



## **Nutritional Counseling**

### Case Study

#### **Case Study: Nutritional Counseling Following WHO Guidelines to Prevent Caries – Report from Brazil**

Childhood caries is a common problem which leads to difficulties with chewing as well as psychosocial challenges for the child. The intake of important nutrients may also be impaired. A multifaceted approach to prevention of childhood caries is essential. One such approach is nutritional counseling of the parent or caregiver. The long term effectiveness of a home based nutritional counseling program in preventing early childhood caries was investigated in a parallel randomized clinical trial in Brazil.<sup>1</sup> Nutritional counseling of the parent/caregiver was provided monthly by undergraduate nutrition students up to the child's 6th month and then again at 8, 10 and 12 months. The counseling program was based on World Health Organization guidelines<sup>2</sup>.

The program was successful in decreasing caries incidence in short term assessments at ages 12-16 months<sup>3</sup>. The present study evaluated the occurrence of early childhood caries at age four. One dentist who was blinded as to the research group performed clinical exams in a municipal clinic. The feeding habits in the home were obtained by blinded observers. Mothers were advised to exclusively breastfeed up to 6 months after which time they were encouraged to continue breastfeeding while gradually introducing thicker foods. The mothers were advised not to use the bottle or breastfeeding as pacifiers and to provide children with nutritional food where there are reasonable intervals between meals. Daily intake of fruits and vegetables was encouraged while the



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use of adding sugars (sugar cane, honey) in fruits and porridge was discouraged as was the use of soft drinks and sweets.

With 71% of intervention children and 66% of control children receiving follow up exams at age 4 years, the relative risk was statistically significant demonstrating a 22% reduction in caries in the group that received the nutritional counseling( RR 0.78; 95% CI 0.65-0.93). Additionally the average number of affected teeth was lower for the intervention group (3.25) compared with the control group (4.15) and the incidence of severe early childhood caries was reduced by 32% (RR 0.68; 95% CI 0.50-0.92). This study demonstrated that nutritional counseling of parents may reduce caries occurrence in their young children.

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## References:

1. Feldens CA, Giugliani ERJ, Duncan BB, Drachler ML, Vi´tolo MR. Long-term effectiveness of a nutritional program in reducing early childhood caries: a randomized trial. *Community Dent Oral Epidemiol* 2010; 38: 324–332.
2. World Health Organization. *Global strategy for the prevention and control of non-communicable diseases*. Geneva: World Health Organization; 2000.
3. Feldens CA, Vi´tolo MR, Drachler ML. A randomized trial of the effectiveness of home visits in preventing early childhood caries. *Community Dent Oral Epidemiol* 2007;35:215–23. 18. Ferreira SH, Be´ria JU,