Author's response to reviews

Title: Children's Acceptance of Milk with Xylitol or Sorbitol for Dental Caries Prevention

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Author's response to reviews: see over
GENERAL
This is a nice attempt to try to improve caries prevention. There is, however, a (major?) methodological problem - which does not affect the current paper itself but may be a big problem for the whole study. The authors say in the Discussion that "studies are needed to ascertain whether single dose per day is substantive enough to modify the bacteria flora" Any references? There are some indications in the literature that even a frequency of two per day may be too low to give a preventive effect. Therefore, before any large and demanding field trial one should be sure that the frequency of xylitol intake is adequate. As far as I am correctly informed, no retention in the oral cavity happens with xylitol. This methodological aspect may be crucial for the whole project.

We agree with you, and that is why we want to develop this research project step by step. The first step was to determine the acceptance of xylitol in milk by children. Once we found that, the next step is to determine if there is any difference in various frequency protocols. We will look at microbiological and caries rates variables, starting with some pilot studies. Xylitol in milk may behave differently than xylitol in other vehicles. We want to know if milk is a good vehicle for caries prevention. If so then we can address the issue of how to increase its retention in the mouth. One of the Finnish studies on xylitol otitis suggested that the total dose per day may be as important as the frequency but this remains to be seen.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
done

The daily doses have to be corrected throughout the paper; 0.021, 0.042 g/ml, and in Discussion:
"five to 10 g of xylitol affects..."
We came up with 5 to 10 gms from the literature. The daily amount of xylitol that is mainly used in research is 5 to 10 gms a day. Since we are using volumes, and we want to give each child a glass of milk (240 ml), the concentration of xylitol in milk would be 0.021 g/ml (5 gms in 240 ml) or 0.042 g/ml (10 gms in 240 mls). It is explained in the “testing procedure” section.

Tables 2 and 3 have the same title. Where is powder milk?
Corrected

What is UHT milk? Perhaps plain milk? Please explain.
UHT stands for Ultra High Temperature Milk. The basis of UHT, is the sterilization of food before packaging, then filling into pre-sterilized containers in a sterile atmosphere. It is sterilizing the milk with very high temperature in a short period of time, without losing any properties of flavor or nutrients. It is really plain milk that has been subject to a certain type of sterilization.

Are gum, candies etc foods?
Yes, we are including under that term candies and gum.