Physical growth in schoolchildren from Argentina: comparison with Argentinean and CDC/NCHs growth references.

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Source
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Abstract
The aim of this study was to assess the physical growth of schoolchildren from Argentina by comparison with the CDC/NCHS and Argentinean growth references (AGR), to contribute to the discussion about the use of local or international references for the assessment of growth in developing countries. Weight and height were measured in 3,411 schoolchildren aged 5-14 years. Data were log-transformed and compared with both references by paired samples t-test (CI = 0.95; alpha = 0.005). The boys' weights were greater than CDC/NCHS (up to 10, and at 14 years old) and the national reference at all ages (P < 0.005). The girls also were heavier than CDC/NCHS (at 7 and 12 years old, P < 0.005) and AGR, except at age 11 and 14 years. In boys, height was lower than CDC/NCHS at 9 and 14 years of age, and higher than AGR at all ages (P < 0.005). The girls were also shorter than CDC/NCHS at 7, 13, and 14 years old (P < 0.005), and except at age 14-taller than AGR. The weight was higher than both of the references. Height showed a clear dissociation from the national reference and minor differences from CDC/NCHS. Nevertheless, around puberty, the children's height fell short of CDC/NCHS, especially the girls, whose values approached those of their Argentinean peers. This divergence could be associated with cohort effects or population variations in adolescent growth spurt. The use of a single growth reference for preadolescent may be appropriate. The height decrease in adolescents suggests the usefulness of local standards at this period.

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