

EARLY OUTCOMES: Impact of the New WIC Foods

The revisions to the food packages for the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) present an unprecedented opportunity to examine how these policy changes affect multiple aspects of a program serving over 9 million participants each month, including nearly half of all infants born in the United States.

This policy brief summarizes late-breaking research on the impact of the new WIC foods on low-income families, communities, and nutrition policy.



Although the long-term health and social effects of the new WIC foods may not be realized for many years, a number of preliminary outcomes and implications are already surfacing. In late 2010, Altarum Institute and national partners sponsored a WIC Food Package Evaluation Symposium in Washington, D.C., to summarize the key early outcomes, explore common themes, and build on these to inform future research and WIC policy modifications.

This policy brief provides highlights of information presented at the Symposium.

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SWEEPING WIC FOOD PACKAGE CHANGES

During 2009, the United States Department of Agriculture (USDA) and all state and local WIC agencies implemented historic changes designed to align the WIC food packages with the Dietary Guidelines for Americans. The changes, recommended by the Institute of Medicine, include the addition of fruits and vegetables, whole grains and soy products, as well as modifications in types and amounts of milk, cheese, eggs, and juice. Information about the WIC food packages is available at www.fns.usda.gov/wic/.

The changes were designed to promote healthier food choices to the more than 9 million women, infants, and children served by WIC each month, with a particular emphasis on updating WIC target nutrients based on newer scientific evidence. The changes were also intended to help lower the risk of obesity and its consequences, since this national epidemic disproportionately impacts low-income families. With nearly half of all infants born in the United States participating in the WIC Program, this was an unprecedented opportunity to promote healthy eating and healthy weight among young children.

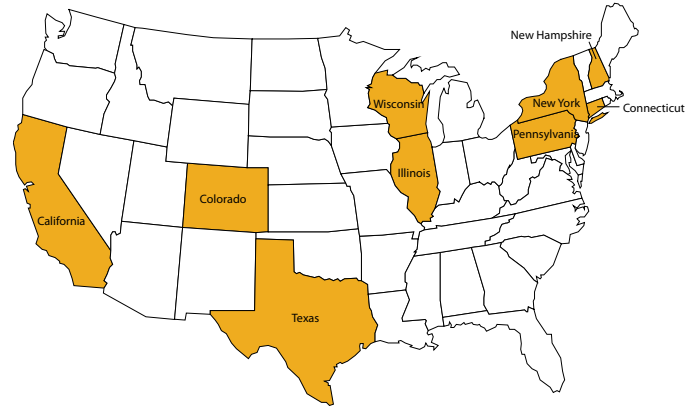
New WIC Foods



HOW IS IT WORKING? CAPTURING EARLY OUTCOMES

With the implementation now complete, policymakers, program administrators and public health experts are eager to find out how these changes have impacted the shopping and eating behaviors of WIC participants. Assessing impact on state agencies administering the program, WIC-authorized grocers, and the community at large is also critical. In response, a number of academic and research institutions have partnered with WIC providers across the nation to capture the impact of these changes on the WIC population, the retail food system, and neighborhood food environments. Figure 1 illustrates the breadth of the research projects presented at the Symposium; other studies are underway.

Figure 1. Selected WIC Food Package Research Project Locations

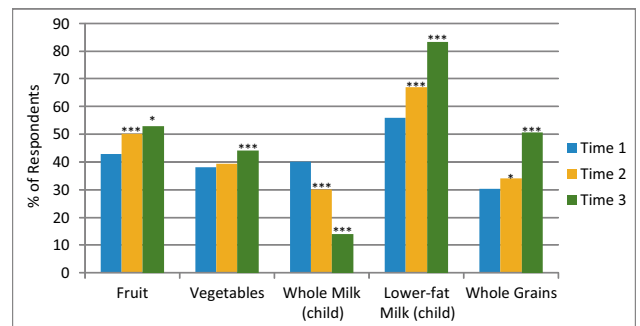


IMPACT ON WIC PARTICIPANTS

Policymakers and WIC providers are most interested in seeing whether the healthy new WIC foods positively influenced food shopping and consumption practices, and if WIC nutrition education, a core component of WIC services, was helpful in changing behaviors. The answer is yes – it's working!

- California's Healthy Habits nutrition education campaign, designed to introduce participants to the changes before they happened, significantly increased participant consumption of fruit, whole grains, and lower-fat milk – even before the new foods were provided. See Figure 2.
- California WIC participant intakes of fruit, vegetables, whole grains, and lower-fat milk increased even further when the new foods were implemented.

FIGURE 2. California Study Shows Increased Intake of New WIC Foods After Nutrition Education Campaign and After Food Package Changes

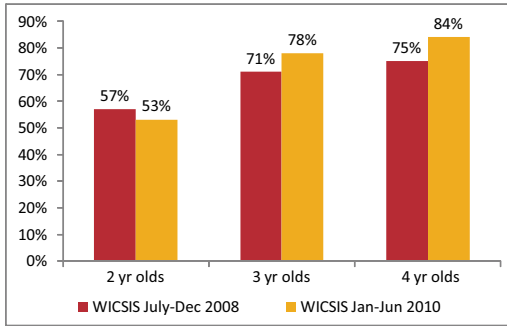


Time 1: Before Education/Before New Foods
 Time 2: After Education/Before New Foods
 Time 3: After Education/After New Foods



■ In New York, preliminary findings from a long-term evaluation showed that WIC participants increased their consumption of non/low-fat milk, fresh produce, and whole grains following the introduction of the new food packages; see Figure 3. Participants reported the positive impact of learner-centered education on their decision to switch to non/low-fat milk.

Figure 3. New York Study Shows Increase in Non/Low-Fat Milk Consumption of Young Children



■ A multi-state National Food and Nutrition Survey coordinated by Texas A&M University is showing similar patterns: reported intake of fruits and vegetables increased, along with favorable changes in children's milk and juice consumption.

IMPACT ON GROCERY STORES AND COMMUNITY FOOD ACCESS

“Obesogenic” environments – neighborhoods where affordable, healthy foods and opportunities for physical activity are scarce – are associated with higher rates of obesity. Policymakers and others interested in improving affordability and access to healthy food choices are eager to see if the new WIC foods can play a role in improving these environments. Several innovative studies looked at the impact of the food package changes on WIC vendors and the community food environment.

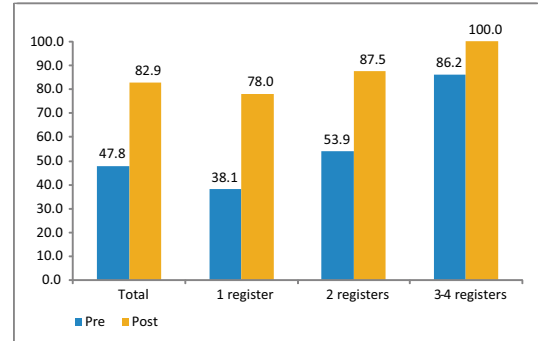
■ A study of the Inner-City Philadelphia grocery landscape showed that small corner stores that sell WIC foods significantly increased the availability of healthy foods (low-fat milk, fresh produce, 100% juice, and brown rice) for all shoppers. The Philadelphia study also found a marked improvement in healthy food availability in a largely Hispanic neighborhood with previously poor access.

■ In Connecticut, a study of a representative cross-section of grocery stores found a sizable increase in the supply of healthy foods, especially fresh fruit, whole wheat bread and brown rice, in WIC-authorized stores, with stronger gains in lower-income neighborhoods. The small vendors were able to adapt to the change quickly.

■ In Northern Illinois, several types of fruit and vegetable selections, such as commonly consumed fresh varieties and varieties preferred by African Americans, increased between pre- and post- implementation among larger stores.

■ An evaluation of the impact on small stores in Colorado, New Hampshire, Wisconsin, and Pennsylvania found that availability of the new healthier WIC foods, such as whole grains, universally increased, especially in stores with just one or two cash registers. See Figure 4. Most small store owners in the study overcame any initial implementation challenges and reported feeling positive about the WIC program and the new foods.

Figure 4. More Brown Rice in Small Stores After New WIC Foods Implemented



IMPACT ON EARLY FEEDING AND BREASTFEEDING

Early feeding practices lay the groundwork for lifetime habits. WIC's healthier offerings for toddlers, if accompanied by effective WIC guidance and support for young parents as they introduce solids and encourage varied and healthy table foods, can impact an entire generation.

■ A Chicago study of Latino and African-American families with children aged 2-3 years found higher food security and more fruits and vegetables in African-American households 6 months after introduction of the new food package. Researchers will follow up on this positive early finding over time to see if healthier foods impact the weight status of this group.

For WIC mothers and infants, significant changes were made in the new WIC rules to better incentivize and sustain exclusive breastfeeding. These included not only an enhanced food package for breastfeeding mothers and their babies, but also strengthened breastfeeding support services. See Figure 5.

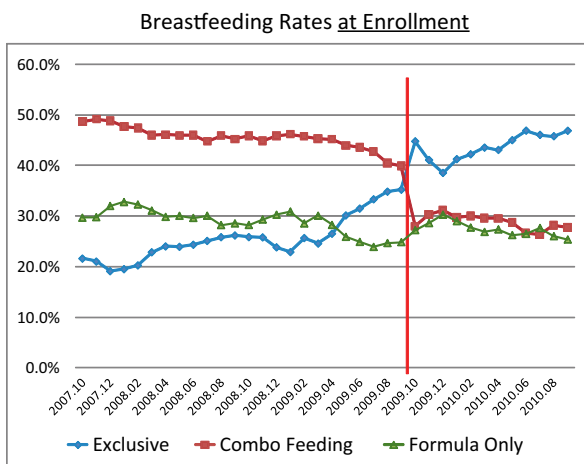
Figure 5. Multiple WIC Policies Encourage Exclusive Breastfeeding

1. State policy option of no routine provision of formula in the first 30 days for breastfeeding infants.
2. Individual assessment of mother and baby for breastfeeding concerns and problems, and for requests for supplemental formula.
3. More carefully calculated quantities of supplemental formula.
4. Enhanced food package for breastfeeding mothers.



- In a very large Los Angeles WIC agency, an analysis of administrative data shows how these multiple policies resulted in a striking increase in exclusive breastfeeding initiation *and* duration, with an associated decrease in formula supplementation. The issuance rate of fully breastfeeding food packages increased by nearly 86% in the months following the rollout of the new enhanced packages.
- Significantly, breastfeeding rates in this agency began to rise 6 months *before* the new foods were introduced, when all frontline WIC staff received high-quality breastfeeding education and training in new policy and support protocols. See Figure 6.

Figure 6: Breastfeeding Rates in Los Angeles Increased Before and After Implementation of Changes



RECOMMENDATIONS AND NEXT STEPS

Rigorous evaluation of the food packages and other key WIC policy changes can play an important role in helping policymakers and program administrators understand both the dynamics of what worked well in implementing the changes, but also what might be improved upon in future reforms. To support a culture of outcomes-based management of the WIC program, the following policy recommendations should be considered:

1. Congress should continue to support WIC outcomes research with adequate and targeted annual appropriations.
2. USDA should continue to lead an open and consultative priority-setting process for WIC outcomes research, and ensure that all research is completed and disseminated in a timely fashion.
3. State and local WIC practitioners should partner with researchers to pursue small-scale WIC research projects and participate in larger studies that can inform policymakers and improve program operations.
4. WIC outcomes research should include not only health and behavioral outcomes, but also identify WIC Best Practices, operational and cost efficiencies across states and programs.
5. Whenever possible, WIC practitioners and local researchers should link efforts across states and regions to address national program impact.

Proceedings from the WIC Food Package Evaluation Symposium, including presentations of the research, as well as other sources of WIC-related research can be accessed at the Web resource pages listed below.

WIC Food Package Evaluation Symposium at Altarum Institute: www.altarum.org/obesityresources

USDA Food and Nutrition Service: www.fns.usda.gov/WIC

Healthy Eating Research: www.healthyeating.org

Journal of Nutrition Education and Behavior, WIC Supplement, May 2010: www.jneb.org

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