

Reviewer's report

Title: The effects of oral iron supplementation on cognition in older children and adults: a systematic review and meta-analysis

Version: 1 **Date:** 29 September 2009

Reviewer: Nicola M Lowe

Reviewer's report:

General comments

This is a well written, thoroughly undertaken review. The introduction outlines the rationale for the question addressed by this review and the aims of the study are clearly defined. A number of reviews of Iron supplementation have already been conducted, however the uniqueness of this review in terms of the specific age range studied, is adequately justified. The methods used are appropriate and well described. The discussion is well balanced and is supported by the data. The points listed below are discretionary revisions.

Methods

1. The authors stated that the "search was not limited by language", was translation of papers or abstracts therefore required, and if so, how was this undertaken?

Results

2. Page 13 refers to funding bias, how was this assessed?

3. Table 3. It would be useful to have the P values to indicate which of the cognitive domains Iron had a significant effect on.

Discussion

4. It is well established that Zn also plays a role in cognitive function. Do the authors think that the lack of effect of Fe supplementation on many of the cognitive domains may be due to a concurrent Zn deficiency, possibly worsened by the Fe supplementation?

5. Page 22, paragraph 3, second sentence ".....This was because the outcomes were reported as z-scores or were adjusted, which were highly appropriate, or because of lack of variance data". This sentence does not make sense to me??

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests