**Supplementary table 2.**

**Regional lean, fat and bone mass changes during the expedition**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Visit pre-1** | **Visit pre-2** | **Visit post-1** |
| Lean mass (kg) | | | |
| *Arms* | 5.44 (0.57) | 5.15 (0.45)\* | 4.99 (0.36) |
| *Legs* | 18.79 (1.05) | 18.08 (0.98)\* | 16.98 (1.22)\* |
| *Trunk* | 26.15 (1.96) | 26.06 (1.5) | 26.52 (1.84) |
| *Android* | 3.52 (0.24) | 8.33 (0.61)\* | 53.57 (3.06) |
| *Gynoid* | 3.73 (0.25) | 8.4 (0.59) | 52.34 (1.99) |
| *Total* | 3.67 (0.31) | 8.22 (0.54) | 51.55 (3.04) |
| Fat mass (kg) | | | |
| *Arms* | 1.44 (0.12) | 1.94 (0.16)\* | 1.49 (0.19)\* |
| *Legs* | 6.4 (1.13) | 7.26 (1.47)\* | 5.05 (0.79)\* |
| *Trunk* | 5.59 (1.09) | 7.47 (1.16)\* | 4.79 (0.66)\* |
| *Android* | 0.61 (0.17) | 0.9 (0.15)\* | 0.49 (0.08)\* |
| *Gynoid* | 2.92 (0.52) | 3.71 (0.59)\* | 2.49 (0.43)\* |
| *Total* | 14.23 (2.11) | 17.5 (2.52)\* | 12.13 (1.37)\* |
| *Total (%)* | 1.44 (0.12) | 1.94 (0.16)\* | 1.49 (0.19)\* |
| Bone mineral content (kg) | | | |
| *Arms* | 0.34 (0.02) | 0.35 (0.03) | 0.35 (0.03) |
| *Legs* | 1.05 (0.06) | 1.05 (0.06) | 1.05 (0.05) |
| *Trunk* | 0.83 (0.07) | 0.86 (0.07)\* | 0.83 (0.07) |
| *Android* | 0.05 (0.00) | 0.06 (0.01)\* | 0.05 (0.01) |
| *Gynoid* | 0.30 (0.02) | 0.30 (0.02)\* | 0.30 (0.02) |
| *Total* | 2.75 (0.13) | 2.80 (0.13)\* | 2.77 (0.12) |

Android: the area between the ribs and pelvis, gynoid: pelvis and upper thighs.

\* p<0.05 vs previous visit (paired t test)