the Program. In particular, although retailers may choose to become authorized WIC vendors because of anticipated financial benefits – not only from the WIC purchases, but also because WIC shoppers may buy other products with non-WIC funds while at the store – they also incur costs associated with their WIC authorization. WIC vendors must abide by the State agency's stocking or signage requirements, and selling within price guidelines set by the State agency. Because WIC vendors are not reimbursed by USDA for unapproved items erroneously charged to WIC, they typically strive to develop systems and training for store employees to avert such errors. In addition, WIC vendors may be interested in strategies to increase efficiency during check-out process, both for reducing operational costs (e.g., loss from redemption errors) and maintaining WIC and non-WIC customer satisfaction by reducing problems and delays at check-out. Whereas many WIC vendors are enthusiastic about the implementation of WIC EBT (which is expected to reduce the likelihood of erroneously charging a non-WIC approved food to WIC), one white paper identified a small decline in average monthly WIC expenditures when stores switched from paper vouchers to EBT.<sup>8</sup> It is not yet clear to what extent this may be due to WIC participants choosing not to purchase some items, or forgetting that they had remaining WIC foods available for redemption.

The WIC white papers and roundtable discussions also provided some insights on how levers used by State agencies to help manage food costs – such as the selection of WIC-allowed food items, signage, and vendor authorization, training, and monitoring – may have potential for behavioral

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economics strategies for managing food costs while addressing WIC participant customer satisfaction issues.

## Implications and Opportunities for Future Research

Effective strategies for improving the WIC shopping experience may improve WIC participant satisfaction with the program and increase the likelihood that participants will make full use of their nutrition benefits and/or continue to participate in the program. At the same time, some strategies may also help reduce overall food costs by reducing the likelihood that participants will choose a higher-price store or higher-priced products. However, additional research is needed to explore the impact of such behavioral economic strategies on program food costs, benefit redemptions, program satisfaction, and program retention. Possible research directions include:

- *Investigating effective strategies for improving in-store identification of WIC-allowed foods* - Strategies could include clear in-store labeling and shelf-talkers, placement strategies that group WIC foods within the store for ease of identification, improved brochures and printed materials, and mobile technologies such as phone-based “apps”. Technology-based applications could also be used to investigate the potential for including behavioral “nudges” to encourage healthy food habits, or choice of lower-priced options.
- *Investigating effective strategies for increasing full redemption of food benefits* – Strategies could include easy methods by which participants in State agencies using EBT could check their balance of available WIC foods, prompting use of about-to-expire benefits, making it easier for participants to estimate the cost of their fruits and vegetable purchases, or finding ways to easily help participants reach their CVV value without surpassing it.
- *Identifying effective strategies for improving WIC customer service* - Staff training on WIC customer assistance, checkout, and resolving common problems at checkout and other times could improve the shopping experience, decrease checkout time, and increase the participant’s overall satisfaction with the WIC Program.
- *Identifying and developing effective uses of WIC State agency administrative data* –State agencies may be able to use administrative data on WIC shopper-vendor redemption patterns to identify stores that WIC customers patronize once or twice and then switch away from, suggesting some potential problems with the shopping experience.<sup>9</sup> State agencies that have implemented EBT have information on items purchased and prices paid that can be used to identify food items with low redemption rates or unusually high prices paid.<sup>8,10</sup> This information can be used to target efforts to improve shopping and purchasing behaviors. Vendor monitoring and training could potentially include a focus on ensuring a satisfactory WIC shopping experience. Brochures, CDs and more recently phone-based applications (“apps”) may offer opportunities to guide and simplify the WIC shopping experience.

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