**Supplementary material**

**Table S1 - Results of agreement between bioelectrical impedance analysis and Slaughter 1, Slaughter 2, Goran, and Huang estimates of percent body fat.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | **Slaughter 1** | **Slaughter 2** | **Goran** | **Huang** |
| **Arithmetic mean** | -1.71 | 0.37 | 0.89 | -1.68 |
| **95% CI** | -3.09 to -0.32 | -0.99 to 1.74 | -0.37 to 2.16 | -2.40 to -0.96 |
| **p**  | 0.015 | 0.586 | 0.166 | < 0.000 |
| **Lower limit** | -13.72 | -11.52 | -10.16 | -18.17 |
| **95% CI** | -16.09 to -11.34 | -13.87 to -9.17 | -12.34 to -7.98 | -19.40 to -16.93 |
| **Upper limit** | 10.29 | 12.27 | 11.94 | 14.79 |
| **95% CI** | 7.92 to 12.66 | 9.92 to 14.62 | 9.76 to 14.13 | 13.56 to 16.03 |

**Table S2 - Results by sex of agreement between bioelectrical impedance analysis and Slaughter 1, Slaughter 2, Goran, and Huang estimates of percent body fat.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Slaughter 1** | **Slaughter 2** | **Goran** | **Huang** |
|  | **Female** | **Male** | **Female** | **Male** | **Female** | **Male** | **Female** | **Male** |
| **Arithmetic mean** | -1.49 | -1.99 | 0.53 | 0.16 | 2.14 | -0.72 | 0.72 | -4.46 |
| **95% CI** | -3.28 to 0.29 | -4.25 to 0.27 | -1.38 to 2.46 | -1.85 to 2.18 | 0.48 to 3.79 | -2.66 to 1.21 | -0.20 to 1.65 | -5.49 to -3.43 |
| **p** | 0.099 | 0.083 | 0.576 | 0.869 | 0.012 | 0.454 | 0.125 | < 0.000 |
| **Lower limit** | -13.05 | -14.71 | -11.87 | -11.19 | -8.51 | -11.62 | -14.74 | -20.42 |
| **95% CI** | -16.14 to -9.96 | -18.62 to -10.80 | -15.19 to -8.56 | -14.69 to -7.70 | -11.36 to -5.67 | -14.97 to -8.27 | -16.33 to -13.15 | -22.18 to -18.66 |
| **Upper limit** | 10.06 | 10.73 | 12.95 | 11.52 | 12.80 | 10.18 | 16.19 | 11.49 |
| **95% CI** | 6.97 to 13.15 | 6.82 to 14.64 | 9.63 to 16.26 | 8.03 to 15.01 | 9.95 to 15.64 | 6.83 to 13.52 | 14.60 to 17.78 | 9.73 to 13.25 |