IADR Abstract Archives

Gingival and Nutritional Status of 12-year-olds in Costa Rica

Objectives: Research on gingival health of 12-year-olds in Costa Rica is scarce. Since nutrition is an integral component of oral health, this study aims to determine gingival status of 12-year-olds in Carmen Lyra Public School and correlate these variables with diet and body mass index (BMI).
Methods: Sixty-two 12-year-olds were recruited. A periodontist assessed Plaque Index (Silness and Löe, 1964), presence of calculus, and Gingival Index, Löe and Silness, 1963). 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.
Results: 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.
Conclusions: We conclude the prevalence of gingivitis and calculus is high in the sample examined. A greater sample is needed to determine correlations between the frequency of foods evaluated and gingival status.

Division: IADR/AADR/CADR General Session
Meeting: 2020 IADR/AADR/CADR General Session (Washington, D.C., USA)
Location: Washington, D.C., USA
Year: 2020
Final Presentation ID: 2559

Authors
- Ramirez, Karol (Universidad de Costa Rica , San José , Costa Rica)
- Rojas, Monica (Universidad de Costa Rica , San José , Costa Rica)
- Rojas-guzman, Rebeca (Universidad de Costa Rica , San José , Costa Rica)
- Solano-sanabria, Mariana (Universidad de Costa Rica , San José , Costa Rica)
- Villalobos-méndez, Carolina (Universidad de Costa Rica , San José , Costa Rica)
- **Gomez-fernandez, Adrian** (Universidad de Costa Rica , San José , Costa Rica)
- Gomez, Gerogina (Universidad de Costa Rica , San José , Costa Rica)

Support Funding Agency/Grant Number: Universidad de Costa Rica Research Ordinary Funds given to KRC
Financial Interest Disclosure: NONE

SESSION INFORMATION
Poster Session
Nutrition I