

SPECIAL SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS, AND CHILDREN (WIC)
INFANT AND TODDLER FEEDING PRACTICES STUDY 2: SECOND YEAR REPORT (SUMMARY)

Background

The U.S. Department of Agriculture’s (USDA) Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) safeguards the health of low-income pregnant and postpartum women, infants, and young children who are at nutritional risk. The WIC Infant and Toddler Feeding Practices Study-2 (WIC ITFPS-2), also known as the “Feeding My Baby” Study, captures data on caregivers and their children over the first 5 years of the child’s life after WIC enrollment to address a series of research questions regarding feeding practices, associations between WIC services and those practices, and the health and nutrition outcomes of children receiving WIC. The study previously produced two reports, the Intentions to Breastfeed Report¹ and the Infant Year Report.² The current report focuses on caregivers’ employment, school, and childcare circumstances, as well as the feeding progressions, dietary intake, and weight status of children from birth through around 24 months.

Methods

The study was designed to represent the national population of infants participating in WIC. Caregivers were recruited in person as they enrolled in WIC (either prenatally or before their infant was 2.5 months old) between July and November 2013. Study recruitment occurred at 80 WIC sites across 27 States and territories nationwide. Sites were eligible for study participation if they enrolled a minimum average of 1.5 participants per day.

The study sample includes 3,777 caregivers who completed at least a 1- or 3-month postpartum interview. This report sometimes utilizes a subset of respondents due to study attrition.

¹ May L, Borger C, McNutt S, et al (2015). WIC Infant and Toddler Feeding Practices Study 2: Intention to Breastfeed. Available at: <https://www.fns.usda.gov/wic/special-supplemental-nutrition-program-women-infants-and-children-wic-infant-and-toddler-feeding>

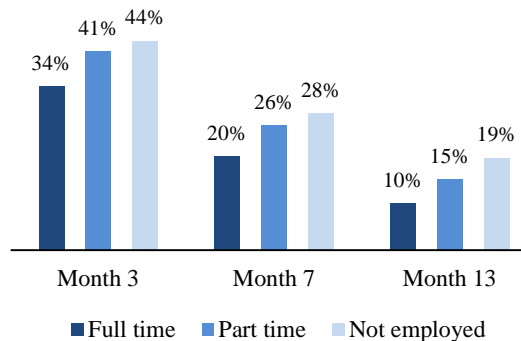
² May L, Borger C, Weinfield N, et al (2017). WIC Infant and Toddler Feeding Practices Study 2: Infant Year Report. Available at: <https://www.fns.usda.gov/wic/wic-infant-and-toddler-feeding-practices-study-2-infant-year-report>

This report reflects the responses from the prenatal and subsequent interviews conducted every 2-3 months between ages 1 and 24 months. These interviews took place between July 2013 and July 2016 and included questions on feeding practices and related behaviors, as well as a 24-hour dietary recall to collect detailed information on the child’s dietary intake. Additionally, WIC administrative records or health care provider records provide data on children’s weight and length at birth, and around 6, 12, and 24 months of age.

Findings

Mothers receiving WIC are returning to work and school, and many are continuing to breastfeed while working. By 7 months postpartum, 48 percent of mothers are in school, working for pay, or both, and by 24 months, it rises to 56 percent. At 3 months, 34 and 41 percent of mothers who are employed full time and part time, respectively, continue breastfeeding; however, these percentages decrease throughout the first year of life (Figure 1). At both 7 and 13 months postpartum, breastfeeding rates are significantly lower among mothers who work full time than those who are not employed. Breastfeeding mothers who work full time also breastfeed for a shorter median duration (60 days) than those employed part time (79 days) and those not employed (91 days).

Figure 1. Breastfeeding rates by employment status



Most breastfed children who attend child care regularly continue to receive breastmilk. Many children receiving WIC attend child care, with 60 percent of study children having attended at some point by 24 months. Among breastfed children in child care, 80 and 75 percent are fed breastmilk while attending child care at 3 and 7 months, respectively.

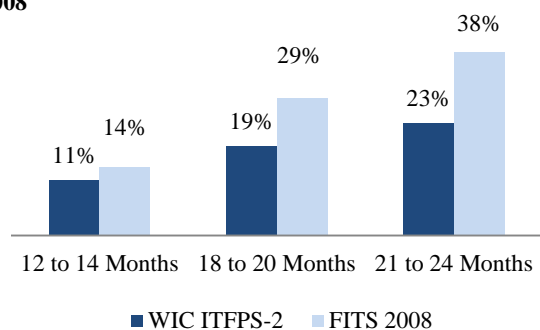
Most children receiving WIC eat regular meals and consume foods provided by the WIC food package.

At 24 months:

- 98 percent of children consume breakfast, 94 percent consume lunch, 95 percent consume dinner, and 80 percent consume at least one snack on a given day³;
- 70 percent of children are eating fruits and 62 percent are eating vegetables at least once per day, percentages similar to those found in national studies of all children; and
- 85 percent of children over 12 months old consume cow’s milk, a beverage included in the children’s WIC food package, on a given day.

In their second year, children’s consumption of sweet desserts and candy, salty snacks, and sugar-sweetened beverages increases. However, the percentage of children who consume sugar-sweetened beverages is lower than observed for children of the same age group in the 2008 national Feeding Infants and Toddlers Study (FITS 2008)⁴ (Figure 2).

Figure 2. Percentages of children consuming sweetened beverages on a given day in WIC Infant and Toddler Feeding Practices Study-2 and Feeding Infants and Toddlers Study 2008



WIC = Special Supplemental Nutrition Program for Women, Infants, and Children

The most commonly consumed snacks at 13 and 24 months are fruit and milk or milk products.

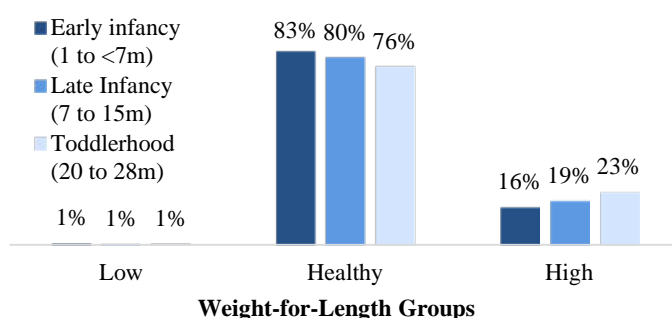
³ Eating occasions (e.g., breakfast, lunch, dinner, snack, other) are identified by caregivers in the 24-hour dietary recall.

⁴ Siega-Riz, A. M., Deming, D. M., Reidy, K. C., Fox, M. K., Condon, E., & Briefel, R. R. (2010). Food consumption patterns of infants and toddlers: where are we now? *Journal of the American Dietetic Association, 110*(12), S38-S51.

Most children receiving WIC meet their recommended nutrient intakes, with the exception of vitamins D and E. From 5 to 24 months, median intakes of macronutrients (fat, carbohydrate, and protein) and most micronutrients meet or exceed recommended levels at most ages for which standards have been determined. However, a small share of children (fewer than 20 percent) report inadequate intakes of iron and zinc during the first year of life, and fewer than 5 percent report inadequate intakes during their second year. In addition, median intakes of vitamins D and E fall below recommended levels during the second year.

While most children have a healthy weight-for-length, about one in four toddlers have a high weight-for-length. Eighty-three percent of young infants (1 to < 7 months), 80 percent of older infants (7 to 15 months), and 76 percent of toddlers (20 to 28 months) have a healthy weight-for-length. Only 1 percent have low weight-for-length; nearly one-quarter of toddlers (23 percent) have a high weight-for-length (Figure 3).

Figure 3. Percentages of children in weight-for-length groups by age group



In multivariate analyses, the introduction of complementary foods prior to 4 months of age, rapid weight gain in toddlerhood, time spent playing video games, and high birth weight all independently predict high weight-for-length around 24 months after adjustment for factors such as race, ethnicity, marital status, breastfeeding duration, and health status. These findings help WIC program staff as they educate caregivers on healthy feeding practices.

For More Information

Borger, C., Weinfield, N., Zimmerman, T., et. al (2018). WIC Infant and Toddler Feeding Practices Study 2: Second Year Report. Prepared by Westat, Contract No. AG-3198-K-11-0073. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, Project Officer: Courtney Paolicelli. Available online at: www.fns.usda.gov/research-and-analysis.