**Supplementary materials**

**Table S1. Regression coefficients (log total calories) and percentage changes from all variables in the primary outcome analysis aggregating across sites per day**

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| --- | --- | --- | --- |
| **Variable** | **Coefficients****(95% CIs)1**  | **Percentage change (%) (95% CIs)1** | **p1**  |
| Portion size intervention | -0.0934(-0.1825, -0.0044) | -8.92 (-16.68, -0.44) | 0.081  |
| Total number of transactions | 0.0004(0.0002, 0.0006) | 0.04 (0.02, 0.06) | 0.015 |
| Number of days pre- or post-intervention2 | 0.0004(-0.0011, 0.0017) | 0.04 (-0.09, 0.17) | 0.582 |
| Temperature (Celsius) | -0.0055(-0.01407, 0.0031) | -0.55 (-1.40, 0.31) | 0.253 |
| Sunshine (hours) | -0.0007(-0.0067, 0.0054) | -0.07 (-0.67, 0.54) | 0.837 |
| Rainfall (mm) | -0.0014(-0.0069, 0.0041) | -0.14 (-0.69, 0.41) | 0.630 |
| *Intercept* | 11.2590(10.7814, 11.7365) | - | <0.0001  |

1 As the p-values (the more robust Kenward-Roger corrected) and CIs (Wald) presented here have been calculated using different assumptions, there is not always an equivalence of interpretation between the 95% confidence intervals and significant p-values.

2 Day 0 is the day that the intervention was implemented

**Table S2. Regression coefficients (log total calories) and percentage changes from all variables in the primary outcome analysis by site per day**

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| --- | --- | --- | --- |
| **Variable** | **Coefficients** **(95% CIs)1** | **Percentage change (%) (95% CIs)1** | **p1** |
| Portion size intervention period | Site 1 | -0.1159 (-0.2711, 0.0393) | -10.94 (-23.74, 4.01) | 0.188  |
| Site 2 | -0.0518 (-0.1938, 0.0902) | -5.05 (-17.61, 9.44) | 0.499  |
| Site 3 | -0.0031 (-0.1407, 0.1343) | -0.32 (-13.13, 14.38) | 0.965  |
| Site 4 | -0.0740 (-0.2116, 0.0636) | -7.13 (-19.07, 6.56) | 0.328  |
| Site 5 | -0.1503 (-0.2882, -0.0124) | -13.96 (-25.04, -1.24) | 0.071  |
| Site 6 | -0.1700 (-0.3111, -0.0288) | -15.63 (-26.74, -2.84) | 0.052  |
| Total number of transactions | 0.0004 (0.0002, 0.0007) | 0.04 (0.02, 0.07) | 0.013  |
| Number of days pre- or post-intervention2 | 0.0004 (-0.0009, 0.0018) | 0.04 (-0.09, 0.18) | 0.539  |
| Temperature (Celsius) | -0.0060 (-0.0146, 0.0026) | -0.60 (-1.45, 0.26) | 0.218  |
| Sunshine (hours) | -0.0008 (-0.0069, 0.0052) | -0.08 (-0.69, 0.53) | 0.80  |
| Rainfall (mm) | -0.0018 (-0.0074, 0.0037) | -0.18 (-0.73, 0.37) | 0.540  |
| *Intercept* | 11.2586 (10.7971, 11.7200) | - | <0.0001  |

1 As the p-values (the more robust Kenward-Roger adjusted) and CIs (Wald) presented here have been calculated using different assumptions, there is not always an equivalence of interpretation between the 95% confidence intervals and significant p-values.

2 Day 0 is the day that the intervention was implemented