**Supplementary Material 1. Body composition variables according to sex, age, and lean-to-fat mass ratio tertiles in men**

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| **Variables** | **30 to 44 years** | | | ***p\**** | **45 to 59 years** | | | ***p\**** | **60 or older** | | | ***p\**** |
| **LFMR tertiles** | | | **LFMR tertiles** | | | **LFMR tertiles** | | |
| **Lowest** | **Middle** | **Highest** | **Lowest** | **Middle** | **Highest** | **Lowest** | **Middle** | **Highest** |  |
| **Weight (kg)** | 76.43 (69.85 to 82.86) | 67.08 (63.31 to 70.78) | 58.01 (53.46 to 61.84) | **< 0.001** | 72.81 (69.21 to 77.94) | 63.56 (59.95 to 67.48) | 55.49 (51.25 to 59.49) | **< 0.001** | 71.79 (68.73 to 74.80) | 59.98 (53.55 to 61.91) | 51.69 (45.95 to 56.11) | **< 0.001** |
| **WC (cm)** | 95.32  (92.87 to 100.12) | 86.88  (84.7 to 89.0) | 77.47  (74.7 to 79.47) | **< 0.001** | 96.72 (92.73 to 100.27) | 86.23 (84.47 to 88.53) | 77.87 (75.93 to 81.07) | **< 0.001** | 98.55 (94.55 to 102.3) | 86.17 (84.13 to 87.5) | 77.57 (70.8 to 80.43) | **< 0.001** |
| **LMI (kg/m2)** | 19.95  (19 to 21.39) | 18.88 (18.13 to 19.55) | 17.60 (17.07 to 18.25) | **< 0.001** | 19.23 (18.53 to 20.39) | 18.02 (17.39 to 19.13) | 16.97 (16.58 to 17.40) | **< 0.001** | 19.42 (18.43 to 19.90) | 17.38 (16.73 to 18.29) | 16.71 (16.17 to 17.58) | **< 0.001** |
| **FMI (kg/m2)** | 8.49  (7.91 to 9.73) | 6.43  (6.06 to 6.97) | 4.40 (3.82 to 4.85) | **< 0.001** | 8.41 (7.65 to 9.39) | 6.09 (5.72 to 6.73) | 4.23 (3.56 to 4.76) | **< 0.001** | 8.84 (7.92 to 10.40) | 6.15 (5.67 to 6.66) | 3.99 (2.90 to 4.72) | **< 0.001** |
| **LFMR (kg/kg)** | 2.36 (2.10 to 2.49) | 2.87  (2.76 to 3.09) | 4.08  (3.67 to 4.54) | **< 0.001** | 2.34 (2.15 to 2.45) | 2.98 (2.75 to 3.19) | 4.07 (3.62 to 4.59) | **< 0.001** | 2.2 (1.90 to 2.36) | 2.87 (2.75 to 2.98) | 4.18 (3.47 to 5.90) | **< 0.001** |

All variables are presented as median (interquartile ranges). WC: waist circumference (cm). LMI: Lean mass index (kg/m2). FMI: Fat mass index (kg/m2). LFMR: Lean-to-fat mass ratio. \*Analysis performed with the Kruskal Wallis test. The significative p-value (p < 0.05) is **bold.**