**Supplementary table 1. Anthropometric changes during the expedition.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Pre-expedition** | | | **Post-expedition** | | | | |
|  | **Visit pre-1**  *(-64 days)* | **Visit pre-2**  *(-39 days)* | **- 16 days** | **+1 day** | **Visit post-1**  *(+5 days)* | **+ 10 days** | **Visit post-2**  *(+15 days)* | **+ 18 to 24 days** |
| BMI, kgm-2  Mean (SD) [range] | 24.2 (0.97)  [22.8 - 25.45] | 24.9 (1.24)  [23.11 - 26.72] | 25.0 (1.11)  [23.48 - 26.73] | 21.7 (1.23)  [19.68 - 22.91] | 22.3 (1.03)  [20.59 - 23.27] | 22.3 (1.17)  [20.37 - 23.53] | 22.4 (1.02)  [20.56 - 23.42] | 22.7 (1.02)  [20.81 - 23.72] |
| Body mass, kg  Mean (SD) [range] | 70.47 (4.51)  [62.7 - 74.2] | 72.6 (1.75)  [65.85 - 76.83] | 72.8 (3.99)  [65.8 - 77.2] | 63.2 (4.74)  [55.5 - 68.4] | 64.9 (4.20)  [58.0 - 69.2] | 65.0 (4.03)  [58.4 - 68.9] | 65.3 (4.21)  [58.3 - 69.1] | 66.2 (4.11)  [59.5 - 69.7] |
| % fat, DXA  mean (SD) | 20.92 (2.12)  [19.2 to 25.4] | 24.97 (2.39)  [23.3 to 30.3] |  |  |  |  | 19.02 (1.28)  [17.2 to 20.4] |  |
| % fat, skinfold  mean (SD) |  |  | 31.0 (2.0)  [0.28 - 0.33] |  | 23.0 (1.0)  [0.21 - 0.24] |  |  |  |
| %fat, BIA  mean (SD) |  |  |  | 22.15 (2.22)  [19.4 - 26.0] | 21.8 (3.71)  [18.1 - 28.8] | 23.3 (1.20)  [22.5 - 25.7] | 25.0 (2.04) | 23.2 (1.74)  [22.2 - 28.1] |
| Total body mass, DXA, kg  Mean (SD) [range] | 70.6 (4.5)  [62.68 to 74.26] | 72.6 (3.9)  [65.85 to 76.83] |  |  |  |  | 66.4 (4.2)  [59.67 to 70.76] |  |
| Total lean mass, DXA, kg  Mean (SD) [range] | 53.5 (3.06)  [48.81 to 57.27] | 52.3 (2.00)  [48.85 to 54.72] |  |  |  |  | 51.5 (3.04)  [47.25 to 54.24] |  |
| Total bone mineral content, DXA, kg  Mean (SD) [range] | 2.75 (0.13)  [2.62 to 2.97] | 2.80 (0.13)  [2.67 to 3.02] |  |  |  |  | 2.77 (0.12)  [2.64 to 2.97] |  |

BMI, body mass index. DXA, dual x-ray absorptiometry; BIA, bio-electrical impedance.