**JPED-2019-398 –** **Supplementary Material**

**Supplementary Table 1 - Assessment agreement on excess weight between the WHO BMI and the study cutoff point of 1,715 (840 girls and 875 boys) adolescent students aged between 10 and 17 years in a municipality in Southern Brazil.**

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| --- | --- | --- | --- | --- | --- |
| **Group** | **Criterion** | **Female**  **gender** | **Kappa (p*-*value)** | **Male**  **gender** | **Kappa (p*-*value)** |
| **Pre-PGV** | **WHO BMI (%)** | 31.2 | 0.489  (< 0.001) | 42.1 | 0.541  (< 0.001) |
| **NC (%)** | 29.0 | 41.7 |
| **PGV** | **WHO BMI (%)** | 33.9 | 0.456  (< 0.001) | 32.1 | 0.473  (< 0.001) |
| **NC (%)** | 34.2 | 29.3 |
| **Post-PGV** | **WHO BMI (%)** | 26.4 | 0.447  (< 0.001) | 30.3 | 0.374  (< 0.001) |
| **NC (%)** | 22.9 | 30.0 |

BMI, body mass index; WHO, World Health Organization; NC, neck circumference.

**Supplementary Table 2 - Correlation between NC and anthropometric variables by gender and somatic maturation group of 1,715 (840 girls and 875 boys) adolescent students aged between 10 and 17 years in a municipality in southern Brazil.**

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| --- | --- | --- | --- | --- | --- |
| **Gender** | **Group** | **NC-Height** | **NC-Weight** | **NC-BMI** | **NC-WC** |
| **Female** | **Pre-PGV** | 0.441 | 0.670 | 0.613 | 0.736 |
| **PGV** | 0.347 | 0.700 | 0.673 | 0.688 |
| **Post-PGV** | 0.225 | 0.569 | 0.537 | 0.545 |
| **Overall** | 0.471 | 0.698 | 0.638 | 0.658 |
| **Male** | **Pre-PGV** | 0.384 | 0.712 | 0.695 | 0.721 |
| **PGV** | 0.511 | 0.706 | 0.610 | 0.649 |
| **Post-PGV** | 0.274 | 0.623 | 0.583 | 0.668 |
| **Overall** | 0.677 | 0.799 | 0.641 | 0.726 |

NC, neck circumference; BMI, body mass index; WC, waist circumference; PGV, peak growth velocity.