|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Supplemental Table S1**. Associations between maternal sociodemographic characteristics and offspring adolescent adiposity variables, leptin and adiponectin levels | **Sample size (n)** | **Leptin (SD), ng/ml** | **Adiponectin (SD), ng/ml** | **Body Fat Percentage (%)** | **Triceps Thickness (cm)** | **Waist Circumference (cm)** | **BMI Z-score** |
| **Maternal Age** |  |  |  |  |  |  |  |
| 14-23 | 95 | 23.35 (17.29) | 11.986 (4.29) | 27.05 (10.02) | 17.94 (6.32) | 78.62 (10.78) | 0.61 (1.25) |
| 23-26 | 77 | 23.11 (17.18) | 11.673 (3.98) | 27.40 (10.34) | 19.37 (7.16) | 80.66 (12.52) | 0.74 (1.35) |
| 26-30 | 101 | 25.43 (19.85) | 11.538 (3.57) | 26.34 (9.66) | 18.21 (7.16) | 78.29 (11.75) | 0.54 (1.17) |
| 30-44 | 106 | 24.98 (18.36) | 11.490 (3.81) | 26.52 (9.60) | 18.61 (6.99) | 78.18 (12.00) | 0.48 (1.29) |
| *P*2 |  | 0.398 | 0.358 | 0.570 | 0.747 | 0.510 | 0.327 |
| **Parity**  |  |  |  |  |  |  |  |
| 0 or 1 | 138 | 26.53 (19.35) | 11.668 (4.12) | 27.77 (10.13) | 19.07 (6.87) | 79.61 (12.37) | 0.71 (1.23) |
| 2 | 134 | 23.96 (19.52) | 11.457 (3.58) | 25.95 (10.13) | 17.75 (6.92) | 78.86 (11.57) | 0.52 (1.34) |
| 3 or more | 107 | 21.83 (14.45) | 11.925 (4.01) | 26.56 (9.07) | 18.66 (6.91) | 77.76 (11.14) | 0.50 (1.19) |
| *P*2 |  | 0.0453\* | 0.659 | 0.300 | 0.563 | 0.223 | 0.174 |
| **Maternal Education**  |  |  |  |  |  |  |  |
| Did not complete secondary (<9) | 42 | 25.10 (15.78) | 12.098 (3.97) | 27.05 (9.62) | 20.29 (6.27) | 78.65 (10.34) | 0.48 (1.21) |
| Completed some high school (9 to <12) | 155 | 24.03 (17.93) | 11.538 (3.95) | 27.55 (10.09) | 18.34 (6.55) | 79.29 (11.83) | 0.61 (1.35) |
| Completed high school (12) | 127 | 23.94 (18.59) | 11.769 (4.02) | 26.26 (9.97) | 18.29 (7.57) | 78.92 (12.98) | 0.55 (1.25) |
| Higher Education (>12) | 55 | 25.37 (20.32) | 11.458 (3.49) | 25.62 (9.03) | 17.98 (6.69) | 77.43 (9.42) | 0.63 (1.08) |
| *P*2 |  | 0.903 | 0.678 | 0.221 | 0.183 | 0.502 | 0.771 |
| **Marital Status** |  |  |  |  |  |  |  |
| Married or civil union | 338 | 24.15 (18.07) | 11.672.76 (3.85) | 27.78 (10.20) | 19.29 (6.91) | 79.19 (11.56) | 0.81 (1.19) |
| Single, separated, divorced, or widowed | 41 | 25.74 (19.76) | 11.596.30 (4.33) | 26.66 (9.81) | 18.39 (6.91) | 78.78 (11.78) | 0.55 (1.26) |
| *P*2 |  | 0.601 | 0.907 | 0.493 | 0.429 | 0.831 | 0.213 |

1From linear regression models adjusted for marital status, maternal education, and maternal parity

2 *P* for trend estimated by including a continuous ordinal variable representing quartiles of dietary pattern adherence into the linear regression models

\* Denotes P<0.05

 **Supplemental Table S2.** Trimester 2 Principal Component Loadings of Foods

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Prudent Diet** | **High Meat & Fat Diet** | **Transitioning Mexican Diet1** |
| **Milk** | -0.198 | -0.566\* | 0.017 |
| **High Fat Dairy** | 0.128 | -0.086 | -0.453\* |
| **Yogurt** | -0.027 | -0.285 | -0.141 |
| **Ice Cream** | -0.054 | 0.100 | -0.261 |
| **Fruit** | 0.372\* | -0.215 | 0.118 |
| **Egg** | 0.034 | 0.096 | -0.175 |
| **Chicken** | 0.127 | 0.023 | -0.487\* |
| **Beef** | -0.008 | 0.000 | -0.358\* |
| **Pork** | -0.070 | 0.404\* | -0.121 |
| **Processed Meat** | -0.055 | 0.502\* | -0.273 |
| **Organic Meat** | 0.186 | 0.103 | 0.096 |
| **Fish** | 0.222 | 0.083 | -0.253 |
| **Tomato** | 0.415\* | 0.004 | 0.013 |
| **Potato** | 0.405\* | 0.077 | -0.170 |
| **Avocado** | 0.142 | -0.118 | -0.181 |
| **Cruciferous Vegetables** | 0.452\* | -0.053 | 0.033 |
| **Yellow Vegetables** | 0.636\* | -0.061 | -0.152 |
| **Leafy Vegetables** | 0.605\* | -0.088 | -0.017 |
| **Legumes** | 0.458\* | 0.150 | -0.008 |
| **Corncob** | 0.188 | 0.253 | -0.058 |
| **Other Vegetables** | 0.619\* | -0.063 | -0.080 |
| **Soup** | 0.408\* | 0.059 | -0.032 |
| **Chili** | 0.100 | 0.436\* | 0.220 |
| **Atole** | 0.105 | 0.176 | -0.113 |
| **Corn Tortilla** | -0.145 | 0.178 | 0.545\* |
| **Refined Grain** | -0.099 | 0.314\* | -0.016 |
| **Whole Grain** | 0.187 | -0.278 | -0.216 |
| **Chips** | -0.037 | 0.433\* | 0.115 |
| **Dessert** | -0.256 | 0.101 | 0.045 |
| **Jam** | 0.140 | 0.012 | -0.118 |
| **Sugar Beverages** | 0.082 | -0.014 | 0.330\* |
| **Diet Soda** | -0.055 | 0.034 | 0.048 |
| **Coffee** | -0.080 | 0.213 | 0.022 |
| **Wine** | -0.055 | 0.085 | -0.013 |
| **Unsaturated Oil** | 0.287 | 0.036 | 0.310\* |
| **Butter** | 0.087 | 0.341\* | -0.094 |
| **Spread** | -0.008 | 0.232 | -0.413\* |
| **Crisco** | 0.025 | 0.024 | -0.013 |
| **Mexican Foods** | -0.028 | 0.489\* | -0.036 |
| **Natural Juice** | 0.169 | -0.127 | -0.166 |
|  |  |  |  |
| **Percent Variance Explained** | 7 | 5 | 5 |

1Factor loadings and diet pattern scores multiplied by (-1) for interpretability (i.e., to load positively with tortillas and sugar-sweetened beverages) \*Foods considered meaningful if loadings were greater than an absolute value of 0.3

**Supplemental Table S3.** Trimester 3 Principal Component Loadings of Foods

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Prudent Diet** | **High Meat & Fat Diet** | **Transitioning Mexican Diet** |
| **Milk** | -0.166 | 0.057 | -0.578\* |
| **High Fat Dairy** | 0.177 | 0.465\* | -0.133 |
| **Yogurt** | 0.043 | 0.120 | -0.352\* |
| **Ice Cream** | 0.022 | 0.156 | 0.046 |
| **Fruit** | 0.426\* | -0.162 | -0.075 |
| **Egg** | 0.068 | -0.005 | 0.160 |
| **Chicken** | 0.154 | 0.361\* | -0.091 |
| **Beef** | -0.009 | 0.280 | 0.083 |
| **Pork** | -0.051 | 0.040 | 0.482\* |
| **Processed Meat** | -0.085 | 0.472\* | 0.398\* |
| **Organ Meat** | 0.316\* | -0.001 | 0.034 |
| **Fish** | 0.279 | 0.211 | 0.009 |
| **Tomato** | 0.376\* | -0.179 | -0.037 |
| **Potato** | 0.320\* | 0.169 | 0.179 |
| **Avocado** | 0.165 | 0.260 | 0.105 |
| **Cruciferous Vegetables** | 0.312\* | 0.151 | -0.116 |
| **Yellow Vegetables** | 0.570\* | 0.224 | -0.022 |
| **Leafy Vegetables** | 0.578\* | 0.106 | -0.064 |
| **Legumes** | 0.415\* | -0.129 | 0.083 |
| **Corncob** | 0.326\* | 0.073 | 0.173 |
| **Other Vegetables** | 0.614\* | 0.112 | -0.014 |
| **Soup** | 0.400\* | 0.217 | 0.022 |
| **Chili** | 0.092 | -0.284 | 0.464\* |
| **Atole** | 0.198 | 0.084 | 0.177 |
| **Corn Tortilla** | -0.015 | -0.580\* | 0.220 |
| **Refined Grain** | -0.214 | 0.253 | 0.260 |
| **Whole Grain** | 0.243 | 0.284 | -0.262 |
| **Chips** | -0.124 | 0.050 | 0.390\* |
| **Dessert** | -0.265 | -0.169 | 0.009 |
| **Jam** | 0.082 | 0.152 | 0.118 |
| **Sugar Beverages** | -0.119 | -0.363\* | 0.055 |
| **Diet Soda** | 0.001 | 0.032 | 0.196 |
| **Coffee** | -0.033 | -0.090 | 0.117 |
| **Wine** | -0.013 | 0.060 | 0.136 |
| **Unsaturated Oil** | 0.265 | -0.252 | 0.175 |
| **Butter** | 0.027 | 0.121 | 0.260 |
| **Spread** | -0.013 | 0.444\* | 0.196 |
| **Crisco** | 0.066 | 0.047 | 0.124 |
| **Mexican Foods** | -0.055 | -0.071 | 0.438\* |
| **Natural Juice** | 0.171 | 0.079 | -0.065 |
|  |  |  |  |
| **Percent Variance Explained** | 7 | 5 | 5 |

\*Foods considered meaningful if loadings were greater than an absolute value of 0.3

**Supplemental Table S4.** Spearman correlations between adipokines and adiposity measures

|  |  |  |
| --- | --- | --- |
|  | **Leptin** | **Adiponectin** |
| **Triceps Thickness** | 0.77 | -0.26 |
| **Waist Circumference** | 0.65 | -0.32 |
| **BMI Z-score** | 0.61 | -0.29 |
| **Body Fat Percentage** | 0.88 | -0.14 |

**Supplemental Table S5.** Sex-stratified adjusted associations1 between trimester 2 maternal prenatal diet patterns and offspring adolescent anthropometric measures

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | **Body fat percentage** | **Triceps skinfolds, mm** | **Waist circumference, cm** | **BMI Z-score** |
|  | **n** | Females | Males | Females | Males | Females | Males | Females | Males |
| **Prudent Diet** |  |  |  |  |  |  |  |  |  |
| Q1 | 95 | Reference | Reference | Reference | Reference | Reference | Reference | Reference | Reference |
| Q2 | 95 | 0.06 (-0.30, 0.42) | -0.25 (-0.71, 0.21) | -0.02 (-0.44, 0.41) | -0.17 (-0.65, 0.30) | 0.22 (-0.23, 0.67) | -0.32 (-0.79, 0.14) | 0.25 (-0.17, 0.67) | -0.29(-0.73, 0.16) |
| Q3 | 94 | 0.25 (-0.11, 0.62) | -0.01 (-0.47, 0.45) | 0.05 (-0.38, 0.48) | 0.18 (-0.29, 0.65) | 0.37 (-0.08, 0.82) | 0.16 (-0.31, 0.62) | 0.21 (-0.22, 0.63) | 0.11 (-0.34, 0.56) |
| Q4 | 95 | 0.10 (-0.27, 0.47) | -0.18 (-0.63, 0.27) | -0.14 (-0.57, 0.30) | -0.07 (-0.54, 0.39) | 0.22 (-0.23, 0.67) | -0.12 (-0.58, 0.34) | 0.03 (-0.40, 0.46) | -0.10 (-0.54, 0.34) |
| *P*2 |  | 0.4697 | 0.9287 | 0.7951 | 0.5517 | 0.6925 | 0.6159 | 0.6072 | 0.6718 |
| **High Meat & Fat Diet** |  |  |  |  |  |  |  |  |  |
| Q1 | 95 | Reference | Reference | Reference | Reference | Reference | Reference | Reference | Reference |
| Q2 | 95 | -0.10 (-0.47, 0.27) | -0.39 (-0.84, 0.05) | -0.06 (-0.50, 0.37) | 0.08 (-0.38, 0.540 | -0.14 (-0.59, 0.31) | -0.17 (-0.62, 0.29) | 0.02 (-0.41, 0.45) | -0.34 (-0.78, 0.10) |
| Q3 | 94 | 0.00 (-0.36, 0.37) | -0.21 (-0.67, 0.24) | 0.12 (-0.31, 0.55) | -0.19 (-0.66, 0.29) | -0.08 (-0.53, 0.37) | -0.20 (-0.67, 0.27) | 0.11 (-0.31, 0.54) | -0.26 (-0.71, 0.19) |
| Q4 | 95 | -0.31 (-0.69, 0.07) | -0.12 (-0.57, 0.34) | -0.14 (-0.59, 0.31) | 0.07 (-0.40, 0.55) | -0.52 (-0.99, -0.06) | -0.19 (-0.66, 0.28) | -0.24 (-0.69, 0.20) | -0.21 (-0.66, 0.23) |
| *P*2 |  | 0.3104 | 0.7600 | 0.6841 | 0.6475 | 0.3221 | 0.9791 | 0.4955 | 0.7747 |
| **Transitioning Mexican Diet** |  |  |  |  |  |  |  |  |  |
| Q1 | 95 | Reference | Reference | Reference | Reference | Reference | Reference | Reference | Reference |
| Q2 | 95 | 0.182 (-0.18, 0.54) | 0.030 (-0.41, 0.48) | 0.185 (-0.24, 0.61) | -0.065 (-0.53, 0.40) | 0.256 (-0.19, 0.70) | 0.174 (-0.29, 0.64) | 0.196 (-0.22, 0.62) | 0.099 (-0.34, 0.54) |
| Q3 | 94 | 0.284 (-0.08, 0.65) | -0.314 (-0.76, 0.14) | 0.286 (-0.14, 0.72) | -0.407 (-0.87, 0.06) | 0.315 (-0.13, 0.76) | -0.071 (-0.54, 0.40) | 0.004 (-0.42, 0.43) | -0.099 (-0.55, 0.35) |
| Q4 | 95 | -0.003 (-0.39, 0.38) | -0.475 (-0.93, -0.02)\* | 0.049 (-0.40, 0.50) | -0.418 (-0.89, 0.05) | -0.015 (-0.49, 0.46) | -0.040 (-0.51, 0.43) | -0.190 (-0.64, 0.26) | -0.185 (-0.63, 0.26) |
| *P*2 |  | 0.3138 | 0.3074 | 0.6118 | 0.2443 | 0.5980 | 0.9608 | 0.4710 | 0.8550 |

1From linear regression models adjusted for marital status, maternal education, and maternal parity

2 *P* for trend estimated by including a continuous ordinal variable representing quartiles of dietary pattern adherence into the linear regression models

\* Denotes P<0.05

**Supplemental Table S6.** Adjusted associations between trimester 2 maternal diet patterns and offspring adolescent leptin and adiponectin levels by sex

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **Leptin (ng/ml)1** | **Adiponectin (ng/mL)1** |
|  | **n** | Females | Males | Females | Males |
| **Prudent Diet** |  |  |  |  |  |
| Q1 | 95 | Reference | Reference | Reference | Reference |
| Q2 | 95 | 4.99 (-1.75, 11.74) | -3.45 (-9.15, 2.25) | -0.56 (-2.15, 1.03) | 0.10 (-1.44, 1.82) |
| Q3 | 94 | 6.42 (-0.41, 13.25) | 2.74 (-2.98, 8.46) | -0.11 (-1.72, 1.50) | 0.30 (-1.43, 1.94) |
| Q4 | 95 | 1.65 (-5.16, 8.46) | -0.55 (-6.25, 5.16) | -0.27 (-1.87, 1.33) | 1.08 (-0.55, 2.72) |
| *P*2 |  | 0.3683 | 0.2434 | 0.8669 | 0.8588 |
| **High Meat & Fat Diet** |  |  |  |  |  |
| Q1 | 95 | Reference | Reference | Reference | Reference |
| Q2 | 95 | 4.05 (-2.68, 10.78) | -2.23 (-7.88, 3.43) | 0.45 (-1.14, 2.03) | -0.58 (-2.22, 1.05) |
| Q3 | 94 | 9.50 (2.77, 16.23)\* | -5.48 (-11.17, 0.21) | -0.99 (-2.57, 0.60) | -0.34 (-1.98, 1.31) |
| Q4 | 95 | 3.17 (-3.97, 10.31) | -7.00 (-12.73, -1.27)\* | 0.11 (-1.57, 1.79) | -0.72 (-2.38, 0.94) |
| *P*2 |  | 0.1178 | 0.1001 | 0.4675 | 0.9633 |
| **Transitioning Mexican Diet** |  |  |  |  |  |
| Q1 | 95 | Reference | Reference | Reference | Reference |
| Q2 | 95 | -2.13 (-9.01, 4.77) | -2.81 (-8.46, 2.85) | 0.49 (-1.12, 2.09) | 1.65 (0.07, 3.23)\* |
| Q3 | 94 | -2.79 (-9.62, 4.04) | -2.10 (-7.88, 3.67) | -0.40 (-1.99, 1.20) | 1.58 (-0.03, 3.19) |
| Q4 | 95 | -4.91 (-12.09, 2.28) | -0.64 (-6.46, 5.17) | 0.10 (-1.58, 1.77) | 2.31 (0.69, 3.93)\* |
| *P*2 |  | 0.6837 | 0.5866 | 0.7764 | 0.1613 |

 1From linear regression models adjusted for marital status, maternal education, and maternal parity

 2 *P* trend estimated by including a continuous ordinal variable representing quartiles of dietary pattern adherence into the linear regression models

\* Denotes P<0.05

**Supplemental Figure S1**. Timeline of study measures

1997

Mother Recruitment

FFQ Completed

2003

2015

Adolescent adipokine and adiposity measures