

Body composition in children and adolescents in Chile: Systematic review 2010-2017

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Abstract

Background: Contextualization and characterization in relation to the techniques most used to assess body composition (CC), provides information on the most researched regions in certain specific populations. The objectives were: a) contextualize the research carried out in Chilean children and adolescents according to demographic variables, b) verify the evaluation techniques that have been used to measure the CC, and c) identify the investigations that have been carried out according to geographical region in Chile. **Methods:** A systematic review study on CC in children and adolescents in Chile was carried out. Studies published in the Pub Med database between the years 2010-2017 was considered. An observation sheet was used to record the information and to systematize the review process the PRISMA flow chart was used. **Results:** A total of 30 investigations have been carried out between 2010 and 2017. The sample size varied from 27 to 3593 subjects, from zero months to 18 years. The most commonly used evaluation technique was double energy X-ray absorptiometry (DXA) (33%), followed by the anthropometric of skin folds (28%), regression equations (15%) and isotopic dilution and Bio impedance (12%). More studies (67%) have been carried out in the metropolitan region, followed by the Araucanía region (14%), Maule (10%), Valparaíso and Bio-Bio (3%) and 3% do not specify the region where was carried out. **Conclusions:** The results suggest that it is necessary to expand CC research in the north and south of Chile and place greater emphasis on demographic variables, since as far as it was systematized they are very limited.

Author keywords

Body composition
Children
Adolescents.
Chile