



## Gingival Health Related to Intake of Different Types of Foods and Body Mass Index in 12-year-old Schoolchildren [

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Analítica

Research on gingival health of 12-year-old schoolchildren in Costa Rica is scarce. Since nutrition is an integral component of oral health, this study aimed to determine gingival status of 12-year-olds at Carmen Lyra Public School, San José, Costa Rica, and correlate these variables with the frequency of intake of different types of food and body mass index (BMI (kg/m<sup>2</sup>)). Sixty-two 12-year-old schoolchildren were recruited. A periodontist assessed Plaque Index (Silness and Loe, 1964), presence of calculus, and Gingival Index (Loe and Silness, 1967). Gingivitis was defined as the presence of bleeding on probing (BOP) on at least one site, and the extent was classified according to the percentage of teeth whose gingiva presented BOP limited: 25-49% of teeth tested; extensive >50% of teeth tested. A semi-quantified food consumption frequency questionnaire was administered. BMI was calculated for each participant. Overall Plaque Index was 1.18. Calculus was present on 40.40% of the sample, 19.4% had supragingival calculus and 21% had either supragingival/subgingival calculus or both. Presence of calculus was related with number of bleeding surfaces ( $p=0.030$ ). Number of teeth with calculus was related to bleeding ( $p=0.029$ ), and number of bleeding surfaces ( $p=0.009$ ). Gingival Index was 0.97, mild gingivitis. Gingivitis was present on 96.8% of children examined. Limited gingivitis was present in 11.5% of children and extensive gingivitis in 88.5%. None of the variables measured differed by gender. No relationships were found between the consumption of starchy foods, animal and vegetable protein sources, fruit, vegetables, fast foods, sugar sweetened beverages and desserts with Plaque Index, calculus, Gingival Index, and BOP. Teeth calculus was related with being overweight (chi-square=0.038). BMI for males was 20.21 and females 20.11. BMI was not related to BOP or calculus. Within the limitations of this pilot study, we concluded the prevalence of gingivitis and calculus is

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## Baratz Innovación Documental

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- [informa@baratz.es](mailto:informa@baratz.es)