Table S1. Associations between specific gravity corrected urinary oxidative stress concentrations (ng/mL) and selected demographic characteristics (N=476).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Prostaglandin-F2α | | 8-iso-prostaglandin-F2α, chemical | | 8-iso-prostaglandin-F2α, enzymatic | |
|  | % Difference  (95% CI) | p | % Difference (95% CI) | p | % Difference  (95% CI) | p |
| Maternal Age, years |  |  |  |  |  |  |
| 18-24 | 17.8 (5.94, 31.0) | <0.01 | 18.5 (5.82, 32.7) | <0.01 | 53.8 (-0.74, 138.3) | 0.05 |
| 25-29 | Ref | Ref | Ref | Ref | Ref | Ref |
| 30-34 | 1.48 (-11.0, 15.7) | 0.83 | -1.50 (-14.4, 13.3) | 0.83 | 26.7 (-26.4, 118.0) | 0.39 |
| >35 | -6.65 (-19.9, 8.84) | 0.38 | -8.42 (-22.3, 7.88) | 0.29 | 4.00 (-44.8, 96.1) | 0.90 |
| Maternal Education |  |  |  |  |  |  |
| <High school | 16.3 (-2.74, 39.0) | 0.10 | 13.1 (-6.85, 37.3) | 0.21 | -2.72 (-53.1, 101.9) | 0.94 |
| High school or equivalent | 10.7 (-3.24, 26.7) | 0.14 | 25.0 (8.16, 44.5) | <0.01 | -17.1 (-52.3, 44.0) | 0.51 |
| Some college or technical school | 12.0 (1.17, 24.1) | 0.03 | 15.3 (3.40, 28.5) | 0.01 | 22.1 (-19.7, 85.6) | 0.35 |
| >College degree | Ref | Ref | Ref | Ref | Ref | Ref |
| Employment Status |  |  |  |  |  |  |
| Unemployed | 5.23 (-4.07, 15.4) | 0.28 | 9.62 (-0.69, 21.0) | 0.07 | -17.3 (-43.3, 20.5) | 0.32 |
| Employed | Ref | Ref | Ref | Ref | Ref | Ref |
| Marital Status |  |  |  |  |  |  |
| Single | 0.80 (-10.5, 13.7) | 0.89 | 8.28 (-4.65, 23.0) | 0.22 | -5.55 (-42.0, 53.8) | 0.82 |
| Married | Ref | Ref | Ref | Ref | Ref | Ref |
| Living together | 8.29 (-2.58, 20.4) | 0.14 | 10.6 (-1.29, 24.0) | 0.08 | 6.04 (-31.1, 63.3) | 0.79 |
| Alcohol Use |  |  |  |  |  |  |
| Never | Ref | Ref | Ref | Ref | Ref | Ref |
| Before pregnancy | 7.69 (-1.92, 18.3) | 0.12 | -6.76 (15.5, 2.92) | 0.17 | 50.3 (3.05, 119.3) | 0.03 |
| Current | 0.57 (-18.5, 24.1) | 0.96 | -7.47 (-26.4, 16.3) | 0.51 | 81.8 (-22.1, 324.5) | 0.17 |
| Smoking |  |  |  |  |  |  |
| Never | Ref | Ref | Ref | Ref | Ref | Ref |
| Before pregnancy | 11.4 (-2.35, 27.0) | 0.11 | 5.88 (-8.27, 22.2) | 0.44 | 9.74 (-35.9, 87.7) | 0.73 |
| Current | 3.05 (-18.1, 29.7) | 0.80 | 19.1 (-6.77, 52.2) | 0.16 | 12.8 (-56.1, 189.5) | 0.80 |
| Insurance Status |  |  |  |  |  |  |
| Private | Ref | Ref | Ref | Ref | Ref | Ref |
| Public | 17.5 (7.02, 29.0) | <0.01 | 11.7 (1.20, 23.4) | 0.03 | 19.0 (-19.6, 76.1) | 0.38 |
| Uninsured | 1.40 (-33.0, 53.4) | 0.95 | 59.9 (4.03, 145.9) | 0.03 | -55.1 (-91.5, 136.5) | 0.35 |

Note: associations are unadjusted. The number of imputed values for each variable were as follows: maternal age=0, maternal education=4, employment status=5,marital status=2, alcohol use=6, smoking=2, insurance status=17.

Abbreviations: CI, confidence interval; Ref, reference.

Table S2. Associations between specific gravity corrected urinary prostaglandin-F2α concentrations (ng/mL) and psychosocial stress measures (N=476).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Crude | | | | Adjusted1 | |
|  | | % Difference (95% CI) | p | % Difference (95% CI) | | p |
| ENRICHD Social Support Instrument | |  |  |  | |  |
| High | | Ref | Ref | Ref | | Ref |
| Medium | | 5.51 (-5.50, 17.8) | 0.34 | 3.39 (-9.42, 18.0) | | 0.62 |
| Low | | -1.68 (-12.4, 10.4) | 0.77 | -5.10 (-16.8, 8.20) | | 0.43 |
| p trend | | 0.92 |  | 0.41 | |  |
| Perceived Stress Scale | |  |  |  | |  |
| Low | | Ref | Ref | Ref | | Ref |
| Medium | | -1.25 (-11.5, 10.1) | 0.82 | -2.92 (-13.0, 8.32) | | 0.60 |
| High | | 3.30 (-8.19, 16.2) | 0.59 | -0.32 (-11.5, 12.2) | | 0.96 |
| p trend | | 0.61 |  | 0.94 | |  |
| CES-D | |  |  |  | |  |
| Low | | Ref | Ref | Ref | | Ref |
| Medium | | 1.27 (-9.22, 13.0) | 0.82 | 0.94 (-9.40, 12.4) | | 0.87 |
| High | | 7.00 (-4.87, 20.4) | 0.26 | 3.77 (-7.83, 16.8) | | 0.54 |
| p trend | | 0.27 |  | 0.55 | |  |
| Life Experience Survey | |  |  |  | |  |
| Low | | Ref | Ref | Ref | | Ref |
| Medium | | 4.73 (-6.29, 17.0) | 0.42 | 3.11 (-7.67, 15.2) | | 0.59 |
| High | | 2.36 (-8.54, 14.6) | 0.69 | 0.47 (-10.3, 12.5) | | 0.94 |
| p trend | | 0.63 |  | 0.88 | |  |
| Neighborhood Perceptions | |  |  |  | |  |
| Low | | Ref | Ref | Ref | | Ref |
| Medium | | -10.9 (-20.6, -0.03) | 0.05 | -9.90 (-19.6, 0.94) | | 0.07 |
| High | | 2.42 (-11.4, 18.3) | 0.75 | -0.21 (-13.6, 15.3) | | 0.98 |
| p trend | | 0.58 |  | 0.44 | |  |

1Models are adjusted for maternal age, maternal education, and marital status.

Note: the number of imputed values for each variable were as follows: ENRICHD Social Support Instrument=36, Perceived Stress Scale=37, CES-D=45, Life Experience Survey=35, Neighborhood Perceptions=17.

Abbreviations: CI, confidence interval; Ref, reference; CES-D, Center for Epidemiologic Studies-Depression.

Table S3. Associations between specific gravity corrected urinary 8-iso-prostaglandin-F2α chemical concentrations (ng/mL) and psychosocial stress measures (N=476).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Crude | | | | Adjusted1 | |
|  | | % Difference (95% CI) | p | % Difference (95% CI) | | p |
| ENRICHD Social Support Instrument | |  |  |  | |  |
| High | | Ref | Ref | Ref | | Ref |
| Medium | | 1.09 (-11.2, 15.1) | 0.87 | -4.81 (-19.0, 11.9) | | 0.55 |
| Low | | 7.37 (-5.24, 21.6) | 0.27 | 0.05 (-13.6, 15.9) | | 0.99 |
| p trend | | 0.29 |  | 0.97 | |  |
| Perceived Stress Scale | |  |  |  | |  |
| Low | | Ref | Ref | Ref | | Ref |
| Medium | | -4.46 (-15.3, 7.77) | 0.46 | -7.40 (-17.9, 4.44) | | 0.21 |
| High | | 1.06 (-10.8, 14.5) | 0.87 | -3.47 (-14.9, 9.54) | | 0.58 |
| p trend | | 0.91 |  | 0.55 | |  |
| CES-D | |  |  |  | |  |
| Low | | Ref | Ref | Ref | | Ref |
| Medium | | -2.29 (-13.5, 10.4) | 0.71 | -2.83 (-13.9, 9.73) | | 0.64 |
| High | | 5.80 (-7.17, 20.6) | 0.40 | 1.67 (-10.9, 16.0) | | 0.81 |
| p trend | | 0.43 |  | 0.85 | |  |
| Life Experience Survey | |  |  |  | |  |
| Low | | Ref | Ref | Ref | | Ref |
| Medium | | 8.01 (-4.32, 21.9) | 0.21 | 6.19 (-5.90, 19.8) | | 0.33 |
| High | | 15.0 (2.04, 29.5) | 0.02 | 13.1 (0.37, 27.5) | | 0.04 |
| p trend | | 0.02 |  | 0.04 | |  |
| Neighborhood Perceptions | |  |  |  | |  |
| Low | | Ref | Ref | Ref | | Ref |
| Medium | | 3.61 (-7.82, 16.5) | 0.55 | 5.51 (-6.06, 18.5) | | 0.37 |
| High | | 1.11 (-13.1, 17.7) | 0.89 | -0.74 (-14.5, 15.6) | | 0.92 |
| p trend | | 0.72 |  | 0.77 | |  |

1Models are adjusted for maternal age, maternal education, and marital status.

Note: the number of imputed values for each variable were as follows: ENRICHD Social Support Instrument=36, Perceived Stress Scale=37, CES-D=45, Life Experience Survey=35, Neighborhood Perceptions=17.

Abbreviations: CI, confidence interval; Ref, reference; CES-D, Center for Epidemiologic Studies-Depression.

Table S4. Associations between specific gravity corrected urinary 8-iso-prostaglandin-F2α enzymatic concentrations (ng/mL) and psychosocial stress measures (N=476).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Crude | | | | Adjusted1 | |
|  | | % Difference (95% CI) | p | % Difference (95% CI) | | p |
| ENRICHD Social Support Instrument | |  |  |  | |  |
| High | | Ref | Ref | Ref | | Ref |
| Medium | | 27.7 (-18.2, 99.3) | 0.28 | 37.5 (-19.8, 135.9) | | 0.25 |
| Low | | -13.6 (-45.9, 38.0) | 0.54 | -8.34 (-46.4, 56.9) | | 0.75 |
| p trend | | 0.70 |  |  | | 0.70 |
| Perceived Stress Scale | |  |  |  | |  |
| Low | | Ref | Ref | Ref | | Ref |
| Medium | | -2.27 (-37.3, 52.3) | 0.92 | -1.60 (-37.2, 54.2) | | 0.94 |
| High | | 0.52 (-37.0, 60.4) | 0.98 | -2.32 (-39.4, 57.4) | | 0.92 |
| p trend | | 0.99 |  | 0.92 | |  |
| CES-D | |  |  |  | |  |
| Low | | Ref | Ref | Ref | | Ref |
| Medium | | 1.86 (-34.5, 58.4) | 0.93 | 2.11 (-34.4, 58.9) | | 0.93 |
| High | | -13.3 (-45.7, 38.5) | 0.55 | -16.5 (-48.1, 34.6) | | 0.46 |
| p trend | | 0.57 |  | 0.48 | |  |
| Life Experience Survey | |  |  |  | |  |
| Low | | Ref | Ref | Ref | | Ref |
| Medium | | 7.14 (-32.1, 69.0) | 0.77 | 1.19 (-36.1, 60.2) | | 0.96 |
| High | | -19.0 (-48.5, 27.4) | 0.36 | -24.6 (-52.4, 19.5) | | 0.23 |
| p trend | | 0.41 |  | 0.26 | |  |
| Neighborhood Perceptions | |  |  |  | |  |
| Low | | Ref | Ref | Ref | | Ref |
| Medium | | -17.0 (-47.2, 30.4) | 0.42 | -17.4 (-47.4, 29.9) | | 0.41 |
| High | | 53.7 (-13.4, 173.0) | 0.14 | 46.7 (-17.9, 162.2) | | 0.20 |
| p trend | | 0.39 |  | 0.48 | |  |

1Models are adjusted for maternal age, maternal education, and marital status.

Note: the number of imputed values for each variable were as follows: ENRICHD Social Support Instrument=36, Perceived Stress Scale=37, CES-D=45, Life Experience Survey=35, Neighborhood Perceptions=17.

Abbreviations: CI, confidence interval; Ref, reference; CES-D, Center for Epidemiologic Studies-Depression.