

CORRECTION

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Correction: Characterising lower-body musculoskeletal morphology and whole-body composition of elite female and male Australian Football players

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Following publication of the original article [1], the authors identified a typesetting error. Table 2 was not published in full and was missing the last 7 rows. The complete Table 2 is supplied in this correction article.

The original article [1] has been corrected.

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References

1. McCaskie CJ, Sim M, Newton RU, et al. Characterising lower-body musculoskeletal morphology and whole-body composition of elite female and male Australian Football players. BMC Sports Sci Med Rehabil. 2022;14:168. <https://doi.org/10.1186/s13102-022-00561-8>.

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Table 2 Body composition and musculoskeletal morphology of the kicking leg between inexperienced and experienced players for AFL and AFLW players

| | AFL | | | | AFLW | | | |
|---------------------------------------|-----------------------------|----------------------------|--------|-------------------|------------------------------|----------------------------|---------|-------------------|
| | Inexperi- enced (n=6) | Experi- enced (n=17) | | | Inexperi- enced (n=10) | Experi- enced (n=13) | | |
| | Mean±SD | Mean±SD | p | ES | Mean±SD | Mean±SD | p | ES |
| General | | | | | | | | |
| Age (y) | 19.7±1.5 | 21.9±1.3 | 0.002* | 1.57 ^d | 23.8±4.5 | 27.3±3.2 | 0.040* | 0.90 ^c |
| Height (cm) | 183±9.6 | 188±6.9 | 0.227 | 0.54 | 168±6.8 | 171±6.3 | 0.258 | 0.49 |
| Body mass (kg) | 78±7.5 | 86±7.8 | 0.055 | 0.98 | 66±7.5 | 65±6.2 | 0.809 | 0.10 |
| Playing Year (y) | 1.5 (1.0) | 4.0 (1.0) | 0.001* | 3.95 ^e | 2.0 (1.0) | 5.0 (0.0) | <0.001* | 5.64 ^e |
| DXA | | | | | | | | |
| WBLH LSTM (kg) | 61.2±6.90 | 68.7±6.46 | 0.025* | 1.12 ^c | 46.4±3.82 | 47.7±4.86 | 0.518 | 0.30 |
| WBLH FM (kg) | 10.5±1.75 | 10.1±1.99 | 0.082 | 0.87 | 14.0±4.27 | 11.88±2.71 | 0.106 | 0.70 |
| WBLH LSTM% | 82.4±2.13 | 84.1±2.04 | 0.103 | 0.82 | 74.8±4.37 | 77.4±3.34 | 0.124 | 0.67 |
| WBLH FM% | 14.1±2.01 | 12.3±2.06 | 0.082 | 0.87 | 22.0±4.60 | 19.2±3.54 | 0.106 | 0.70 |
| LMI (kg/m ²) | 19.2±1.39 | 20.5±0.99 | 0.019* | 1.10 ^c | 17.6±1.26 | 17.3±0.89 | 0.453 | 0.31 |
| Appendicular LMI (kg/m ²) | 9.12 (1.35) | 9.99 (0.78) | 0.058 | 0.88 | 7.86±0.70 | 7.91±0.55 | 0.866 | 0.07 |
| Total Leg LSTM (kg) | 11.69 (1.98) | 12.30 (2.45) | 0.069 | 0.90 | 8.61±0.69 | 8.91±1.07 | 0.451 | 0.33 |
| Total Leg FM% | 15.4±2.13 | 13.2±2.15 | 0.048* | 1.00 ^c | 26.4±5.40 | 24.1±4.62 | 0.276 | 0.47 |
| Thigh LSTM (kg) | 8.38±0.82 | 9.23±1.05 | 0.087 | 0.90 | 6.18±0.51 | 6.38±0.80 | 0.482 | 0.30 |
| Thigh FM% | 15.7±2.64 | 13.4±2.06 | 0.037* | 0.99 ^c | 27.3±5.30 | 25.1±4.36 | 0.285 | 0.45 |
| Shank LSTM (kg) | 2.70±0.35 | 2.99±0.41 | 0.147 | 0.76 | 2.00±0.24 | 2.15±0.31 | 0.197 | 0.54 |
| Shank FM% | 14.1±3.16 | 12.5±3.29 | 0.319 | 0.49 | 25.3±7.75 | 22.7±6.59 | 0.388 | 0.37 |
| pQCT | | | | | | | | |
| Tibial length (mm) | 413±22.3 | 426±21.6 | 0.234 | 0.577 | 367±13.4 | 377±22.0 | 0.206 | 0.57 |
| 4% Bone Mass (g) | 4.95±0.58 | 5.46±0.66 | 0.114 | 0.81 | 3.87±0.43 | 3.80±0.50 | 0.731 | 0.15 |
| 14% Bone Mass (g) | 3.33±0.25 | 3.69±0.38 | 0.044* | 1.12 ^c | 2.80±0.27 | 2.95±0.41 | 0.340 | 0.42 |
| 38% Bone Mass (g) | 4.81±0.57 | 5.29±0.48 | 0.056 | 0.92 | 3.94±0.29 | 4.16±0.62 | 0.298 | 0.47 |
| Total Tibial Mass (g) | 4.36±0.43 | 4.81±0.47 | 0.051 | 1.00 | 3.54±0.32 | 3.64±0.47 | 0.563 | 0.25 |
| 4% Bone Area (mm ²) | 1294±112 | 1414±223 | 0.225 | 0.68 | 1096±96.3 | 1116±125 | 0.677 | 0.18 |
| 14% Bone Area (mm ²) | 537±52.5 | 617±83.8 | 0.041* | 1.15 ^c | 479±51.1 | 502±59.2 | 0.354 | 0.40 |
| 38% Bone Area (mm ²) | 524±60.7 | 583±59.1 | 0.048* | 0.99 ^c | 431 (31.8) | 429 (77.6) | 0.286 | 0.50 |
| 66% Bone Area (mm ²) | 891 (98.3) | 982 (126) | 0.025* | 1.21 ^d | 703±72.6 | 782±94.7 | 0.040* | 0.94 ^c |
| 4% vBMD (mg/cm ³) | 385±59.3 | 390±44.1 | 0.833 | 0.09 | 354±38.6 | 341±25.8 | 0.325 | 0.41 |
| 14% vBMD (mg/cm ³) | 623±54.7 | 603±64.2 | 0.520 | 0.32 | 586±48.0 | 588±52.8 | 0.930 | 0.04 |
| 38% vBMD (mg/cm ³) | 918±41.5 | 908±34.6 | 0.588 | 0.25 | 920±34.9 | 918±28.0 | 0.919 | 0.04 |
| Total vBMD (mg/cm ³) | 642±39.7 | 634±38.6 | 0.671 | 0.20 | 620±34.0 | 616±27.7 | 0.739 | 0.14 |
| Total CortD (mg/cm ³) | 1122 (25.0) | 1116 (33.5) | 0.605 | 0.58 | 1140±13.9 | 1141±18.4 | 0.808 | 0.11 |
| Total CortTh (mm) | 4.89±0.45 | 4.99±0.38 | 0.617 | 0.23 | 4.17±0.32 | 4.25±0.40 | 0.615 | 0.22 |
| Total PeriC (mm) | 81.5±3.34 | 86.7±4.59 | 0.020* | 1.28 ^d | 74.8 (4.55) | 76.1 (5.75) | 0.293 | 0.47 |
| Total EndoC (mm) | 50.8±4.0 | 55.3±4.90 | 0.054 | 1.02 | 49.2±3.08 | 50.6±3.58 | 0.342 | 0.41 |
| SSIPOL (mm ³) | 2226±257 | 2576±345 | 0.034* | 1.15 ^c | 1725 (262) | 1737 (376) | 0.275 | 0.51 |
| FL.Rel (N/kg) | 68.6±9.28 | 69.9±6.44 | 0.726 | 0.15 | 58.6±4.49 | 65.7±10.9 | 0.048* | 0.85 ^c |
| Tibial Robustness | 1.96±0.10 | 2.13±0.24 | 0.022* | 0.92 ^c | 1.84±0.12 | 1.89±0.14 | 0.408 | 0.38 |
| 66% Muscle Area (mm ²) | 7675±1318 | 8715±1084 | 0.069 | 0.86 | 6998±888 | 6813±751 | 0.595 | 0.22 |

Data is presented as mean±SD or Median (IQR) for non-normally distributed variables

CortD cortical density; CortTh cortical thickness; DXA dual-energy x-ray absorptiometry; EndoC endosteal circumference; FL.Rel relative fracture load; FM fat mass; LMI lean mass index; LSTM lean soft-tissue mass; PeriC periosteal circumference; pQCT peripheral Quantitative Computed Tomography; SSIPOL polar stress-strain index; vBMD volumetric bone mineral density; WBLH whole body less head

*denotes significance ($p<0.05$)^aTrivial effect size (<0.2)^bSmall effect size (0.2–0.59)^cModerate effect size (0.6–1.19)^dLarge effect size (1.2–1.99)^eVery large effect size (≥ 2.00)