Evaluation and comparison of five skinfold calipers [Evaluación y comparación de cinco calibres de pliegues cutáneos]

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Introduction: The use of reliable, valid and precise skinfold calipers are key for an adequate anthropometric evaluation and corporal composition analysis. Objective: To compare five models of skinfold calipers -Prime Vision (PV); Harpenden (HP); Sanny (SN); Cescorf (CE); Lange (LA)-. Materials and methods: Thirty-five men (age = 21.5 ± 2.7 y; body mass 72.2 ± 8.0 kg; height 1.76 ± 0.06 m) were recruited and skinfolds (i.e., triceps, biceps, subscapular, pectoral, mid-axillary, suprailiac, abdominal, mid-tight, mid-calf) were measured. Four body fat predictive equations (Durnin y Wimberley; Pollock 3DC; Pollock 7DC; Petroski) were used. Normality assumption for all data was verified with the Shapiro-Wilk test. Predicted body density and fat were compared between skinfold calipers using a two-way ANOVA, with Scheffe post hoc procedures. The level was set at p ? 0.05 for statistical significance. Results: No significant differences were observed between skinfold calipers for predicted body density or body fat. Conclusion: Skinfold calipers compared in this study are precise and efficient to quantify and assess body density and body fat. © 2017, Grupo Aula Medica S.A. All rights reserved.

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Body composition

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devices

evaluation study

human

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obesity

predictive value

skinfold thickness

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Skinfold Thickness

Young Adult