

Waist-Height ratio and risk of metabolic syndrome in Chilean adolescent [Ratio cintura-Estatura y riesgo de síndrome metabólico en adolescentes chilenos]

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Objectives: the aims of this study are twofold: i) to analyze the prevalence of risk of Metabolic Syndrome (MS) using the waist to height ratio (WHR) in a national representative sample of Chilean adolescents; and ii) to obtain percentile tables of WHR by sex and age for this population. **Methods:** cross-sectional study with a sample of 23180 adolescents (boys n=11253; girls n=11927) from 13 to 16 years old. It was obtained anthropometric measures of height, weight and waist circumference. Risk of MS was calculated by the WHR with a cutoff of 0.5. Prevalence for risk of MS was calculated for all Chilean regions. Percentile table of WHR was calculated for this population. **Results:** participants who had a WHR higher than 0.5 was 22.4%. This prevalence was higher in the most extreme regions (both north and south). Girls aged 15 and 16 showed higher WHR than boys. Results of this study shows higher values in WHR than published in previous international studies. **Conclusion:** It has been calculated the risk of MS for Chilean adolescents using WHR and it is associated to sex and region. Additionally percentile tables of WHR for Chilean adolescents aged 13 to 16 have been calculated. © 2015, Grupo Aula Medica S.A. All rights reserved.

Chile

Metabolic syndrome

Waist-Hip Ratio

adolescent

anthropometry

body height

body weight

Chile

cross-sectional study

female

human

male

metabolic syndrome X

prevalence

risk assessment

sex difference

waist circumference

Adolescent

Anthropometry

Body Height

Body Weight

Chile

Cross-Sectional Studies

Female

Humans

Male

Metabolic Syndrome X

Prevalence

Risk Assessment

Sex Factors

Waist Circumference