**Supplementary Materials**

Supplemental Table 1: Completed-case impact analysis **not** **using** inverse probability weighted method

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Caregiver Fruit and Vegetable Behaviors | Baseline | | | | Post-intervention | | | | Pre-post change: difference c | p |
| Intervention | | Comparison | | Intervention | | Comparison | |
| Mean | SE | Mean | SE | Mean | SE | Mean | SE | Effect (95% CI) |
| **Acquisition** (frequency/day) e |  |  |  |  |  |  |  |  |  |  |
| Healthful food score | 1.52 | 0.07 | 1.47 | 0.07 | 1.40 | 0.07 | 1.41 | 0.07 | -0.06 (-0.25; 0.12) | 0.49 |
| Unhealthful food score | 1.27 | 0.07 | 1.31 | 0.07 | 1.21 | 0.07 | 1.29 | 0.07 | -0.03 (-0.25; 0.19) | 0.77 |
| **Home meal preparation** |  |  |  |  |  |  |  |  |  |  |
| Frequency of meal preparation | 35.32 | 2.08 | 34.27 | 2.02 | 33.24 | 2.03 | 38.30 | 2.08 | -4.02 (-10.9; 2.90) | 0.25 |
| Healthful cooking score | -0.08 | 0.06 | -0.14 | 0.06 | -0.01 | 0.06 | -0.08 | 0.06 | 0.01 (-0.22; 0.22) | 0.92 |
| **Daily Consumption** (srv/day)d |  |  |  |  |  |  |  |  |  |  |
| Fruits | 1.21 | 0.16 | 1.59 | 0.18 | 1.24 | 0.12 | 1.21 | 0.13 | 0.41 (-0.15; 0.97) | 0.15 |
| Vegetables | 1.36 | 0.10 | 1.59 | 0.11 | 1.10 | 0.07 | 1.38 | 0.08 | -0.04 (-0.36; 0.27) | 0.77 |
| Fruit and vegetable | 2.69 | 0.23 | 3.20 | 0.25 | 2.35 | 018 | 2.59 | 0.18 | 0.28 (-0.38; 0.94) | 0.41 |

Abbreviations: SE (standard error); CI (confidence interval); srv (servings)

a Multilevel models were conducted with Stata 13.1 package with the maximum likelihood option (**complete-case analysis** n=376 for purchasing and n=188 for consumption).

b In all models: treatment group was coded as comparison (0) and intervention (1); time was coded as baseline (0) and post-intervention (1); standard errors were corrected for clustering for repeated measures from the same individual and BHCK neighborhood (from 1 to 28).

c Mean adjusted difference in change over time for intervention compared to control adult caregiver

d Fruit and Vegetable intakes were estimated via the Quick Fruit and Vegetable Screener from the National Cancer Institute’s Eating at America’s Table Study (EATS) study.

e Fruit and vegetable acquisition frequency (daily) was estimated via a pre-defined list containing 100% fruit juice, apples, bananas, oranges, other fresh fruits, frozen fruits, canned fruits, fresh vegetables, frozen vegetables, and canned vegetables (excluding potatoes and including beans). Adults reported frequency of purchasing these items in the previous 30 days.

**Supplemental Table 2**: Difference of differences in mean change in food-related behaviors comparing BHCK level of exposure by Wave 1 (reference) and Wave 2 participants.

|  |  |  |  |
| --- | --- | --- | --- |
| Change in food-related behaviors a,b,c | Overall BHCK Exposure Score | | |
| Mean Effect Modifier | SE | 95% C.I. |
| Healthful food acquisition score (daily frequency) | 0.07 | 0.08 | -0.10; 0.25 |
| Unhealthful food acquisition score (daily frequency) | -0.05 | 0.13 | -0.31; 0.21 |
| Frequency of home food preparation (days) | -3.68 | 3.14 | -10.11; 2.73 |
| Healthful cooking methods score | -0.07 | 0.11 | -0.30; 0.15 |

Abbreviations: SE (standard error); CI (confidence interval)

a Change from pre- to post-intervention evaluation, n=370. Difference in change in fruit and vegetable intake by exposure level and Wave was not possible to be calculated given that NCI FV screener was not employed among Wave 1 participants at baseline.

b Multiple linear regression models clustered by BHCK zone, controlled for adult caregiver’s age, sex, income, and household size. Interaction term between exposure score and Wave

c Wave 1 = reference

d Communication material score mean: 0.6 (observed range: 0-3.1); e Food environment intervention exposure score mean: 0.3 (observed range: 0-3.1); f Social media/texting exposure score mean: 0.2 (observed range: 0-2); g Texting exposure score mean: 1.1 (observed range 0-3)

**Supplemental Table 3**: Proportion of variability explained (effect sizes) after fitting multivariate linear and logistic regression models on the correlation between social media exposure score and the change in food-related behaviors and fruit and vegetable intake

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Change in food-related behaviors and fruit and vegetable intake (continuous)a,b | Social Media Exposure Score (continuous)f | | Change in food-related behaviors and fruit and vegetable intake (Negative/No change versus Positive)a,e | Social Media Exposure Score (Low vs High)f | | |
| Mean | Omega-Squaredd | OR | SE | 95% C.I. |
| Healthful food acquisition score (daily frequency) | 0.28 | 0.04 | Healthful food acquisition score | 1.12 | 0.15 | 0.85; 1.47 |
| Unhealthful food acquisition score (daily frequency) | 0.47\* | 0.005 | Unhealthful food acquisition score | 1.23 | 0.14 | 0.97; 1.55 |
| Frequency of home food preparation (days) | 1.41 | 0 | Frequency of home food preparation | 0.97 | 0.12 | 0.76; 1.24 |
| Healthful cooking methods score | -0.37 | 0.0008 | Healthful cooking methods score | 0.96 | 0.12 | 0.75; 1.23 |
| Daily total fruit consumption (servings)c | 3.16\* | 0.04 | Daily total fruit consumptionc | 1.25 | 0.19 | 0.93; 1.69 |
| Daily total vegetable consumption (servings)c | -0.21 | 0.005 | Daily total vegetable consumptionc | 0.97 | 0.12 | 0.76; 1.24 |
| Daily total fruit and vegetable consumption (servings)c | 2.94\* | 0.02 | Daily total fruit and vegetable consumptionc | 1.10 | 0.10 | 0.91; 1.34 |

Abbreviation: SE, bootstrapped standard error; OR, odds ratio (standardized effect size); CI, bias corrected confidence interval

a Change from pre- to post-intervention evaluation, n=370

b Multiple linear regression models with bootstrap variance (2000 replications) and clustered by BHCK zone, controlled for adult caregiver’s age, sex, income, and household size

c Fruit and Vegetable intakes were estimated via the Quick Fruit and Vegetable Screener from the National Cancer Institute’s Eating at America’s Table Study (EATS) study. Sample size (n) = 184

d Omega-squared (ω2) estimates the proportion of the variance in the outcome which is due to the variance in the social media exposure score

e change in the outcome was categorized as 0 if no change or negative change, 1= if positive change regressed on social media score (0=low; 1=high) controlled for controlled for adult caregiver’s age, sex, income, and household size.

f Social media/texting exposure score mean: 0.2 (observed range: 0-2); Low = 0 and High >0.01

\* Statistically significant behavioral change at p<0.05