**Supplemental Table 1. Mean (S.D.) or percent values for additional descriptive characteristics of study participants stratified by duration of any breastfeeding.**

|  | Total (N = 1396) | <16 weeks breastfeedinga (N = 592) | ≥16 weeks breastfeedinga (N = 804) |  |
| --- | --- | --- | --- | --- |
|  | N or Mean | % or SD | N or Mean | % or SD | N or Mean | % or SD | Missing (%)b |
|  | **Maternal Demographics** |
| Marital Status\*\*\* |  |  |  |  |  |  | 5.2 |
| Never Married | 188 | 14.2 | 113 | 20.7 | 75 | 9.7 |  |
| Married | 1086 | 82.1 | 402 | 73.6 | 684 | 88.0 |  |
| Divorced, separated, or widowed | 49 | 3.7 | 31 | 5.7 | 18 | 2.3 |  |
| Primiparous\*\* | 394 | 28.9 | 189 | 33.0 | 205 | 25.9 | 2.2 |
|  | **Child Characteristics** |
| <37 weeks gestational age at birth | 64 | 4.6 | 29 | 4.9 | 35 | 4.4 | 0.0 |
| Child age (weeks) at time of questionnaire completion |  |  |  |  |  |  |  |
| 12 month questionnaire | 54.5 | 2.1 | 54.4 | 1.9 | 54.6 | 2.2 | 29.2 |
| Maternal diet questionnaire | 15.4 | 2.7 | 15.4 | 2.8 | 15.4 | 2.5 | 0.0 |
| Y6FU\*\* | 342.3 | 6.8 | 341.5 | 6.6 | 342.9 | 6.9 | 43.6 |
|  | **Barriers and Facilitators to Breastfeeding** |
| Maternal employment 3 months postpartum | 516 | 40.7 | 230 | 43.7 | 286 | 38.5 | 9.2 |
| Childcare use\*\*\*3 months postpartum | 436 | 34.3 | 233 | 44.2 | 203 | 27.2 | 8.8 |
|  | **Child’s Food Environment** |
| Introduction to solid foods by month 4 questionnaire |  |  |  |  |  |  |  |
| Fruit\*\*\* | 158 | 14.2 | 84 | 18.8 | 74 | 11.1 | 20.3 |
| Vegetables\*\* | 116 | 10.5 | 64 | 14.4 | 52 | 7.9 | 20.7 |
| WIC enrollment\*\*\* during child’s 1st year | 505 | 36.2 | 285 | 48.1 | 220 | 27.4 | 0.0 |
| SNAP\*\*\* enrollment at Y6FU | 122 | 15.5 | 69 | 23.0 | 53 | 10.9 | 43.7 |
| Eat fast food\*\*\*for dinner< once/week | 298 | 37.9 | 88 | 29.2 | 210 | 43.3 | 43.7 |
|  | **Maternal Health** |
| Smoking during\*\*\* pregnancy | 121 | 8.7 | 94 | 16.0 | 27 | 3.4 | 0.4 |
| Depression\* | 98 | 7.7 | 51 | 9.9 | 47 | 6.3 | 9.2 |
| Gestational diabetes | 97 | 7.6 | 48 | 8.9 | 49 | 6.7 | 8.7 |
|  | **Additional Measures of Maternal Employment, Childcare Use, and Smoking** |
| Maternal employment |  |  |  |  |  |  |  |
| 6 months\*\* | 561 | 48.7 | 248 | 54.5 | 313 | 44.8 | 17.4 |
| 9 months\*\*\* | 546 | 50.9 | 249 | 59.0 | 297 | 45.6 | 23.1 |
| 12 months\*\* | 529 | 53.9 | 225 | 60.0 | 304 | 50.1 | 29.7 |
| At any time\*\*by Y6FU  | 587 | 74.7 | 242 | 80.7 | 345 | 71.0 | 43.7 |
| Child care use |  |  |  |  |  |  |  |
| 6 months\*\*\* | 481 | 41.6 | 236 | 51.6 | 245 | 35.0 | 17.1 |
| 9 months\*\*\* | 471 | 43.7 | 231 | 54.5 | 240 | 36.7 | 22.8 |
| 12 months\*\*\* | 448 | 45.3 | 200 | 52.9 | 248 | 40.7 | 29.2 |
| Smoking |  |  |  |  |  |  |  |
| During child’s\*\*\* 1st year | 221 | 24.2 | 155 | 40.6 | 66 | 12.5 | 34.7 |
| Y6FU\*\*\* | 79 | 10.1 | 54 | 18.1 | 25 | 5.2 | 44.1 |

SD = standard deviation

a – Unadjusted statistical comparisons by breastfeeding duration were made with chi-square or equal variance t-tests.

b – The percent of the total sample (n = 1396) with missing data for each variable.

\* - differs by breastfeeding duration, p <0.05

\*\* - differs by breastfeeding duration, p <0.01

\*\*\* - differs by breastfeeding duration, p <0.001

**Supplemental Table 2. Logistic regression models of child fruit consumption at 12 months as a function of breastfeeding duration, maternal fruit consumption, and the interaction between breastfeeding duration and maternal fruit consumption.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Model 1 – minimal adjustmenta | Model 2 – key maternal demographicsb | Model 3 – child characteristicsc | Model 4 – breastfeeding barriers and facilitatorsd | Model 5 – food environmente | Model 6 – maternal healthf | Model 7 – additional measures of work, childcare, and smokingg |
|  | β (95% CI) | β (95% CI) | β (95% CI) | β (95% CI) | β (95% CI) | β (95% CI) | β (95% CI) |
| Intercept | 0.21 (-0.23, 0.64) | -0.52 (-1.59, 0.56) | -0.49 (-4.41, 3.43) | -0.52 (-4.46, 3.41) | -0.69 (-4.66, 3.28) | -0.59 (-4.56, 3.37) | -0.69 (-4.63, 3.24) |
| Maternal fruit consumption (servings/day) | -0.01 (-0.12, 0.10) | 0.02 (-0.09, 0.13) | 0.02 (-0.10, 0.13) | 0.02 (-0.10, 0.13) | 0.01 (-0.10, 0.13) | 0.02 (-0.09, 0.14) | 0.02 (-0.10, 0.14) |
| Breastfeeding duration |
|  0 – < 16 weeks | ref |  |  |  |  |  |  |
|  > 16 weeks | **0.38 (0.11, 0.65)\*\*** | **0.30 (0.00, 0.59)\*** | **0.30 (0.01, 0.60)\*** | **0.34 (0.00, 0.67)\*** | **0.35 (0.01, 0.68)\*** | **0.37 (0.03, 0.71)\*** | **0.35 (0.00, 0.70)\*** |
| Maternal fruit consumption x breastfeeding duration | 0.09 (-0.05, 0.23) | 0.09 (-0.06, 0.23) | 0.09 (-0.06, 0.23) | 0.10 (-0.05, 0.24) | 0.10 (-0.05, 0.24) | 0.09 (-0.06, 0.24) | 0.09 (-0.06, 0.24) |

a – Adjusted for maternal daily caloric intake

b – Adjusted for factors in model 1 and maternal age, race/ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic, non-Hispanic Asian/Pacific Islander, non-Hispanic Other), education (≤ high school, 1 – 3 years college, ≥ 4 years college), household income as a percentage of the federal poverty line (<100, 100 - 185, 186 – 349, ≥ 350), marital status (married; divorced, widowed, or separated; never married), and parity (primiparous vs. multiparous)

c – Adjusted for factors in models 1 and 2 and child sex, preterm birth (<37 weeks), and child age at time of questionnaire completion.

d – Adjusted for factors in models 1 - 3 and prenatal plans for breastfeeding duration (<6 months, 6 – 11 months, ≥ 12 months), maternal employment 3 months postpartum, and childcare use 3 months postpartum.

e - Adjusted for factors in models 1 - 4 and introduction to solid fruits by the month 4 questionnaire and WIC enrollment in the first year postpartum.

f - Adjusted for factors in models 1 - 5 and prepregnancy BMI (underweight or normal weight, overweight, obese), smoking during pregnancy, depression (assessed in the month 2 questionnaire by the Edinburgh Postnatal Depression Scale and dichotomized per guidelines),(29) and gestational diabetes.

g - Adjusted for factors in models 1 - 6 and maternal employment at month 6, 9, and 12; childcare use at month 6, 9 and 12; and smoking during the first year postpartum.

\* = p <0.05; \*\* = p < 0.01

**Supplemental Table 3. Logistic regression models of child vegetable consumption at 12 months as a function of breastfeeding duration, maternal vegetable consumption, and the interaction between breastfeeding duration and maternal vegetable consumption.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Model 1 – minimal adjustmenta | Model 2 – key maternal demographicsb | Model 3 – child characteristicsc | Model 4 – breastfeeding barriers and facilitatorsd | Model 5 – food environmente | Model 6 – maternal healthf | Model 7 – additional measures of work, childcare, and smokingg |
|  | β (95% CI) | β (95% CI) | β (95% CI) | β (95% CI) | β (95% CI) | β (95% CI) | β (95% CI) |
| Intercept | 0.24 (-0.20, 0.69) | 0.26 (-0.77, 1.29) | 1.78 (-1.87, 5.43) | 1.87 (-1.80, 5.54) | 1.51 (-2.17, 5.20) | 1.54 (-2.16, 5.24) | 1.39 (-2.32, 5.10) |
| Maternal vegetable consumption (servings/day) | 0.07 (-0.04, 0.17) | 0.07 (-0.04, 0.17) | 0.06 (-0.04, 0.17) | 0.06 (-0.05, 0.17) | 0.05 (-0.05, 0.16) | 0.07 (-0.04, 0.18) | 0.07 (-0.04, 0.19) |
| Breastfeeding duration |
|  0 – < 16 weeks | ref |  |  |  |  |  |  |
|  > 16 weeks | 0.20 (-0.06, 0.47) | 0.17 (-0.11, 0.46) | 0.18 (-0.10, 0.47) | 0.30 (-0.03, 0.64) | 0.33 (-0.01, 0.67) | **0.36\* (0.02, 0.70)** | **0.36\* (0.01, 0.71)** |
| Maternal vegetable consumption x breastfeeding duration | 0.05 (-0.08, 0.18) | 0.04 (-0.09, 0.18) | 0.05 (-0.08, 0.18) | 0.05 (-0.08, 0.19) | 0.06 (-0.07, 0.19) | 0.04 (-0.10, 0.18) | 0.05 (-0.09, 0.18) |

a – Adjusted for maternal daily caloric intake

b – Adjusted for factors in model 1 and maternal age, race/ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic, non-Hispanic Asian/Pacific Islander, non-Hispanic Other), education (≤ high school, 1 – 3 years college, ≥ 4 years college), household income as a percentage of the federal poverty line (<100, 100 - 185, 186 – 349, ≥ 350), marital status (married; divorced, widowed, or separated; never married), and parity (primiparous vs. multiparous)

c – Adjusted for factors in models 1 and 2 and child sex, preterm birth (<37 weeks), and child age at time of questionnaire completion.

d – Adjusted for factors in models 1 - 3 and prenatal plans for breastfeeding duration (<6 months, 6 – 11 months, ≥ 12 months), maternal employment 3 months postpartum, and childcare use 3 months postpartum.

e - Adjusted for factors in models 1 - 4 and introduction to solid vegetables by the month 4 questionnaire and WIC enrollment in the first year postpartum.

f - Adjusted for factors in models 1 - 5 and prepregnancy BMI (underweight or normal weight, overweight, obese), smoking during pregnancy, depression (assessed in the month 2 questionnaire by the Edinburgh Postnatal Depression Scale and dichotomized per guidelines),(29) and gestational diabetes.

g - Adjusted for factors in models 1 - 6 and maternal employment at month 6, 9, and 12; childcare use at month 6, 9 and 12; and smoking during the first year postpartum.

\* = p <0.05

**Supplemental Table 4. Logistic regression models of child fruit consumption at 6 years as a function of breastfeeding duration, maternal fruit consumption, and the interaction between breastfeeding duration and maternal fruit consumption.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Model 1 – minimal adjustmenta | Model 2 – key maternal demographicsb | Model 3 – child characteristicsc | Model 4 – breastfeeding barriers and facilitatorsd | Model 5 – food environmente | Model 6 – maternal healthf | Model 7 – additional measures of work, childcare, and smokingg |
|  | β (95% CI) | β (95% CI) | β (95% CI) | β (95% CI) | β (95% CI) | β (95% CI) | β (95% CI) |
| Intercept | **-0.91\*\*\* (-1.43, -0.39)** | -0.76 (-2.07, 0.55) | 4.23 (-3.51, 11.96) | 4.28 (-3.48, 12.04) | 5.54 (-2.67, 13.74) | 5.67 (-2.58, 13.92) | 5.09 (-3.54, 13.72) |
| Maternal fruit consumption (servings/day) | 0.02 (-0.10, 0.14) | 0.06 (-0.07, 0.18) | 0.05 (-0.07, 0.18) | 0.04 (-0.09, 0.17) | 0.01 (-0.13, 0.15) | 0.01 (-0.13, 0.14) | 0.00 (-0.14, 0.15) |
| Breastfeeding duration |
|  0 – < 16 weeks |  ref |  |  |  |  |  |  |
|  > 16 weeks | **0.60\*\*\* (0.30, 0.90)** | **0.45\*\* (0.13, 0.77)** | **0.47\*\* (0.14, 0.80)** | 0.32 (-0.05, 0.69) | 0.33 (-0.07, 0.72) | 0.32 (-0.08, 0.73) | 0.29 (-0.12, 0.70) |
| Maternal fruit consumption x breastfeeding duration | 0.15 (0.00, 0.29) | 0.14 (-0.01, 0.29) | 0.14 (-0.01, 0.30) | 0.15 (-0.01, 0.31) | 0.14 (-0.02, 0.30) | 0.14 (-0.02, 0.31) | 0.14 (-0.03, 0.31) |

a – Adjusted for maternal daily caloric intake

b – Adjusted for factors in model 1 and maternal age, race/ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic, non-Hispanic Asian/Pacific Islander, non-Hispanic Other), education (≤ high school, 1 – 3 years college, ≥ 4 years college), household income as a percentage of the federal poverty line (<100, 100 - 185, 186 – 349, ≥ 350), marital status (married; divorced, widowed, or separated; never married), and parity (primiparous vs. multiparous)

c – Adjusted for factors in models 1 and 2 and child sex, preterm birth (<37 weeks), and child age at time of questionnaire completion.

d – Adjusted for factors in models 1 - 3 and prenatal plans for breastfeeding duration (<6 months, 6 – 11 months, ≥ 12 months), maternal employment 3 months postpartum, and childcare use 3 months postpartum.

e - Adjusted for factors in models 1 - 4 and introduction to solid fruits by the month 4 questionnaire, WIC enrollment in the first year postpartum, SNAP enrollment at Y6FU, fruit and vegetable availability at home as a snack at Y6FU (rarely/sometimes, often, always), and fast food for dinner less than once per week at Y6FU.

f - Adjusted for factors in models 1 - 5 and prepregnancy BMI (underweight or normal weight, overweight, obese), smoking during pregnancy, depression (assessed in the month 2 questionnaire by the Edinburgh Postnatal Depression Scale and dichotomized per guidelines),(29) and gestational diabetes.

g - Adjusted for factors in models 1 - 6 and maternal employment at month 6, 9, 12, and any time by Y6FU; childcare use at month 6, 9 and 12; and smoking during the first year postpartum and at Y6FU.

\* = p <0.05; \*\* = p < 0.01; \*\*\* = p < 0.001

**Supplemental Table 5. Logistic regression models of child vegetable consumption at 6 years as a function of breastfeeding duration, maternal vegetable consumption, and the interaction between breastfeeding duration and maternal vegetable consumption.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Model 1 – minimal adjustmenta | Model 2 – key maternal demographicsb | Model 3 – child characteristicsc | Model 4 – breastfeeding barriers and facilitatorsd | Model 5 – food environmente | Model 6 – maternal healthf | Model 7 – additional measures of work, childcare, and smokingg |
|  | β (95% CI) | β (95% CI) | β (95% CI) | β (95% CI) | β (95% CI) | β (95% CI) | β (95% CI) |
| Intercept | **-0.71\* (-1.26, -0.16)** | 0.62 (-0.64, 1.89) | 4.02 (-3.94, 11.98) | 3.80 (-4.22, 11.82) | 4.79 (-3.35, 12.92) | 4.84 (-3.40, 13.09) | 5.75 (-2.70, 14.2) |
| Maternal vegetable consumption (servings/day) | 0.06 (-0.06, 0.18) | 0.07 (-0.06, 0.20) | 0.07 (-0.06, 0.20) | 0.07 (-0.06, 0.20) | 0.03 (-0.10, 0.16) | 0.03 (-0.10, 0.17) | 0.04 (-0.10, 0.17) |
| Breastfeeding duration |
|  0 – < 16 weeks | ref |  |  |  |  |  |  |
|  > 16 weeks | 0.14 (-0.18, 0.45) | 0.04 (-0.29, 0.38) | 0.05 (-0.29, 0.40) | -0.07 (-0.48, 0.34) | -0.17 (-0.59, 0.26) | -0.17 (-0.60, 0.27) | -0.19 (-0.64, 0.26) |
| Maternal vegetable consumption x breastfeeding duration | 0.14 (-0.01, 0.28) | 0.14 (-0.01, 0.29) | 0.14 (-0.01, 0.29) | 0.15 (-0.01, 0.30) | **0.17\* (0.02, 0.32)** | **0.17\* (0.02, 0.32)** | **0.16\* (0.01, 0.31)** |

a – Adjusted for maternal daily caloric intake

b – Adjusted for factors in model 1 and maternal age, race/ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic, non-Hispanic Asian/Pacific Islander, non-Hispanic Other), education (≤ high school, 1 – 3 years college, ≥ 4 years college), household income as a percentage of the federal poverty line (<100, 100 - 185, 186 – 349, ≥ 350), marital status (married; divorced, widowed, or separated; never married), and parity (primiparous vs. multiparous)

c – Adjusted for factors in models 1 and 2 and child sex, preterm birth (<37 weeks), and child age at time of questionnaire completion.

d – Adjusted for factors in models 1 - 3 and prenatal plans for breastfeeding duration (<6 months, 6 – 11 months, ≥ 12 months), maternal employment 3 months postpartum, and childcare use 3 months postpartum.

e - Adjusted for factors in models 1 - 4 and introduction to solid vegetables by the month 4 questionnaire, WIC enrollment in the first year postpartum, SNAP enrollment at Y6FU, fruit and vegetable availability at home as a snack at Y6FU (rarely/sometimes, often, always), and fast food for dinner less than once per week at Y6FU.

f - Adjusted for factors in models 1 - 5 and prepregnancy BMI (underweight or normal weight, overweight, obese), smoking during pregnancy, depression (assessed in the month 2 questionnaire by the Edinburgh Postnatal Depression Scale and dichotomized per guidelines),(29) and gestational diabetes.

g - Adjusted for factors in models 1 - 6 and maternal employment at month 6, 9, 12, and any time by Y6FU; childcare use at month 6, 9 and 12; and smoking during the first year postpartum and at Y6FU.

\* = p <0.05

**Supplemental Table 6. Complete case analysis logistic regression models of child fruit and vegetable consumption at 12 months.**

|  |  |  |
| --- | --- | --- |
|  | 12 month child fruit consumption (n = 508)a, b | 12 month child vegetable consumption  (n = 505)a, c |
|  | β (95% CI) | β (95% CI) |
| Intercept | -3.79 (-10.05, 2.47) | -3.85 (-10.06, 2.37) |
| Breastfeeding duration |  |  |
|  0 – < 16 weeks | -- | -- |
|  ≥ 16 weeks | **0.61\* (0.08, 1.14)** | 0.42 (-0.10, 0.94) |
| Maternal fruit consumption (servings/day) | -0.04 (-0.25, 0.17) | Fruit model only |
| Breastfeeding duration x maternal fruit consumption | 0.14 (-0.11, 0.39) | Fruit model only |
| Maternal vegetable consumption (servings/day) | Vegetable model only | -0.04 (-0.23, 0.15) |
| Breastfeeding duration x maternal vegetable consumption | Vegetable model only | 0.21 (-0.01, 0.44) |

a – Adjusted for maternal daily caloric intake, maternal age, race/ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic, non-Hispanic Asian/Pacific Islander, non-Hispanic Other), education (≤ high school, 1 – 3 years college, ≥ 4 years college), household income as a percentage of the federal poverty line (<100, 100 - 185, 186 – 349, ≥ 350), marital status (married; divorced, widowed, or separated; never married), parity (primiparous vs. multiparous), child sex, preterm birth (<37 weeks), child age at time of questionnaire completion, prenatal plans for breastfeeding duration (<6 months, 6 – 11 months, ≥ 12 months), maternal employment 3 months postpartum, childcare use 3 months postpartum, WIC enrollment in the first year postpartum, prepregnancy BMI (underweight or normal weight, overweight, obese), smoking during pregnancy, depression (assessed in the month 2 questionnaire by the Edinburgh Postnatal Depression Scale and dichotomized per guidelines),(29) gestational diabetes, maternal employment at month 6, 9, and 12, childcare use at month 6, 9 and 12, and smoking during the first year postpartum.

b – Additionally adjusted for introduction to solid fruits by the month 4 questionnaire.

c – Additionally adjusted for introduction to solid vegetables by the month 4 questionnaire.

\* = p <0.05

**Supplemental Table 7. Complete case analysis logistic regression models of child fruit and vegetable consumption at 6 years.**

|  |  |  |
| --- | --- | --- |
|  | 6 year child fruit consumption (n = 360)a, b | 6 year child vegetable consumption  (n = 360)a, c |
|  | β (95% CI) | β (95% CI) |
| Intercept | 2.51 (-10.77, 15.80) | 8.62(-4.58, 21.83) |
| Breastfeeding duration |  |  |
|  0 – < 16 weeks | -- | -- |
|  ≥ 16 weeks | 0.31 (-0.41, 1.03) | -0.30 (-0.98, 0.38) |
| Maternal fruit consumption (servings/day) | 0.00 (-0.39, 0.39) | Fruit model only |
| Breastfeeding duration x maternal fruit consumption | 0.05 (-0.37, 0.48) | Fruit model only |
| Maternal vegetable consumption (servings/day) | Vegetable model only | 0.02 (-0.29, 0.33) |
| Breastfeeding duration x maternal vegetable consumption | Vegetable model only | 0.18 (-0.15, 0.51) |

a – Adjusted for maternal daily caloric intake, maternal age, race/ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic, non-Hispanic Asian/Pacific Islander, non-Hispanic Other), education (≤ high school, 1 – 3 years college, ≥ 4 years college), household income as a percentage of the federal poverty line (<100, 100 - 185, 186 – 349, ≥ 350), marital status (married; divorced, widowed, or separated; never married), parity (primiparous vs. multiparous), child sex, preterm birth (<37 weeks), child age at time of questionnaire completion, prenatal plans for breastfeeding duration (<6 months, 6 – 11 months, ≥ 12 months), maternal employment 3 months postpartum, childcare use 3 months postpartum, WIC enrollment in the first year postpartum, SNAP enrollment at Y6FU, fruit and vegetable availability at home as a snack at Y6FU (rarely/sometimes, often, always), fast food for dinner less than once per week at Y6FU, prepregnancy BMI (underweight or normal weight, overweight, obese), smoking during pregnancy, depression (assessed in the month 2 questionnaire by the Edinburgh Postnatal Depression Scale and dichotomized per guidelines),(29) gestational diabetes, maternal employment at month 6, 9, 12, and any time by Y6FU, childcare use at month 6, 9 and 12, and smoking during the first year postpartum and at Y6FU.

b – Additionally adjusted for introduction to solid fruits by the month 4 questionnaire.

c – Additionally adjusted for introduction to solid vegetables by the month 4 questionnaire.