

## Determinant factors of excess of weight in school children: A multilevel study

## Factores determinantes del exceso de peso en escolares: Un estudio multinivel

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**Background:** Rates of obesity reach high levels in Chile, with geographic, social and school variations. **Aim:** To identify factors at two levels associated with excessive weight in school children: child-family characteristics and school-neighborhood. **Material and methods:** Using a cross-sectional and multi-step design, seven counties with the highest prevalence of obesity were identified, and schools were randomly chosen from within the 1st, 3rd and 5th quintiles of the school strata (same level of obesity prevalence). Within each school, twelve 2nd grade children were randomly chosen (n =42 schools and 504 students). Nutritional status, food intake, eating habits and physical activity were measured. Socio demographic, economic characteristics and nutritional status of the parents were assessed. Home size and facilities for children physical activities were assessed, as well as school infrastructure and management. **Results:** Most of the explained variance (97%) in the Body Mass Index (BMI