

Ethnic Differences in Body Composition and Somatotype in Mapuche and Non-Mapuche School Children from Temuco - Chile [Diferencias en la Composición Corporal y Somatotipo de Escolares de Etnia Mapuche y no Mapuche de la Comuna de Temuco - Chile]

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The cultural and demographic development of modern society has also affected the Mapuche ethnica and has influenced changes in lifestyles and in the morphofunctional structure of the population, particularly in young people. The purpose of this study was to determine differences in body composition and somatotype between Mapuche and non-Mapuche children from Temuco, Chile. A total of 122 Mapuche and 146 non-Mapuche children between 10 and 13 years old participated in the study. The measurements included were weight, height, skinfold thickness of triceps, subscapularis, supraspinatus and calf; perimeters of contracted and relaxed arm, waist and calf circumference; and humeral and femoral diameters, all following the procedures reference manual (ISAK). Several indexes were calculated: Body Mass Index (BMI), weight status (underweight, normoweight, overweight, obesity), total body fat (fat mass, percentage of fat mass and percentage of fat mass >20% of obesity) and finally, somatotype (endomorph, ectomorph, mesomorph). Ten year-old Mapuche children had lower values for BMI ($p < 0,01$), total body fat ($p < 0.001$), and endomorphic and mesomorphic values ($p < 0.01$), compared to non Mapuche children. Mapuche children of 11-12 years of age had lower values for total body fat ($p < 0.01$), and endomorphic and ectomorphic values ($p < 0.05$), compared to non-Mapuche children. Thirteen year-old Mapuche children had lower values for total body fat ($p < 0.001$), and endomorphic and ectomorphic values ($p < 0.01$), compared to non-Mapuche children. Mapuche children had lower fat mass than non-Mapuche children, and the main somatotype among Mapuche children is mesomorphic with a

reduction of the endomorphic component with increasing age. Public policy for youth is required, mainly educational, to guarantee appropriate levels of quality of life for both Mapuche and non-Mapuche populations. © 2015, International Journal of Morphology. All Rights Reserved.

Body composition

Mapuche

Scholars

Somatotype

Young people