**Table S4: Adiposity trajectories from birth to ten years and their association with systolic blood pressure at age 15 years, with multiple imputation**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Systolic blood pressure |  |  |  |
|  | Model 1 | Model 2 | Model 3 | Model 4 |
| *Boys, N=2181* |  |  |  |  |
| PI at birth | -0.045(-0.088,-0.002) | -0.045(-0.088,-0.002) | -0.062(-0.106,-0.018) | -0.062(-0.105,-0.019) |
| PI change 0-2mt | 0.045 (0.002,0.087) | 0.039(-0.004,0.082) | 0.049(0.004,0.095) | 0.020(-0.026,0.065) |
| **PI change 2-24mt** | **-0.004****(-0.046,0.039)** | **0.013****(-0.115,0.140)** | **0.053****(-0.076,0.182)** | **0.040****(-0.088,0.167)** |
| **BMI change 2-5y** | **0.046****(0.004,0.087)** | **0.044****(0.002,0.086)** | **0.014****(-0.028,0.056)** | **0.005****(-0.038,0.048)** |
| **BMI change 5-5.5y** | **0.043****(0.001,0.086)** | **0.113****(0.057,0.168)** | **0.012****(-0.047,0.071)** | **-0.031****(-0.097,0.035)** |
| **BMI change 5.5-6.5y** | **-0.064****(-0.105,-0.023)** | **-0.116****(-0.166,-0.065)** | **-0.079****(-0.129,-0.028)** | **-0.065****(-0.119,-0.012)** |
| **BMI change 6.5-7y** | **0.113****(0.071,0.156)** | **0.035****(-0.135,0.205)** | **0.086****(-0.086,0.258)** | **0.130****(-0.044,0.304)** |
| BMI change 7-8.5y | 0.126(0.084,0.167) | 0.124(-0.017,0.264) | 0.103(-0.037,0.243) | 0.074(-0.068,0.217) |
| BMI change 8.5-10y | 0.140(0.098,0.182) | 0.063(-0.029,0.155) | 0.026(-0.065,0.117) | 0.023(-0.069,0.115) |
|  |  |  |  |  |
| *Girls, N=2420* |  |  |  |  |
| PI at birth | -0.009(-0.050,0.032) | -0.009(-0.050,0.032) | -0.014(-0.057,0.029) | -0.037(-0.079,0.007) |
| **PI change 0-1m** | **0.031****(-0.010,0.073)** | **0.032****(-0.013,0.076)** | **0.036****(-0.011,0.083)** | **0.004****(-0.043,0.051)** |
| PI change 1-4m | -0.019(-0.061,0.022) | -0.008(-0.057,0.041) | 0.013(-0.037,0.063) | -0.038(-0.089,0.013) |
| **PI change 4-24m** | **-0.009****(-0.050,0.033)** | **0.011****(-0.074,0.096)** | **0.045****(-0.040,0.131)** | **0.005****(-0.080,0.090)** |
| **BMI change 2-5y** | **0.089****(0.048,0.129)** | **0.102****(0.060,0.144)** | **0.054****(0.010,0.099)** | **-0.008****(-0.056,0.039)** |
| **BMI change 5-5.5y** | **0.063****(0.021,0.105)** | **0.128****(0.080,0.176)** | **0.098****(0.049,0.146)** | **0.041****(-0.013,0.096)** |
| **BMI change 5.5-6.5y** | **-0.030****(-0.071,0.010)** | **-0.081****(-0.134,-0.028)** | **-0.062****(-0.116,-0.007)** | **-0.017****(-0.072,0.038)** |
| BMI change 6.5-7y | 0.107(0.067,0.148) | -0.040(-0.143,0.063) | -0.029(-0.132,0.075) | -0.011(-0.114,0.093) |
| BMI change 7-8.5y | 0.150(0.110,0.189) | 0.095(0.038,0.152) | 0.081(0.023,0.139) | 0.043(-0.016,0.102) |
| BMI change 8.5-10y | 0.129(0.089,0.169) | -0.027(-0.131,0.077) | -0.016(-0.122,0.090) | -0.008(-0.113,0.098) |

PI = ponderal index

BMI = body mass index

SD = standard deviation

Model 1 is adjusted for age at time of measurement of the outcome only

Model 2 is adjusted for age and previous periods of PI/BMI change

Model 3 is adjusted for age, previous periods of PI/BMI change, and confounders

Model 4 is adjusted for age, previous periods of PI/BMI change, confounders, and DXA-assessed fat mass, height and height squared at age 15

**Bold text** indicates indicate that adiposity levels tend to decrease in this period; unshaded cells indicate adiposity increases in this period

BMI change periods:

BMI change 2-5y: 24 and 60 months for boys, 24 and 56 months for girls

BMI change 5-5.5y: 60 and 65 months for boys, 56 and 67 months for girls

BMI change 5.5-6.5y: 65 and 75 months for boys, 67 and 73 months for girls

BMI change 6.5-7y: 75 and 81 months for boys, 73 and 79 months for girls

BMI change 7-8.5y: 81 and 103 months for boys, 79 and 105 months for girls

BMI change 8.5-10y: 103 and 120 months for boys, 105 and 120 months for girls

All variables are standardised, so coefficients represent the standard deviation change in the outcome that is observed with a one standard deviation increase in PI at birth or adiposity change.