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## PERIODONTOLOGY, OBSTETRICS

### The relationship between maternal periodontitis, adverse pregnancy outcome and miscarriage in never smokers

*J Clin Periodontol* 2006; **33**: 115-120

Only late miscarriage appeared related to periodontitis, but the relationship was tenuous.

Smoking has been identified as a persistent confounder in studies linking periodontitis with systemic effects, even when marked allowances have been made for its effect. This is a report on people who have never smoked, and who participated in the largest study yet to examine the relationship of obstetric outcome to periodontal diseases. A total of 1793 non-smoking participants was identified.

Subjects were periodontally examined at 10-15 weeks' gestation. Eventually, 130 gave birth before 37 weeks, and 17 experienced late miscarriage. Mean previous probing depth for subjects with preterm birth was 2.02, as for those without this experience; for those experiencing late miscarriage, it was 2.15 ( $P = 0.054$ ). Logistic regression identified antibiotics in first trimester ( $OR=6.0$ ), previous history of miscarriage (5.0) and increased probing depth at mesial sites (3.8) as related to late miscarriage, but not preterm birth or low birth weight. The authors consider the periodontal-miscarriage relationship to be weak.

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## CARIOLOGY

### Dental flossing and interproximal caries: a systematic review

*Hujoel PP, Cunha-Cruz et al. J Dent Res* 2006; **85**: 298-305

Caries risk may be reduced by professional flossing in some circumstances.

Although oral hygiene is not considered as important as diet control in preventing caries, there have been flossing studies reporting a significant reduction in caries. This systematic review identified 6 trials where the caries status of subjects receiving flossing in 3 ways was compared with that of controls.

Problems identified in individual studies included poor reporting, a high risk of bias and a lack of blinding to outcome. Further statistical adjustment was necessary to correct other factors not taken into account in certain studies. The effect of fluoride was also difficult to elucidate. In 4 studies, there were no significant caries differences between flossing and control groups.

The authors concluded that professional flossing performed on school days for 1.7 years reduced the risk of proximal caries by 40% in children with low fluoride exposure, but that large studies will be needed to identify any more general effect of flossing on caries.

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## CARIOLOGY

### Carbonated soft drinks and dental caries in the primary dentition

*Sohn W, Burt BA et al. J Dent Res* 2006; **85**: 262-266

A high intake of carbonated drinks was significantly associated with a higher caries potential.

There is evidence that children in the USA have increased the diversity of their drinks over recent years, with carbonated drinks and fruit juices replacing much water and milk. The possible association of carbonated soft drinks with caries recently has been the subject of contradictory reports. This study compared data from a 24 hr dietary recall interview in NHANES III with dental caries experience in 5985 children aged 2-10 yrs.

Subjects were clustered into 4 groups with fluid intake high in: carbonated soft drinks ( $n=619$ ), fruit juice (1201), milk (1387) and plain water (2778). Respective weighted % of caries-free children in these groups were 52, 64, 66 and 62 ( $P = 0.014$ ). A logistic regression analysis identified a significant OR of 1.8 for the first group having 1 or more decayed or filled surfaces. Other significant ORs included age  $>2$  yrs, race other than white or black, and socio-economic status low or middle level. The authors point out that this was a cross-sectional study, and therefore is not direct evidence of causality.

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## SOCIOLOGY, DENTAL HEALTH

### Dimensions of oral health-related quality of life in an adult Swedish population

*Collin-Bagewitz I, Söderfeldt B et al. Acta Odont Scand* 2005; **63**: 353-360

Three factors may explain oral health-related quality of life (OHRQoL).

QoL is defined in a variety of ways. OHRQoL was studied in a 22 item questionnaire sent to a random sample of 2000 persons aged 50-75 in a Swedish county. The response rate was 66%. Questions centred around psychological discomfort and disability, functional limitation, social disability and physical pain.

Between 62% and 94% of the subjects were satisfied with their condition in response to the different questions. Principal component analysis identified 3 factors which accounted for 59% of the variance in answers. These were interpreted by the authors as physical and social disability, psychological discomfort and disability, and functional limitation and physical pain. The authors aim to explore these factors in future studies to see whether they result from different mechanisms and processes.

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