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### Prenatal Perception of WIC Breastfeeding Recommendation Affects First Month Postpartum Breastfeeding Outcomes

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**Objectives:** Promoting breastfeeding (BF) is a priority of the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). Pregnant WIC participants may differ in their perception of WIC recommendations, some believing WIC recommends BF only while others believe WIC recommends BF and formula equally. We examine the relationship between prenatal perceptions and BF outcomes at one month postpartum.

**Methods:** We use the WIC Infant and Toddler Feeding Practices Study-2 (ITFPS-2), a longitudinal study of WIC mother-infant dyads, with 2649 mothers providing prenatal and 1-month interviews. Binary BF outcomes were created, including BF initiation, food first fed after birth, BF in the first hour, food first fed after hospital discharge, and current feeding in the first month. We compared BF outcomes for the two perception groups (BF only recommended vs. BF and formula recommended), using logistic regression and controlling for socio-demographic factors. The mechanism was explored via mediation

analyses, using prenatal infant feeding intent (IFI) as the mediator. Analyses accounted for survey design effects.

**Results:** Of the pregnant mothers, 41.3% ( $\pm 1.1\%$ ) perceived that WIC recommends BF only, and 58.7% ( $\pm 1.1\%$ ) perceived that WIC recommends BF and formula equally. The “recommend BF only” group had consistently better BF outcomes than the other group: BF initiation: 89.1% vs. 81.4%; BF first fed after birth: 70.4% vs. 59.9%; Breastfed in the first hour: 62.9% vs. 55.8%; First breastfed after leaving hospital: 48.3% vs. 35.1%; Current BF feeding: 37.7% vs. 28.3% (All Ps < 0.001). Perceiving WIC recommends BF only significantly predicted higher odds of all BF outcomes [Odds Ratios (OR) varied from 1.4 to 1.6, all significant at 0.01 level]. IFI was significantly associated with perception of WIC BF recommendation ( $P < 0.001$ ). After controlling for IFI, perceived WIC recommendation only significantly predicted BF first in the first hour and BF first after leaving hospital ( $P < 0.05$ ).

**Conclusions:** Prenatal perception of WIC BF recommendations significantly predicts BF outcomes in the first month postpartum. Mediation analysis suggests perception may affect BF intention and then affect BF outcomes.

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