Methods of body composition and four compartiments model in obese school children Métodos de composición corporal y modelo de cuatro compartimentos en escolares obesos chilenos

Vásquez, F.

Diaz, E.

Lera, L.

Vásquez, L.

Anziani, A.

Burrows, Raquel

Introduction: In Chile, the prevalence of obesity in schoolchildren is 21.3%. The study and individual intervention of this malnutrition, it is necessary to have not only global indicators of nutritional status, but also indicators that give information on body composition. Objective: To compare estimates of body fat isotopic dilution, plethysmography and radiographic absorptiometry 4C model in overweight schoolchildren. Methods: We worked with 61 obese (BMI ? p 95) of both sexes, between 8 and 13 years, enrolled in a school in a district of the city of Santiago. The multicompartmental body composition determination, considered isotopic dilution, plethysmography and radiographic absorptiometry. Using as a reference standard four compartment model of Fuller. Results: In both sexes, the method showed better agreement with the reference of 4 compartments was isotope dilution ($r = 0.98$, $p < 0.01$). In children, the isotopic dilution underestimates body fat in -0.40 kg. By contrast, DEXA and