

Nutrition and learning in Chilean school age children: Chile's Metropolitan Region survey 1986-1987

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The objective of this study was to determine the interrelationship between the scholastic achievement (SA) test and nutritional status of a representative sample of 4,509 elementary and high school children from Chile's Metropolitan Region. Percentages of weight/age (W/A), height/age (H/A), and weight/height (W/H) were compared to WHO (World Health Organization) Tables, head circumference/age (HC/A) to the Tanner Tables, and brachial anthropometry to Frisancho's norms. Socioeconomic status (SES) was measured by means of Graffar's Modified Method; SA by means of a language and mathematics test. Statistical analysis included correlation, regression, and WHO risk-approach methodology. Results showed that HC/A was the anthropometric parameter with the greatest explanatory power in SA variance and was significantly greater in high school graduates who were 17 y old ($r = 0.350$; $p < 0.001$; $r^2 = 0.122$) than in elementary school children, who were 6 y old ($r = 0.227$; $p < 0.001$; $r^2 = 0.049$), wi