Table S1 Spearman’s correlation coefficients between maternal characteristics and cord blood metabolic related biomarker levels.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Total adiponectin | HMW adiponectin | Leptin | TNF-α | IL-6 |
| Maternal characteristics |  |  |  |  |  |
| Maternal age | 0.033 | 0.049 | -0.062 | -0.057 | 0.028 |
| Pre-pregnancy BMI | 0.126\* | 0.075 | 0.144\*\* | -0.053 | 0.054 |
| Parity | 0.054 | 0.051 | -0.123\* | 0.018 | -0.182\*\* |
| Drinking during pregnancy | -0.070 | -0.065 | -0.005 | -0.041 | -0.066 |
| Smoking during pregnancy | -0.074 | -0.049 | -0.085 | 0.037 | -0.014 |
| Annual family income | 0.066 | 0.064 | -0.001 | 0.027 | -0.012 |
| Maternal education | -0.056 | -0.041 | -0.043 | -0.038 | 0.052 |
| Child characteristics |  |  |  |  |  |
|  Sex | 0.160\*\* | 0.178\*\* | 0.186\*\* | -0.095 | -0.077 |
|  Gestational age | 0.112\*\* | 0.118\* | 0.249\*\* | -0.159\*\* | 0.165\*\* |
|  Birth weight | 0.234\*\* | 0.217\*\* | 0.334\*\* | -0.096 | 0.036 |
|  Birth length  | 0.115\*\* | 0.113\* | 0.207\*\* | -0.094 | 0.013 |

\* p < 0.05, \*\* p < 0.01

BMI: body mass index, HMW: high-molecular-weight, TNF-a: tumor necrosis factor alpha, IL-6: interleukin 6

Table S2 Spearman’s correlation coefficients between maternal characteristics and maternal serum bisphenol A and phthalate metabolite levels.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Bisphenol A | MnBP | MiBP | MEHP | MECPP |
| Maternal characteristics |  |  |  |  |  |
| Maternal age | -0.037 | 0.061 | 0.071 | 0.063 | 0.025 |
| Pre-pregnancy BMI | -0.062 | 0.016 | 0.020 | -0.009 | -0.017 |
| Parity | -0.036 | 0.044 | 0.032 | 0.089 | 0.027 |
| Drinking during pregnancy | -0.063 | 0.050 | 0.061 | -0.021 | -0.001 |
| Smoking during pregnancy | -0.034 | 0.141\* | 0.107 | -0.024 | 0.002 |
| Annual family income | -0.067 | 0.134 | 0.146\* | 0.001 | 0.093 |
| Maternal education | -0.043 | 0.013 | 0.029 | 0.040 | 0.078 |
| Child characteristics |  |  |  |  |  |
|  Sex | 0.003 | -0.055 | -0.075 | -0.043 | -0.091 |
|  Gestational age | -0.066 | -0.025 | 0.009 | -0.119\* | -0.038 |
|  Birth weight | -0.034 | -0.001 | 0.010 | -0.101 | 0.073 |
|  Birth length  | -0.009 | -0.017 | 0.024 | -0.182\* | 0.104 |

\* p < 0.05

BMI: body mass index

Table S3 Comparison of characteristics of follow-up study population (n=5,600) and the present study population (n=365).

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | n=365 | N=5,600 |
|  |  | Mean ± SD, n (%), median (IQR) |
| **Maternal** |  |  |  |
| Age (years) |  | 31.9 ± 4.4 | 30.8 ± 5.0 |
| Pre-pregnancy BMI (kg/m2) |  | 20.8 ± 2.7 | 21.2 ± 3.3 |
| Parity | Nulliparous | 148 (40.5) | 1933 (34.5) |
|  | Parous | 201 (55.1) | 5994 (53.5) |
|  | Missing | 16 (4.4) | 673 (12.0) |
| Drinking alcohol during pregnancy | Yes | 44 (12.1) | 557 (9.9) |
|  | No | 313 (85.8) | 4784 (75.4) |
|  | Missing | 8 (2.2) | 259 (4.6) |
| Smoking during pregnancy | Yes | 19 (5.2) | 511 (9.1) |
|  | No  | 276 (75.6) | 3988 (71.2) |
|  | Missing | 70 (19.2) | 1101 (19.7) |
| Annual family income (JPY) | < 5M | 187 (51.2) | 3178 (56.8) |
|  | ≧ 5M | 132 (36.2) | 1580 (28.2) |
|  | Missing | 46 (12.6) | 842 (15.0) |
| Education (years) | ≦ 12 | 140 (38.4) | 2554 (45.6) |
|  | ≧ 13 | 221 (60.5) | 2891 (51.6) |
|  | missing | 4 (1.1) | 155 (2.8) |
| **Child** |  |  |  |
| Sex | Girl | 176 (48.2) | 2785 (49.7) |
|  | Boy | 189 (51.8) | 2815 (50.3) |
| Gestational age (days) |  | 275 ± 8 | 273 ± 12  |
| Birth weight (g) |  | 3040 ± 352 | 3008 ± 343 |
| Birth length (cm) |  | 48.9 ± 1.9 | 48.8 ± 3.9 |

SD: standard deviation, IQR: inter quartile range, BMI: body mass index, JPY: Japanese yen,