Periodontitis and three health-enhancing behaviors: maintaining normal weight, engaging in recommended level of exercise, and consuming a high-quality diet.

Al-Zahrani MS, Borawski EA, Bissada NF.

Division of Periodontics, Faculty of Dentistry, King Abdulaziz University, Jeddah, Saudi Arabia. mxa67@cwru.edu

Comment in:

BACKGROUND: Maintaining normal weight, engaging in the recommended level of exercise, and eating healthy food are known to improve general health. The impact of these behaviors on periodontal health is not well documented. This study is aimed at examining whether the increased number of these behaviors is associated with a decrease in the prevalence of periodontitis in a United States population.

METHODS: This study utilized data on 12,110 individuals who participated in the third National Health and Nutrition Examination Survey. Multivariate logistic regression analysis was used to estimate the association between the number of health-enhancing behaviors and periodontitis prevalence. Health enhancing behaviors included maintaining normal weight (body mass index [BMI], 18.5 to 24.9 kg/m²), engaging in the recommended level of exercises (≥1 episode of moderate exercise or ≥5 episodes of vigorous-intensity physical activity per week), and having a high-quality diet (healthy eating index >80).

RESULTS: After controlling for age, gender, race/ethnicity, cigarette smoking, other tobacco products, education, diabetes, poverty index, census region, acculturation, vitamin use, time since the last dental visit, dental calculus, and gingival bleeding, a 1-unit increase in the number of the three health-enhancing behaviors was associated with a 16% reduction in the prevalence of periodontitis (odds ratio [OR] = 0.84; 95% confidence interval [CI]: 0.77 to 0.93). Individuals who maintained normal weight, engaged in the recommended level of exercise, and had a high-quality diet were 40% less likely to have periodontitis compared to individuals who maintained none of these health-enhancing behaviors.


PMID: 16101370 [PubMed - indexed for MEDLINE]