

## USDA Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Food Cost-Containment Practices Study (Summary)

### Background

The U.S. Department of Agriculture's (USDA) Food and Nutrition Service (FNS) administers the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) through Federal grants to 89 State agencies. WIC provides nutritious foods, nutrition education, breastfeeding promotion and support, and healthcare referrals to nutritionally at-risk, low-income pregnant women, new mothers, and infants and children up to age 5. WIC State agencies provide services through local agencies and clinics.

Federal regulations designate the types and amounts of foods that can be prescribed to meet each participant's nutritional needs. Food costs accounted for \$3.1 billion, or about 61 percent of the WIC program's total costs, in 2019. State agencies are responsible for implementing cost-containment practices to ensure WIC foods are reimbursed at competitive prices while maintaining Federal nutrition standards and quantities. Some of these practices are federally mandated, while others are voluntary. These practices are intended to keep food costs down and ensure WIC food grants are used efficiently.

This study sought to understand the approaches State agencies use to reduce food costs when selecting and authorizing WIC foods and the relative effectiveness of these approaches. The study examined how 6 types of State agency food cost-containment practices are associated with food costs and WIC participant outcomes (i.e., participant satisfaction, benefit redemption, and food consumption) in 12 State agencies. The 6 types of food cost-containment practices included: least expensive brand restrictions, store brand only restrictions, manufacturer rebates for supplemental foods other than infant formula, container size restrictions, form or type<sup>1</sup> restrictions, and food alternative<sup>2</sup> restrictions.

### Methods

To obtain a national picture of food cost-containment practices, WIC food lists and policy documents were collected from 70 State agencies (50 States, District of Columbia, 5 U.S. territories, and a sample of 14 of the 34 Indian Tribal Organizations) in 2018. Program staff from these State agencies also completed in-depth interviews about their food cost-containment practices.

### Key Findings

- All 70 WIC State agencies surveyed used at least one container size restriction for cost containment purposes and at least one form or type restriction on their WIC-approved foods.
- Seventeen of the 29 food cost-containment practices examined were associated with estimated average cost savings of between \$0.02 and \$0.61 per participant per month.
- Some food cost-containment practices did not reduce estimated food costs and/or were associated with lower participant satisfaction, benefit redemption, or consumption of prescribed foods.
- More than 90 percent of participant respondents were satisfied with foods purchased with WIC. No brand or container size-related food cost-containment practices were associated with brand or container size satisfaction with WIC foods.

In order to conduct an in-depth assessment of estimated cost savings<sup>3</sup> and participant outcomes associated with food cost-containment practices, the study collected information from 12 State agencies which had fully transitioned to an electronic benefit transfer (EBT) system: Colorado, Florida, Kentucky, Massachusetts, Michigan, Nevada, Ohio, Texas, Virginia, Wisconsin, West Virginia, and Wyoming. The four types of data collected included:

<sup>1</sup> Form or type refers to the form in which the food is packaged (e.g., string or shredded cheese) or the type (e.g., Greek or organic yogurt).

<sup>2</sup> Food alternative refers to authorized foods that accommodate dietary or cultural preferences (e.g., soy-based beverage and tofu as milk alternatives).

<sup>3</sup> Cost savings for food restrictions were defined as having an estimated average cost savings of \$0.01 or more per participant month.

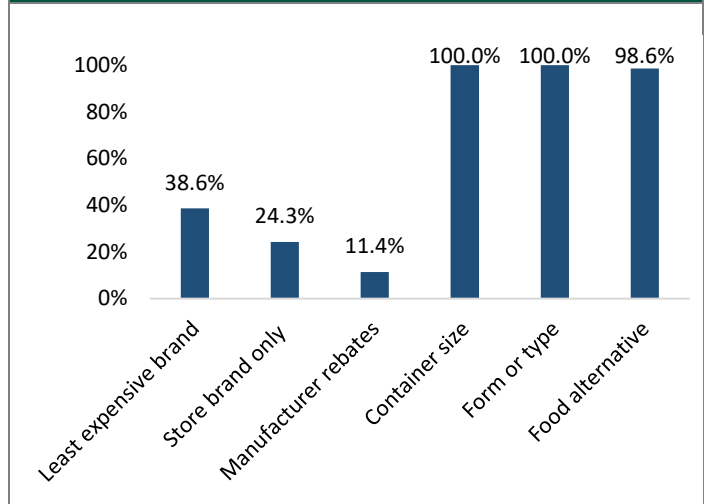
1. **Survey of current WIC participants:** Administered to a household respondent for 2,963 participants across the 12 EBT State agencies, this survey covered satisfaction with WIC food items, benefit use, food item purchases and consumption, use of mobile shopping applications, and presence of modified diets or food allergies.
2. **Survey of former WIC participants.** Administered to a household respondent for 380 participants in 3 of the 12 EBT State agencies, this survey covered satisfaction with WIC foods and reasons for nonparticipation.
3. **EBT data.** Benefit issuance, redemptions, vendor information, and approved product lists were used to understand and characterize the foods purchased by WIC households.
4. **Certification data.** These administrative data were used to identify and sample current and former participants and included information on participant characteristics, food package prescriptions, health outcomes, and household income used in the analysis.

## Findings:

### *National Picture of Cost-Containment Practices*

**All 70 State agencies studied used cost-containment practices to manage their food grant, including container size and form or type restrictions for at least 1 WIC-approved food.** Ninety-eight percent of these State agencies restricted at least one food alternative. Some study State agencies also limited the brands of foods eligible for WIC (through least expensive brand and store brand only restrictions and manufacturer rebates). Nearly 40 percent of study State agencies required participants to purchase the least expensive brand of a food item (Figure 1).

**Figure 1: Study State Agencies with Food Cost-Containment Restrictions in 2018 (Percentages; N=70)**



### *Food Costs and Savings*

**Examining data from 12 State agencies with EBT data, 17 cost-containment practices out of a possible 29 were associated with cost savings. The estimated average cost savings per practice was between \$0.02 and \$0.61 per participant per month.** These practices included:

- Requiring least expensive brands for cheese, juice, and whole wheat/grain bread;
- Requiring store brands for cheese and juice;
- Having manufacturer rebates for infant cereal, infant fruits and vegetables, and infant food meat;
- Limiting container sizes for yogurt, cheese, and juice;
- Having form or type restrictions for cow's milk, yogurt, eggs, and infant fruits and vegetables; and
- Not allowing yogurt and tofu as alternatives for milk.

### *Participant Shopping Experience and Satisfaction*

**While almost three-quarters of the 2,963 household respondents indicated the WIC shopping experience was easy, 90 percent reported experiencing at least one challenging shopping event.** Seventy-seven percent of these household respondents reported selecting the wrong item at least once and being asked by the cashier to retrieve the correct item. Seventy-two percent experienced a WIC food being out of stock or unavailable in the correct container size.

**More than 90 percent of the 2,852 household respondents were satisfied with foods purchased with WIC.** No brand or container size-related food cost-containment practices (e.g., least expensive brand or quart-size restrictions for yogurt) were significantly associated with brand or container size satisfaction with WIC foods.

**Certain food cost-containment practices were significantly associated with reported full consumption of purchased WIC foods.** Least expensive brand restrictions for whole wheat/grain bread products and tortillas, store brand only restrictions for juice, container size restrictions for yogurt (quarts only), and form or type restrictions for cheese (no shredded) were significantly associated with a decreased likelihood of reporting full consumption of purchased WIC foods. Restrictions for 48-ounce containers of juice and Monterey Jack cheese (i.e., not allowing this size or type) were significantly associated with an increased likelihood of reporting full consumption of purchased WIC foods.

**Reasons Former Participants Left WIC**

**Although both current and former WIC participants reported high levels of satisfaction, current participants were more satisfied with WIC foods compared to former WIC participants.** Ninety-five percent of current participants indicated they were satisfied with WIC foods compared with 90 percent of former participants, a statistically significant difference ( $p < 0.05$ ; total  $n=741$  and  $378$ , respectively). When satisfaction was examined by food item, former WIC participant households reported lower satisfaction with brand and container sizes than current participant households.

**The majority of 380 former WIC participant households reported they stopped buying WIC foods at least in part because they did not need WIC foods or because of a negative shopping or retailer experience.** Those respondents who had a negative shopping or retailer experience (Figure 2) reported they had trouble finding WIC foods in the store (41 percent) or lacked a convenient place to shop for WIC foods (15 percent).

**Figure 2: Reasons Former WIC Households Stopped Buying WIC Foods in 2018 (Percentages; N=380)**



**Participant Food Redemptions**

**While redemption rates varied across food items, they were highest for eggs and lowest for infant food meats.** On average, more than two-thirds of households redeemed eggs, cheese, and juice per month. Less than half of households redeemed soy-based beverages, tofu, and infant food meats in an average month.

**Table 1: Average Monthly Household Redemption Rates, by Food Item, Across the 12 EBT Study State Agencies in 2018**

WIC Food Items	Percent of Units Redeemed
Eggs	74.7%
Cheese	70.4%
Juice	67.0%
Cow's milk	62.6%
Yogurt	60.4%
Breakfast cereal	58.6%
Legumes	55.8%
Whole grains	55.8%
Infant fruits and vegetables	55.7%
Canned fish	54.7%
Infant cereal	53.3%
Soy-based beverage	43.5%
Tofu	35.8%
Infant food meat	33.0%

**Certain food cost-containment practices were significantly associated with redemption rates.** Store brand only restrictions for cheese and juice, container size restrictions for yogurt (quarts only), and form or type restrictions for cheese (no shredded) and eggs (large only) were significantly associated with lower redemption rates. Least expensive brand restrictions for both cow's milk and cheese were associated with higher redemption rates.

**Accommodations for Participants with Modified Diets**

**Nearly 22 percent of the 2,963 surveyed households followed a modified diet for health or personal reasons (religious, cultural, and other personal choice diets).** Among households following a modified diet, about 11 percent reported problems finding appropriate WIC foods because of their dietary needs.

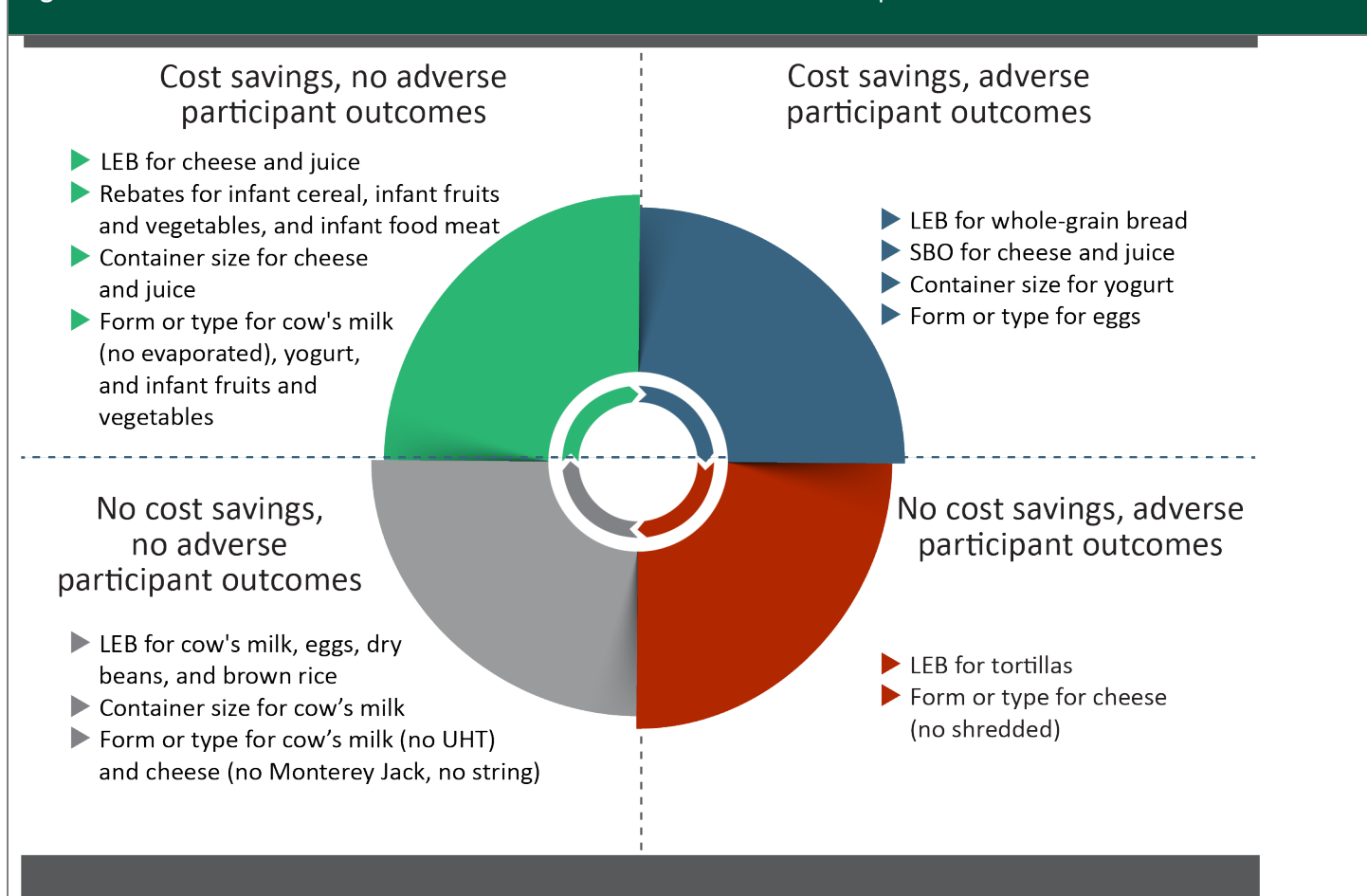
**Certain least expensive brand restrictions were associated with a lower likelihood of full purchase and consumption among households that followed a modified diet.** Such restrictions for eggs were associated with a lower likelihood of full purchase among households that followed a modified diet. Least expensive brand restrictions for cheese also were associated with a lower likelihood of consumption among households that followed a modified diet.

### Conclusions

Nine WIC food cost-containment practices were associated with average food-cost savings per restriction of \$0.10 or more per participant per month (between \$0.10 and \$0.37) and were not associated with adverse participant outcomes (i.e., satisfaction, redemption, or consumption). Four of these restrictions were widely used across the 70 study State agencies, and they reported few barriers to implementation: not allowing Greek yogurt and organic infant fruits and vegetables; restricting cheese container sizes to 16 ounces only; and not allowing 48-ounce containers of juice.

Some food cost-containment practices did not reduce estimated food costs and/or were associated with adverse participant outcomes. Two food restrictions did not yield any estimated cost savings and were associated with adverse participant outcomes: restricting tortillas to the least expensive brand and not allowing shredded cheese. An additional five practices yielded modest cost savings but resulted in adverse outcomes: restricting juice and cheese to the store brand only, restricting yogurt container sizes to quarts only, restricting whole wheat/grain bread to the least expensive brand and restricting the form or type of eggs to large only. These restrictions were unpopular with households, resulting in negative associations with full consumption or redemption of the given foods.

**Figure 3: Classification of Food Cost-Containment Practices Based on Participant Outcomes**



#### For More Information:

Gleason, S., Wroblewska, K., Trippe, C., Kline, N., Meyers Mathieu, K., Breck, A., Marr, J., Bellows, D. (2022). WIC Food Cost-Containment Practices Study. Prepared by Insight Policy Research, Contract No. AG-3198-C-15-0022. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, Project Officer: Ruth Morgan. Available online at: [www.fns.usda.gov/research-and-analysis](http://www.fns.usda.gov/research-and-analysis).