**Online Supporting Material**

**Supplemental Table 1. Metabolic syndrome score, cardio-metabolic markers, anthropometry, and body composition at baseline, after the control and New Nordic Diet (NND) period, and differences between NND and control in children with data from baseline, 3 and 6 months.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | |  |  | Raw values | | | | | | | | | | | | |  | |  | | Complete case analysis\* | | | | | |  | |
|  | |  |  | Baseline | |  | Control | | | |  | | NND | | | |  | |  | | Difference between  NND and control | | | | | |  | |
|  | | n |  | Mean or median | SD or  IQR |  | Mean or median | | SD or  IQR | |  | | Mean or median | | SD or  IQR | |  | |  | | Mean | | 95% CI | | *P* | |  | |
| MetS score† | 631 | |  | - |  |  | -0.01 | 2.75 | |  | | -0.01 | | 2.79 | |  | |  | | 0.01 | | -0.30; 0.31 | | 0.98 | |  | |
| Mean arterial pressure (mmHg) | 726 | |  | 81.2 | 6.3 |  | 78.8 | 5.6 | |  | | 78.4 | | 5.5 | |  | |  | | -0.4 | | -0.8; -0.1 | | 0.03 | |  | |
| Heart rate (beats/min) | 726 | |  | 78.1 | 11.4 |  | 76.5 | 10.5 | |  | | 75.6 | | 10.2 | |  | |  | | -0.9 | | -1.5; -0.2 | | <0.01 | |  | |
| Total cholesterol (mmol/l) | 676 | |  | 4.09 | 0.64 |  | 4.02 | 0.64 | |  | | 3.96 | | 0.63 | |  | |  | | -0.05 | | -0.08; -0.02 | | <0.01 | |  | |
| HDL cholesterol (mmol/l) | 676 | |  | 1.44 | 0.29 |  | 1.43 | 0.29 | |  | | 1.41 | | 0.28 | |  | |  | | -0.02 | | -0.03; -0.00 | | 0.02 | |  | |
| LDL cholesterol (mmol/l) | 676 | |  | 2.33 | 0.57 |  | 2.28 | 0.57 | |  | | 2.25 | | 0.56 | |  | |  | | -0.02 | | -0.05; 0.00 | | 0.08 | |  | |
| Total:HDL cholesterol | 676 | |  | 2.84 | 2.51; 3.28 |  | 2.80 | 2.49; 3.17 | |  | | 2.77 | | 2.48; 3.21 | |  | |  | | -0.01 | | -0.03;0.02 | | 0.62 | |  | |
| TAG (mmol/l) | 676 | |  | 0.61 | 0.50; 0.78 |  | 0.60 | 0.50; 0.80 | |  | | 0.58 | | 0.48; 0.75 | |  | |  | | -0.03 | | -0.04; -0.01 | | <0.01 | |  | |
| HOMA-IR | 639 | |  | 1.38 | 1.01; 1.95 |  | 1.54 | 1.08; 2.13 | |  | | 1.45 | | 1.00; 2.05 | |  | |  | | -0.11 | | -0.17; -0.04 | | <0.01 | |  | |
| Waist circumference (cm) | 733 | |  | 62.7 | 59.2; 68.2 |  | 62.4 | 58.4; 68.1 | |  | | 63.0 | | 59.1; 68.5 | |  | |  | | 0.5 | | 0.3; 0.7 | | <0.01 | |  | |
| Height (cm) | 733 | |  | 142.4 | 7.0 |  | 144.9 | 7.2 | |  | | 145.0 | | 7.3 | |  | |  | | 0.0 | | -0.0; 0.1 | | 0.33 | |  | |
| BMI-for-age z-score | 732 | |  | 0.14 | 1.07 |  | 0.09 | 1.10 | |  | | 0.10 | | 1.10 | |  | |  | | 0.01 | | -0.00; 0.03 | | 0.09 | |  | |
| Fat mass index (kg/m2) | 717 | |  | 3.68 | 2.45; 5.32 |  | 3.81 | 2.56; 5.41 | |  | | 3.76 | | 2.57; 5.54 | |  | |  | | 0.03 | | 0.00; 0.05 | | 0.04 | |  | |
| Fat-free mass index (kg/m2) | 717 | |  | 12.99 | 1.03 |  | 13.02 | 1.05 | |  | | 13.03 | | 1.04 | |  | |  | | 0.00 | | -0.02; 0.02 | | 0.99 | |  | |
| Android:total fat mass ×105 | 717 | |  | 6279 | 1359 |  | 6083 | 1409 | |  | | 6129 | | 1420 | |  | |  | | 44 | | 5; 83 | | 0.03 | |  | |

IQR, interquartile range; MetS, metabolic syndrome; HOMA-IR, homeostasis model of assessment insulin resistance.  
\*Adjusted for visit, order of NND and control, sex, baseline values, baseline age, height if appropriate and also school, class, year group within school, sibling and child as random effects. Blood pressure and heart rate were also adjusted for blood pressure device.

†The MetS score was based on mean arterial pressure, plasma HDL cholesterol, plasma TAG, HOMA-IR and waist circumference. Since baseline values were included in the calculation of the score, it had no value at baseline.