## Association between obesity and dental caries in 12-year-old schoolchildren in the Departament of Montevideo

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## Resume

**Objective.** To determine the association between obesity and dental caries in 12-year-old schoolchildren in Montevideo according to socioeconomic and demographic variables.

**Methods.** Cross-sectional, analytical, population-based study in a representative sample of 1,154 of 12-year-old schoolchildren from Montevideo. 44 schools were randomly selected, 32 publics and 12 privates. Two structured questionnaires were applied. The clinical exam was performed recording ICDAS for caries and BMI for obesity by calibrated researchers. A descriptive analysis of the variables and the association between prevalence/extent of caries and body mass percentiles was made using scattering plots and correlation coefficients. The association was quantified using regression models.

**Results.** 680 children were normal weight, 26 were emaciation and 430 were overweight. No significant difference in caries prevalence was found in any of the body weight categories (emaciation 97,1%, normal weight 92.1%, overweight 91,2%). The prevalence of caries was 91.9% being higher in schoolchildren of low SES; the average in extension 8.8. The level of severity was distributed as follows: healthy 9.0%, mild 38.3%, moderate 25.6% and severe 27.1%. An association was found between caries severity and emaciation (OR 1.99), and in children with mothers with  $\leq 8$  years of formal education (OR 1.90). Of the behavioral variables, the strongest association was between consumption of sugary foods and severity of caries (OR=1.52) and between brushing  $\geq 2$  times a day with lower prevalence of caries (OR=1.8). **Conclusions.** No association was found between overweight/obesity and dental caries in the population studied.

**Key words.** Obesity, Tooth decay, Biofilm, Body mass, Adolescence.

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