Appendices C1-C4

Primary Tables by Key Socio-Demographic Variables

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In the tables presented in Appendices C1-C4, each of the main analyses tables is crossed by several key socio-demographic characteristics. There are a total of 20 key socio-demographic characteristics used throughout the first year of this study. To facilitate presentation, each is associated with the letter indicated in the list below this paragraph. Because they are widely applicable, the first ten characteristics (a-j) apply to all tables in Appendices C1-C4. The latter 10 apply selectively to tables as relevant. For all of the key socio-demographic variables listed missing values are imputed.

a.   **Race** (of the caregiver): consists of three categories—African American, White, and Other—based on responses to question SD3. If multiple races are indicated, respondent is categorized as other.

b.   **Ethnicity** (of the caregiver): consists of two categories—Hispanic and non-Hispanic—based on responses to question SD2.

c.   **Current Marital Status of the Mother:** consists of two categories—married and not married developed from question SD14. Not married includes widowed and divorced.

d.   **Food Security** (measured using the 6-item module): consists of three categories—high or marginal food security, low food security, and very low food security—based on responses to questions SD36 through SD40. Directions for coding responses are available at http://www.ers.usda.gov/datafiles/Food_Security_in_the_United_States/Food_Security_Survey_Modules/short2012.pdf.

e.   **Participation in non-WIC Benefit Program(s):** consists of three categories—does not participate in any other benefit programs; participates in SNAP or in SNAP and other benefit programs; participates in other programs excluding SNAP—based on responses to questions SD21a-d. Placement in the SNAP category is determined by responses to SD21a regardless of responses to other questions.

f.   **Parity:** consists of three categories—first born, second born, and third or subsequent born—based on responses to question SD15.

g.   **Timing of WIC Enrollment:** consists of four categories—first trimester, second trimester, third trimester, and postnatal—based on the difference between the infant's due data and the respondents enrollment date and assumes a 40-week pregnancy. If the number of weeks pregnant is less than zero, the respondent joined postnatally. If the number of weeks pregnant is greater than zero and less than 13, the respondent joined in the first trimester. If the number of weeks pregnant is between 13 and 28 (inclusive), the respondent joined in the second trimester. If the number of week pregnant is greater than 28, the respondent joined in her third trimester.

h. **Weight Status of the Mother before Pregnancy:** consists of three categories—normal or underweight, overweight, and obese—based on the calculation of the respondent's body mass index (BMI) from questions MH1, MH2, and MH29. If BMI is less than 25, the respondent is classified in the normal or underweight category. If BMI is between 25 and 30, the respondent is classified as overweight. If BMI is 30 or higher, the respondent is classified as obese.

i. **Income Poverty:** consists of three categories—75 percent of the poverty guideline or below, above 75 percent of the poverty guideline but no more, above 130 percent of the poverty guideline—based on calculations using the poverty guidelines published at http://aspe.hhs.gov/poverty/13poverty.cfm and responses to question SD18.

j. **Breastfeeding History:** consists of three categories—no history, three or fewer months of history, and more than three months of history—based on questions KA1, KA2, and KA6.

k. **Age of Mother or Caregiver at Child's Birth:** consists of three categories—16-19 years of age, 20-25 years of age, and 26 years or older—based the infant's date of birth and the mothers age as reported in question SD1.

l. **Birth Weight:** consists of three categories—low, normal, and high birth weights—based on the responses to question HF28 using the following cut-offs. If the infant's birth weight is less than 5 pounds 9 ounces, the infant is categorized as low birth weight. If the infant's birth weight is between 5 pounds 9ounces and 9 pounds 14 ounces, the infant is categorized as normal birth weight. If the infant's birth weight is greater than 9 pounds 14 ounces, the infant is categorized as high birth weight.

m. **Delivery Type:** consist of two categories—vaginal or caesarean—using question HF7.

n. **Birth Complications:** binary response variable indicating whether infant had birth complications based on whether the infant spent time in the neonatal intensive care unit (NICU) as reported in question HF1.

o. **Length of Mother's Hospital Stay:** consists of two categories—0-2 nights and 3 or more nights—using answers to question HF26.

p. **Time between Birth of Reference Child and Previous Child:** consists of three categories—less than 27 months, 27-68 months, more than 68 months or only child—based on the difference between birth dates of the reference child and the most recent previous child using responses to SD42.

q. **Nature of Non-WIC Breastfeeding Support at Hospital:** consists of three categories— weak, moderate, and strong—based on responses aggregating responses to questions HF22 and HF23. For this composite variable, affirmative responses to the questions are assigned a value of one; negative responses are assigned a value of zero. If the sum of affirmative responses is zero, support is weak. If the sum of responses is 1, support is moderate. If the sum of responses is 2, support is strong.

r.   **Non-Breastfeeding Infant Nutrition Education and Skills Training from WIC:** consists of four categories—received training on formula only, received training on cereal only, received training on both, and received training on neither—based on responses to question WC7, WC8, and WC9.

s.   **Nature of Breastfeeding Support at Home:** consists of three categories—weak, moderate, and strong—based on responses to questions KA31a, KA31b, and KA31c. For this composite variable, responses of encourage are assigned a value of two; responses of discourage are assigned a value of zero. All other responses to these questions are assigned a value of one. Responses are aggregated. Support is weak if the sum is less than or equal to two. Support is moderate if the sum is between three and four (inclusive). Support is strong if the sum is between five and six (inclusive).

t.   **Nature of Breastfeeding Support from WIC:** consists of three categories—weak, moderate and strong—based on responses to questions WC5, WC10, and WC11. For this composite variable, affirmative responses are assigned a value of one; negative responses are assigned a value of zero. Responses of didn't need it are assigned a value of one-half if WC5 equals one and zero otherwise. Responses are aggregated. Support is weak if the sum is less than or equal to one. Support is moderate if the sum is greater than one and less than or equal to two. Support is strong is the sum is greater than two.

The main analysis sample is composed of 3,777 (unweighted) observations. All analyses are based on this group unless otherwise noted. Table C2-9a offers an example of analysis on a subgroup within the main analysis sample, mothers who give birth in a hospital or birthing center. This is a total of 3,384 women. However, a few mothers did not answer the survey question analyzed. Thus, the sample size reported in Table C2-9a is slightly smaller than 3,384. When a respondent skips a question, it is referred to as item non-response. Responses of Don't Know or Refused are also treated as nonresponse unless otherwise noted. To address the fact that sample sizes vary between analyses due to item nonresponse, sample sizes have been included in the tables. Footnotes indicate when sample size falls below the total number of respondents who received a given question.

Table titles include information on the variables used in the tables, followed by an indicator in parentheses of the interviews from which data were drawn. In some cases interviews asked respondents to report retrospectively on events such as the timing of major feeding transitions not previously reported. Consequently, interview months in the titles may at times not correspond to event timing reported in the tables themselves.

In the tables, percentages of are within group percentages, that is, they are of the sample size (denoted "n") reported for the category. For example, in Tables C2-2a breastfeeding initiation rates are reported for those women who fall within the Infant Feeding Intention (IFI) scale score range listed. The within group data are then examined by the socio-demographic characteristic of interest.

Significance tests were conducted on the crosstabs to determine whether the distribution of mothers within a socio-demographic group (e.g., race) changed with the variable of interest (e.g., breastfeeding initiation). A chi-square test, appropriately adjusted for our complex sample design, was used to determine if observed differences were statistically significant or the result of normal sampling error. Using breastfeeding status and race as an example, the chi-square test was run to determine whether the percentage distribution of women initiating breastfeeding was associated with race. It should be noted that a chi-square test of the association of breastfeeding initiation with race indicates whether the percentage of women initiating breastfeeding changes with race but does not indicate how racial subgroups differ from each other (i.e., whether African American mothers differ from White mothers.) Only large differences between specific subgroups are likely to be statistically significant.

For tables that contain small cells, statistical disclosure control procedures have been implemented to reduce the risk to participants. WIC ITFPS-2 follows a rule of three[1] for disclosure control, such that not fewer than three unweighted cases can appear in a cell in a publication table. Cells that fall below this threshold are suppressed in the appendix tables, as are adjacent cells that could be used to back-calculate the values of the original suppressed cells. Cells that have been suppressed contain a double-dash (–) in place of the original calculated value.

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[1] Sweeney, L. (2002). Achieving k-anonymity Privacy Protection Using Generalization and Suppression. *International Journal on Uncertainty, Fuzziness and Knowledge-based Systems, 10*, 571–588.