

**Comment to SACN on the Draft Report 'Feeding in the First Year of Life' by Andrew Rugg-Gunn<sup>1</sup>.**

1. I welcome this report and the inclusion of the chapter on oral health. Importance of oral health is correctly emphasised.
2. I wish to draw your attention to three issues: a recent publication on breast feeding; vitamin D; and fluoride.
3. I draw your attention to the following article recently published in Pediatrics. The study was a well-controlled birth cohort study. *[Your paragraphs 372-380]*

Peres KG, Nascimento GG, Peres MA et al. 'Impact of prolonged breastfeeding on dental caries.' *Pediatrics* 2017; 140(1): e20162943.

4. *[paragraphs 363-4]* Vitamin D has been studied since the first article by May Mellanby in 1918. Vitamin D status both of the mother in pregnancy and of the infant influences the occurrence of enamel hypoplasia and dental caries. There are two aspects: raising an inadequate intake to adequate, and supplemental vitamin D in the presence of adequate intake. It is likely that there is more than one mechanism for effect: including the well-known effect on calcification while teeth are forming; post-eruptive immunological effects. The first article (a systematic review) reports substantial effect size.

Hujoel PP. 'Vitamin D and dental caries....' *Nutrition Reviews* 2012; 71(2): 88-97.

Schroth RJ et al. 'Vitamin D status....' *BMC Pediatrics* 2013; 13: 174.

Schroth RJ et al. 'Prenatal Vitamin D.....' *Pediatrics* 2014; 133(5): e1277-1284.

5. *[paragraph 364]* The use of a fluoride-containing toothpaste is rightly emphasised in paragraph 359. I would like to see mention of the caries preventive effect of water fluoridation (there are PHE references to its effectiveness and promotion in the UK). Water fluoridation has a pre-eruptive effect (while teeth are forming, i.e. from birth) as well as a topical, intra-oral, post-eruptive effect (on teeth as soon as they erupt). Both are relevant to this report. The post-eruptive effects are very well documented (by PHE) but I give you three references to the pre-eruptive effect:

Groeneveld A et al. 'Fluoride in caries prevention....' *J Dent Res* 1990; 69(Spec Iss): 751-755.

Singh KA et al. 'Relative effects of pre- and posteruptive....' *J Public Health Dent* 2003; 63(1): 11-19.

Cho HJ et al. 'Systemic effect.....' *Community Dent Oral Epidemiol* 2014; 42(4): 341-8.

I would comment *[paragraph 363]*, in case you consider it, that fluoride has no worthwhile pre-natal effect on the child's dental health.

6. Lastly, I think in paragraph 375, the name 'Parera' is mis-spelt.

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