

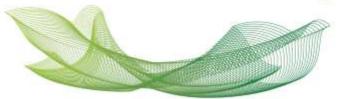


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Tipo	Periódico
Título	Concordance between whole- and half-body scans to evaluate body composition in dual-energy X-ray absorptiometry in children and adolescents with different nutritional and pubertal conditions
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Resumo	Objectives: Evaluation of body composition is a relevant clinical instrument for the follow-up assessments of children and adolescents, and dual-energy X-ray absorptiometry (DXA) is an accurate method for the pediatric population. However, DXA has limited scan area for the obese population. Thus, half-body scans emerged as an alternative to evaluate individuals with obesity. The aim of this study was to compare the body composition of children and adolescents with whole- and half-body DXA scans, considering nutritional status, pubertal development, sex, and age. Methods: This was a cross-sectional, analytical, and diagnostic intervention study with a sample of 82 participants of both sexes between 4 and 20 y of age. Body composition was evaluated by DXA using an iDXA bone densitometer (GE Healthcare Lunar, Madison, WI, USA). Two evaluations were performed: whole-body and half-body scans. The Bland–Altman correlation and linear regression tests were applied to identify the presence of association bias between the techniques. $\alpha = 0.05$ was set. Results: Of the 82 participants, 20 were excluded. A high correlation was observed between the data (correlation coefficient \sim 0.999). Bland–Altman plots and regression analyses demonstrated correlation and randomness bias between whole- and half-body scan techniques in obese or normal weight participants for all DXA markers. Conclusions: The use of half-body scans was feasible and accurate to evaluate whole-body composition. The difference bias between techniques occurred randomly and was







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	clinically irrelevant. A high correlation was observed between half- and whole-body
	analysis techniques.
Fomento	

