

Dental Caries in Relation to Obesity in Children: A Systematic Review and Meta-analysis

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Abstract

Background: Globally, almost 43 million children below five years of age carry excess body weight, 17% of adolescence and children are presently obese. The prevalence of obesity is about 40-60% because high diet calories in obese children lead to dental caries and teeth problems. Aim: This work aims to determine the relationship between dental caries with obesity in children. Materials and Methods: A systematic search was performed over different medical databases to identify Dentistry studies, which studied the outcome of Caries group versus Caries-free group of obese children. Using the meta-analysis process, either with fixed or random-effects models, we conducted a meta-analysis on the prevalence of obesity as a primary outcome, and on low socioeconomic standard as a secondary outcome. Results: Seven studies were identified involving 6886 patients, 3062 in the Caries group, and 3824 in the Caries-free group. The meta-analysis process revealed a highly significant increase in obesity and low socioeconomic standard in the Caries group compared to the Caries-free group ($p < 0.05$ respectively).

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Biography

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