**Supplemental Table 1 :** Absolute change in body composition pre and post 90 min run at 60% Heart Rate Reserve

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| --- | --- | --- | --- | --- | --- | --- |
| **Mean±SE** | **Overall (n=27)** | **P-value for pre-vs. post-run\*** | **NWR (n=16)** | **P-value for pre-vs. post-run\*** | **OWR**  **(n=11)** | **P-value for pre-vs. post-run\*** |
| **Pre-run fat mass (kg)** | 19.7±2.3 |  | 12.0±1.1 |  | 30.8±3.3 |  |
| **Post-run fat mass (kg)** | 19.5±2.3 |  | 11.9±1.1 |  | 30.5±3.4 |  |
| **Absolute change fat mass (kg)** | -0.2±0.1 | 0.04 | -0.1±0.1 | 0.19 | -0.3±0.2 | 0.13 |
| **Pre-run total arm fat mass (kg)** | 2.3±0.3 |  | 1.4±0.1 |  | 3.6±0.5 |  |
| **Post-run total arm fat mass (kg)** | 2.3±0.3 |  | 1.4±0.1 |  | 3.6±0.5 |  |
| **Absolute change total arm fat mass (kg)** | 0.0±0.0 | 0.95 | 0.0±0.0 | 0.38 | 0.0±0.1 | 0.76 |
| **Pre-run trunk fat mass (kg)** | 9.2±1.2 |  | 5.1±0.5 |  | 15.0±1.6 |  |
| **Post-run trunk fat mass (kg)** | 9.0±1.2 |  | 5.0±0.5 |  | 14.8±1.6 |  |
| **Absolute change trunk fat mass (kg)** | -0.2±0.1 | 0.048 | -0.2±0.1 | 0.0086 | -0.2±0.2 | 0.32 |
| **Pre-run total leg fat mass (kg)** | 7.3±0.9 |  | 4.7±0.5 |  | 11.3±1.5 |  |
| **Post-run total leg fat mass (kg)** | 7.3±0.9 |  | 4.6±0.5 |  | 11.3±1.5 |  |
| **Absolute change total leg fat mass (kg)** | 0.0±0.0 | 0.73 | 0.0±0.0 | 0.36 | 0.0±0.2 | 0.86 |
| **Pre-run visceral fat mass (kg)** | 0.3±0.1 |  | 0.2±0.0 |  | 0.6±0.1 |  |
| **Post-run visceral fat mass (kg)** | 0.4±0.1 |  | 0.2±0.0 |  | 0.6±0.1 |  |
| **Absolute change visceral fat mass (kg)** | 0.0±0.0 | 0.16 | 0.0±0.0 | 0.99 | 0.0±0.0 | 0.052 |
| **Pre-run subcutaneous fat mass (kg)** | 1.1±0.2 |  | 0.5±0.1 |  | 2.0±0.3 |  |
| **Post-run subcutaneous fat mass (kg)** | 1.1±0.2 |  | 0.5±0.1 |  | 1.9±0.3 |  |
| **Absolute change subcutaneous fat mass (kg)** | 0.0±0.0 | 0.063 | 0.0±0.0 | 0.13 | 0.0±0.0 | 0.2 |
| **Pre-run android fat mass (kg)** | 1.4±0.2 |  | 0.7±0.1 |  | 2.6±0.3 |  |
| **Post-run android fat mass (kg)** | 1.3±0.2 |  | 0.6±0.1 |  | 2.3±0.4 |  |
| **Absolute change android fat mass (kg)** | -0.1±0.1 | 0.23 | 0.0±0.0 | 0.087 | -0.3±0.2 | 0.28 |
| **Pre-run gynoid fat mass (kg)** | 3.6±0.5 |  | 2.1±0.3 |  | 5.7±0.7 |  |
| **Post-run gynoid fat mass (kg)** | 3.4±0.4 |  | 2.1±0.3 |  | 5.1±0.6 |  |
| **Absolute change gynoid fat mass (kg)** | -0.2±0.2 | 0.38 | -0.0±0.0 | 0.68 | -0.6±0.6 | 0.39 |

\*significant if p ≤ 0.003 given multiple comparisons