

**Table** The associations between log transformed 8-isoprostane and body composition metrics at 4 years

|                            | Log transformed 8-isoprostane |                  |                             |                             |                             |
|----------------------------|-------------------------------|------------------|-----------------------------|-----------------------------|-----------------------------|
|                            | <i>r</i>                      | Crude P          | Model 1                     | Model2                      | Model 3                     |
| BMI                        | 0.21                          | <b>0.001</b>     | <b>0.84 (0.35, 1.33)***</b> | <b>0.63 (0.16 1.10)**</b>   | <b>0.67 (0.15, 1.18)*</b>   |
| Male                       | 0.34                          | <b>&lt;0.001</b> | <b>1.40 (0.81, 1.99)***</b> | <b>1.13 (0.52, 1.74)***</b> | <b>1.16 (0.5, 1.83) ***</b> |
| Female                     | -0.10                         | 0.41             | -0.51 (-1.42, 0.39)         | -0.23 (-1.2, 0.74)          | -0.37 (-1.46, 0.73)         |
| BMI z-score                | 0.23                          | <b>&lt;0.001</b> | <b>0.57 (0.26, 0.88)***</b> | <b>0.43 (0.13, 0.72)**</b>  | <b>0.44 (0.12, 0.76)**</b>  |
| Male                       | 0.34                          | <b>&lt;0.001</b> | <b>0.93 (0.55, 1.31)***</b> | <b>0.71 (0.32, 1.11)***</b> | <b>0.74 (0.32, 1.17)***</b> |
| Female                     | -0.10                         | 0.42             | -0.30 (-0.83, 0.23)         | -0.12 (-0.69, 0.44)         | -0.19 (-0.83, 0.45)         |
| Body composition variables |                               |                  |                             |                             |                             |
| Body fat mass (kg)         | 0.17                          | <b>0.02</b>      | <b>0.35 (0.07, 0.63)*</b>   | 0.2 (-0.08, 0.48)           | 0.21 (-0.1, 0.52)           |
| Male                       | 0.28                          | <b>&lt;0.001</b> | <b>0.61 (0.28, 0.94)***</b> | <b>0.45 (0.09, 0.81)*</b>   | <b>0.49 (0.09, 0.89)*</b>   |
| Female                     | -0.09                         | 0.53             | -0.28 (-0.90, 0.34)         | -0.06 (-0.76, 0.63)         | -0.19 (-1.01, 0.63)         |
| Percent body fat (%)       | 0.15                          | <b>0.04</b>      | <b>0.32 (0.03, 0.60)*</b>   | 0.17 (-0.1, 0.45)           | 0.18 (-0.13, 0.49)          |
| Male                       | 0.26                          | <b>0.002</b>     | <b>0.57 (0.24, 0.90)***</b> | <b>0.41 (0.04, 0.77)*</b>   | <b>0.43 (0.03, 0.83)*</b>   |
| Female                     | -0.08                         | 0.56             | -0.21 (-0.79, 0.38)         | 0.05 (-0.6, 0.7)            | -0.08 (-0.85, 0.69)         |

Data presented are the Pearson correlation coefficients and  $\beta$  coefficients with 95% confidence intervals (CIs) in the outcomes (e.g., BMI) from Pearson and multiple linear regression models. Standardized z score for body fat mass and percent body fat were used in the regression analyses.

The interaction between child sex and 8-isoprostane on BMI has a p-value of 0.002, on BMI-Z score has a p-value of 0.001, on Body Fat Mass has a p-value of 0.023, and on Percent Body Fat has a p-value of 0.034.

Model 1 adjusted for breastfeeding during infancy, nutrition supply and outdoor activity.

Model 2 adjusted for maternal age, maternal education, pre-pregnancy BMI, gestational diabetes mellitus, hypertension in pregnancy, breastfeeding during infancy, nutrition supply and outdoor activity.

Model 3 adjusted for maternal age, maternal education, pre-pregnancy BMI, gestational diabetes mellitus, hypertension in pregnancy, breastfeeding during infancy, nutrition supply, outdoor activity, smoking in pregnancy, alcohol drinking in pregnancy, gestational week and the sum of skinfold thickness.

BMI, body mass index. Significant values indicated in **bold**: \*P < 0.05, \*\*P < 0.01, \*\*\*P < 0.001.