The Effect of WIC Food Package Changes on Breastfeeding Duration and Fully Breastfeeding Rates, 2007-2010
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The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is a national public health nutrition program that provides nutritious supplemental foods, nutrition education, referrals for health care, and breastfeeding support to participants. WIC food packages are designed to supplement participants’ diets. Foods are chosen as good sources of five target nutrients: vitamin A, vitamin C, calcium, iron, and protein.

Prior to October 2009, a breastfeeding WIC participant could receive a full food package and the infant could receive a full formula food package at the same time (up to one year of age), regardless of the number of times the infant was breastfed each day. In 2007, the United States Department of Agriculture changed the composition and quantities of prescribed foods in the WIC food packages. State agencies were required to implement these changes by October 1, 2009. The Florida WIC Program successfully implemented the updated food packages on October 1, 2009. Changes to the food package included new food categories, revised maximum quantities, and optional new food substitution policies. In addition, the definitions for fully breastfeeding and partially breastfeeding changed, which affected the amount of food/formula provided to participants. Furthermore, the participant must declare whether she is fully breastfeeding (infant receives no formula), partially breastfeeding (infant receives up to ½ the maximum amount of formula), or not breastfeeding (infant receives up to the maximum amount of formula). This change may have influenced the self-reporting of breastfeeding status by participants.

This data brief provides information on the effect of WIC food package changes on breastfeeding duration and fully breastfeeding rates among Florida WIC participants between calendar years 2007 and 2010.

Breastfeeding Duration at 6 Months
Prior to the WIC food package changes in Florida, the prevalence of breastfeeding at 6 months was 38% in 2007 and 2008. After the food package changes in 2010, the prevalence of breastfeeding at 6 months was 29%. The prevalence of breastfeeding at 6 months significantly decreased from 38% in 2007 to 29% in 2010 (Figure 1).

To determine if an association existed between the food package change and breastfeeding at 6 months, this analysis adjusted for factors associated with breastfeeding and calendar year:
- Participants in calendar years 2007 and 2008 (before food package changes) were 5% more likely to breastfeed at 6 months compared to participants in calendar year 2009.
- Participants in calendar year 2010 (after food package changes) were 19% less likely to breastfeed at 6 months compared to participants in calendar year 2009, shown in Figure 2.
Fully Breastfeeding at 6 Months

Fully breastfeeding is defined as a breastfed infant not receiving formula from WIC. Prior to the WIC food package changes in Florida, the prevalence of fully breastfeeding at 6 months was 5% in 2007 and 9% in 2008. After the food package changes in 2010, the prevalence of fully breastfeeding at 6 months was 13%. The prevalence of fully breastfeeding at 6 months significantly increased from 5% in 2007 to 13% in 2010 (Figure 3).

Additionally, the economic recession in the United States that started in the late 2000s may have caused many mothers to return to work, which may have influenced breastfeeding duration rates. Furthermore, the 2002 and 2008 Farm Acts made the Supplemental Nutrition Assistance Program (SNAP) benefits easier to apply for, available to more people, and more generous. Currently, SNAP participants can purchase any food or formula preferred while WIC participants may purchase only WIC-approved foods. For this reason, breastfeeding women may choose not to receive WIC benefits.

Current WIC Initiatives to Improve Breastfeeding Duration

To increase breastfeeding duration rates, the Florida WIC Program received federal funding to expand the piloted breastfeeding peer counseling model called Loving Support® through Peer Counseling Program to all local WIC agencies. For more information on the Loving Support® breastfeeding peer counseling program, please visit the following website: http://www.wicworks.org/Learning_Center/support_peer.html.


Definitions:
Breastfeeding duration: the reported or calculated length of time the infant (age < 2 years) was breastfed among participants who reported initiating breastfeeding. If the participant reported still breastfeeding at the last WIC visit the length of time breastfed was calculated as follows: Calculated duration = date of last visit - infant date of birth.

Discussion

The Florida WIC breastfeeding duration rates at 6 months were lowest in calendar year 2010; however, the fully breastfeeding rates at 6 months were highest in calendar year 2010. In calendar year 2009, the Florida WIC program updated its food packages, which may have influenced the decline in breastfeeding duration rates and the increase in fully breastfeeding rates. The new food packages were designed to support and sustain breastfeeding by providing different food packages for fully formula fed, partially breastfed, and fully breastfed infants.

To determine if an association existed between the food package changes and fully breastfeeding at 6 months, this analysis adjusted for factors associated with breastfeeding and calendar year:
- Participants in calendar years 2007 (59%) and 2008 (25%) were less likely to fully breastfeed at 6 months compared to participants in calendar year 2009.
- Participants in calendar year 2010 were 8% more likely to fully breastfed at 6 months compared to participants in calendar year 2009, as shown in Figure 4.

References: