Supplemental Table 1: Adjusted difference in the children’s calculated percent predicted forced expiratory volume (FEV) at ages 4 and 5, per log2-transformed increase in cord serum leptin or adiponectin concentrations: adjustment for gestational weight gain z-score, maternal asthma, maternal allergies, paternal asthma, paternal allergies, pet ownership and child serum cotinine levels.1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Overall | | Girls | | Boys | | Sex \* Adipokine |
|  | N | β and 95% CI | N | β and 95% CI | N | β and 95% CI | p-value |
| **Leptin and PCT Predicted Mean FEV** |  |  |  |  |  |  |  |
| Adjusted1 | 252 | -0.7 (-3.1, 1.7) | 145 | 0.3 (-2.8, 3.4) | 107 | -0.8 (-4.9, 3.3) | 0.179 |
| Adjusted + gestational weight gain zscore | 250 | -0.8 (-3.2, 1.6) | 145 | 0.2 (-2.9, 3.3) | 107 | -0.6 (-4.6, 3.3) | 0.156 |
| Adjusted + maternal asthma | 252 | -0.7 (-3.1, 1.7) | 145 | 0.4 (-2.6, 3.4) | 107 | -0.9 (-4.9, 3.0) | 0.177 |
| Adjusted + maternal allergies | 252 | -0.8 (-3.2, 1.6) | 145 | 0.5 (-2.6, 3.6) | 107 | -0.8 (-4.9, 3.4) | 0.182 |
| Adjusted + paternal asthma | 250 | -0.8 (-3.2, 1.7) | 145 | 0.3 (-2.9, 3.4) | 105 | -1.0 (-5.4, 3.5) | 0.186 |
| Adjusted + paternal allergies | 250 | -0.6 (-3.0, 1.8) | 145 | 1.1 (-2.0, 4.2) | 105 | -0.6 (-5.0, 3.7) | 0.139 |
| Adjusted + pets | 249 | -0.5 (-2.9, 1.9) | 143 | 0.6 (-2.7, 3.8) | 106 | -0.7 (-4.9, 3.5) | 0.220 |
| Adjusted + child cotinine (average of 1 to 4 years) | 248 | -0.8 (-3.3, 1.6) | 142 | 1.8 (-3.3, 3.7) | 106 | -0.3 (-5.4, 4.7) | 0.172 |
| Adjusted + urban/suburban/rural | 252 | -0.6 (-3.0, 1.9) | 145 | 0.7 (-2.3, 3.7) | 107 | -0.9 (-5.1, 3.2) | 0.196 |
|  |  |  |  |  |  |  |  |
| **Adiponectin and PCT Predicted Mean FEV** |  |  |  |  |  |  |  |
| Adjusted1 | 262 | 0.8 (-1.6, 3.2) | 154 | 3.1 (0.6, 5.6) | 108 | -1.3 (-5.9, 3.3) | 0.052 |
| Adjusted + gestational weight gain zscore | 260 | 0.7 (-1.8, 3.2) | 152 | 3.4 (0.6, 6.3) | 108 | -1.4 (-5.9, 3.1) | 0.044 |
| Adjusted + maternal asthma | 262 | 0.8 (-1.7, 3.2) | 154 | 3.0 (0.5, 5.5) | 108 | -1.1 (-5.7, 3.4) | 0.053 |
| Adjusted + maternal allergies | 262 | 0.8 (-1.6, 3.2) | 154 | 3.9 (1.4, 6.3) | 108 | -1.2 (-6.3, 3.9) | 0.055 |
| Adjusted + paternal asthma | 260 | 1.1 (-1.4, 3.6) | 154 | 3.1 (0.7, 5.6) | 106 | -0.9 (-5.6, 3.8) | 0.059 |
| Adjusted + paternal allergies | 260 | 0.9 (-1.5, 3.4) | 154 | 3.2 (0.6, 5.7) | 106 | -1.1 (-5.9, 3.7) | 0.068 |
| Adjusted + pets | 259 | 0.6 (-1.8, 3.0) | 152 | 2.9 (0.6, 5,2) | 107 | -1.3 (-6.0, 3.1) | 0.044 |
| Adjusted + child cotinine (average of 1 to 4 years) | 258 | 0.5 (-1.9, 2.9) | 151 | 1.3 (-0.2, 5.0) | 107 | -2.3 (-5.9, 3.4) | 0.086 |
| Adjusted + urban/suburban/rural | 262 | 0.6 (-1.8, 3.0) | 154 | 2.7 (0.2, 5.2) | 108 | -1.0 (-5.4, 3.4) | 0.060 |

1Adjusted model: We adjusted for neonatal birthweight percentile (<10%, 10-90%, > 90%), gestational age (term or pre-term), maternal education (high school graduate or less, tech school or some college, college graduate or above), pre-pregnancy BMI (<25, 25-30, ≥30 kg/m2), parity (0, 1, ≥2), child’s sex (Male, Female), mother’s race (non-Hispanic White, non-Hispanic Black, other), and birth serum cotinine concentrations (<0.015, 0.015-0.3, >0.3 ηg/mL). N = no of repeats. We considered p-values for interaction terms < 0.20 as an indication that the association varied by sex.