

Applicability of BMI in adolescent students living at moderate altitude of Peru [Aplicabilidad del IMC en adolescentes escolares que viven a moderada altitud del Perú]

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Introduction and Objectives: The use of BMI is highly contested, especially in populations in which growth phase is characterized by short stature for his age. The aim is to verify if the BMI is applicable to a school sample of adolescents living in a region of moderate altitude of Peru. **Material and Methods:** A descriptive cross-sectional study in 319 adolescent students (181 men and 138 women) from 12.0 to 17.9 years of age. Anthropometric variables of height and weight were evaluated. Body Mass Index (BMI) was calculated. The CDC -2000 reference was used to compare weight and height from Z- score and BMI by mean difference. **Results:** The Z - score showed body weight to small variations (from -0.3 to 0.3 kg). In stature negative values for both sexes (men between -0.3 to -1.3 cm and women between -0.5 to 1.3 cm) is observed. For BMI, there were significant differences in all ages and in both sexes ($p < 0.05$). **Conclusion:** The mean values of BMI in adolescents of both sexes are increased due to the observed low stature. These results suggest that BMI would not apply to school adolescents living in a region of moderate altitude of Peru. © 2015, Grupo Aula Medica S.A. All rights reserved.

Altitude

Body mass index

School

Teenagers

adolescent

altitude

anthropometry

body mass

body weight

child

cross-sectional study

female

human

male

Peru

reproducibility

sex difference

student

Adolescent

Altitude

Anthropometry

Body Mass Index

Body Weight

Child

Cross-Sectional Studies

Female

Humans

Male

Peru

Reproducibility of Results

Sex Factors

Students