

**SACN Draft Carbohydrates and Health report- scientific consultation: 26th June
to 1st September 2014- British Association for the Study of Community
Dentistry (BASCD) response**

We welcome this review and the inclusion of oral health as a key consideration.

General Comments

We support the recommendation that the population-wide reference value for free sugars should be 5% of total energy intake.

Specific Comments

The detail within the report is useful however the report as it is currently organised is difficult to navigate and the research questions that it aims to answer are not made explicit. It would be helpful if the report was structured by research question, followed by a discussion of the evidence in relation to that question. A structure such as that used in a Cochrane systematic review would help to set out a clear research question, inclusion and exclusion criteria and methodology used, before outlining the potential influence of bias and confounding in each study. It would also have been useful to have a table summarising the quality and reliability of the studies. This would have made it easier to understand the evidence that was presented

The oral health systematic review is helpful however it reviews the literature using a different structure than the final report so that it is difficult for the reader to find the evidence underpinning statements in the final report and sometimes the two cite different literature to support the same statements.

Within the report there are conflicting statements with regard to evidence on frequency of sugar intake in the mixed and permanent dentition between paragraphs 6.61/6.62, this may cause issues when trying to give advice on frequency of intake.

With regard to the dental caries process both amount and frequency of consumption are key and underpin current advice regarding prevention of tooth decay. However within the document they are considered in several areas with no clear message that could be easily transferred to public health advice. The rationale regarding the importance of frequency is discussed in chapter 2 with no clear link to the findings regarding frequency in chapter 6.

If terminology is changed from non-milk extrinsic sugars (NMES) to free sugars it will require clear definition for the UK as terminology varies in other countries. It is also important to note that the two terms are not synonymous.

Recommendations in final report should include further research to address identified evidence gaps in the systematic review e.g. relating to caries in adults and infant feeding.

In the summary and conclusions to chapter 6 the report states that there is a lack of data on adults, this should be stated earlier in the document rather than in the summary and conclusion. Although outside your search time-frame, a recent prospective cohort study of the relationship between sugar sweetened beverage (SSB) intakes and dental caries in adults has recently been published (Bernabé et al., 2014).

The WHO review states that “for the analysis relating dental caries in adults, data were not downgraded for indirectness, although all cohort studies were conducted in children” because “the etiology of dental caries is the same in children and adults”. If SACN are taking a different view it should be made explicit and reasons given.

In chapter 12 the report gives overall summary and conclusions and makes a statement relating to periodontal disease. Periodontal disease is a pathological process that does not involve carbohydrates, and so it is not surprising that there is limited evidence for association between sugar and periodontal disease.

With regard to infant feeding the systematic review reported two trials that looked at the effect of encouraging exclusive and prolonged breast feeding on the deciduous dentition (Feldens et al 2010) and mixed and permanent dentition (Kramer et al, 2007). The findings of these two studies have not been included in the main report. This would however be a useful statement of findings and support the wider health benefits of breast feeding.

References

Bernabé, E. et al., 2014. Sugar-sweetened beverages and dental caries in adults: A 4-year prospective study. *Journal of Dentistry*, 42: 952-958.