

SANTOS, Carla Fernandez dos. *Agreement and association between body image and nutritional status among adolescents*. 2012. 70 p. Dissertation (Master's degree on Food, Nutrition and Health) – Nutrition Institute, University of the State of Rio de Janeiro, Rio de Janeiro, 2012. *Supervisor*: Inês Rugani Ribeiro de Castro.

Abstract

One of the aspects commonly assessed by the monitoring systems of risk factors and health protection of adolescents both nationally and internationally is body image. This dissertation examines the agreement between different indicators of body image and nutritional status and the association of these indicators with BMI among adolescent students in Rio de Janeiro, RJ. A total of 152 students from a probabilistic sample of nine public and private schools were studied. Data was collected in three stages: an initial visit to the school to administer the Personal Digital Assistant (PDA) questionnaire and the first figure rating scale (FRS_A); two telephone interviews on different days to make questions regarding the students' opinion on the body (OpB) and weight (OpW); and a second visit to the school for anthropometric measurement and application of the second figure rating scale (FRS_B). The Body Mass Index (BMI) [weight (Kg)/ height (m²)] was examined according to the nutritional status (NS), as defined by the classification of nutritional status of the World Health Organization and as a continuous variable (crude and z-score). For the correlation analysis of the variables of interest (OpB, OpW, FRS_A, FRS_B, and NS) quadratic weighted kappa statistic was used. To examine the association between the body image indicators and BMI, the median, average, standard deviation and 95% confidence interval of BMI were calculated for each category of the body image variables studied. The statistical significance of the differences found was determined by comparing the BMIs of 95%, considering as statistically different the estimates whose confidence intervals did not overlap. All analyses were stratified according to gender, type of school (public or private) and according to gender per type of school. Linear regressions were also performed controlling for the student's age and gender and the type of school attended by each student. In general, the agreement between different variables of body image ranged from satisfactory to good, and between them and the nutritional status variable the agreement was between fair and satisfactory. The best results were observed among boys and students from private schools. All variables of body image showed good discriminatory power for BMI when it was assessed as a continuous variable. This result remained when controlling for potential confounders. OpB seems to be better than OpW to compose the list of variables of a monitoring system of risk factor and protection designed to adolescents.

