

Letter to Editor

Link between Dietary Habits and Dental Carious Process

Grimoud AM*

Toulouse 3 Paul Sabatier University, France

***Corresponding author:** Anne-Marie Grimoud, Toulouse 3 Paul Sabatier University, 3 Chemin des Maraîchers, 31052 Toulouse Cedex 9, France**Received:** February 11, 2019; **Accepted:** February 15, 2019; **Published:** February 22, 2019

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Dental caries, the 3rd ranking disease worldwide, is a relevant marker of the impact of lifestyle and diet on dental status over time [1].

In western countries, maxillary examinations covering thousands of years have revealed a large increase in numbers of dental carious lesions since the 18th century. Whittaker D.K. et al. report that, over this recent period, such lesions have been increasing in parallel with the importation of Caribbean sugar into England [2]. At present, it is accepted that the disease process depends on food composition and consistency and, notably, on daily frequency of intake (Keyes diagram). Soft foods containing added refined sugar and foods that stick to the teeth creep into the smallest spaces between teeth, where saliva cannot flow to provide cleaning, immune defence and its balancing effect against acidity from sugar and/or starch metabolized by oral bacteria. Thus enamel demineralization, the first step of the carious process, can set in.

Up to the 18th century, dental caries most often affected proximal permanent molar surfaces in adults, because of stagnation of soft food

in interdental spaces that had increased due to continuing eruption resulting from pronounced dental wear. Today, in low-income populations with poor oral hygiene habits [3] “bottle caries” affects very young children fed on sweet foods and drinks. The deciduous incisors, and then the following permanent teeth, are affected [4]. Despite this regression, the prevalence of dental caries in general is falling in western countries. However, it is rising in developing countries, in parallel with the adoption of western feeding habits. Given the impact of diet, nutritional programmes should be coupled with the prevention of dental caries. Parents and teachers need to be strongly involved alongside health personnel to spare children and new countries from the disease.

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