

Interdependency between Nutrition and Oral Health

Interdependencia entre nutrición y salud oral

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Dear Editor,

We have read the original study entitled “Relationship between iron deficiency anaemia and dental caries in school children of Peruvian native communities” published in *Revista Cubana de Investigaciones Biomédicas*.⁽¹⁾ We would like to appreciate and congratulate them. Limited research observations are available to establish a conclusive association between iron deficiency and dental caries. In this regard study by CRA Canchari, SGC *Bustamante et al.* is an important contribution.

It is a well-known fact that iron deficiency is the most common form of nutritional deficiency all over the world. Tooth pain or oral disease usually restricts the ability to eat healthy food and to alter nutritional levels and affect oral health, and so nutrition and oral health are interdependent.

Dental caries is a multifactorial disease due to the involvement of cariogenic microorganisms and exposure to carbohydrates in a susceptible tooth. In the etiopathogenesis of dental caries, inappropriate eating practices and dietary habits, socioeconomic status of the family, parents, educational status, Oral hygiene practices, and access to dental care services plays a significant role.^(2,3)

Many possible explanations are given in relating iron deficiency and dental caries which includes:⁽⁴⁾

1. Decreased salivary function due to the influence of iron deficiency to salivary gland
2. Carious s tooth is interfering in mastication and eating
3. Pain and discomfort may interfere in eating nutritious food
4. Progress of dental caries may lead to pulpal and periapical inflammation resulting in the release of inflammatory cytokines which considered to play a role in reducing hemoglobin level

Thus, effective dental caries preventive measure for children should include diet counseling, creating awareness among children and parents. Dental caries in children can be an early indicator of low iron levels and could enable patients to undergo the necessary therapies before long-standing symptoms of iron deficiency.^(1,5)

Dental caries is a preventable disease, and a better awareness of this disease through several more studies in this area is essential for the development of a comprehensive community dental prevention program.

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Conflict of interests

The authors declare that they do not have any type of conflict of interest related to this article.