Reviewer's report

Title: Vitamin D status and dental caries in healthy Swedish children

Version: 1 Date: 30 Nov 2017

Reviewer: Robert Schroth

Reviewer's report:

Thank you for the opportunity to review this revised manuscript.

Overall, the authors have carefully reviewed the feedback and suggestions identified by the reviewers.

The reviewer does have a few more comments on this revised manuscript that should be considered:

Background: line 60-63 - these were historical studies conducted in the early 1900s. It might be good to mention that they are historical clinical trials of vitamin D "supplementation", not actual vitamin D status.

Also, I think the authors haven't really correctly interpreted what the Hujoel reported in his paper. Each form of supplementation, including irradiation produced similar outcomes and overall supplementation was associated with lower risk of caries.

Results: Watch the tense being used.

Line 175 - suggest adding the word "adjusted" before odds ratios.

Table 3 - please show all of the covariates and their associated adjusted odds ratios for the final models. Simply just reporting the odds ratio for vitamin D status is not sufficient. The readers want to see more details and this could be achieved.

Page 18, line 263-275 - can this be shortened? It doesn't flow and the average reader may not understand this section. The same applies to lines 284-286.
Discussion: instead of saying "negative" association, perhaps rephrase as and "inverse" association between vitamin D status and caries experience. There are two instances in the discussion when this is referred to as a negative association (some may mistake this to mean no association).

Figure 2A and 2B are a bit difficult to follow as there is no heading or legend.

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