Reviewer's report

Title: Is dietary zinc protective for Type 2 diabetes? Results from the Australian Longitudinal Study on Women’s Health

Version: 1 Date: 31 July 2013

Reviewer: Meropi Kontogianni

Reviewer's report:

Re: Is dietary zinc protective for Type 2 diabetes? Results from the Australian Longitudinal Study on Women’s Health, by Vashum et al.

This is an interesting work, revealing data regarding zinc intake and zinc/iron ratio and type 2 diabetes risk in a population based prospective study.

- Major Compulsory Revisions
  1. Background: this section is rather too long (~ 4 pages) and gives much information regarding the associations between zinc intake and type 2 diabetes. I would suggest shortening this introduction and incorporating part of this information in the discussion section. The animal/supplementation studies for example could be omitted.
  2. Methods, Dietary assessment: “The validation of the FFQ against a 7-day weighted food record showed fair correlation for dietary zinc intake (Pearson correlation coefficient = 0.4)” this is not a good correlation and should be acknowledged in the limitations section, as well as the difficulty of estimating macro and micronutrient intakes through FFQs
  3. Results, Page 13: “Of particular interest in this investigation, those in the highest quintile of zinc intake also had the highest intake of dietary iron”. Authors could mention which were the most commonly recorded dietary sources of zinc in the study sample.
  4. Results, Table 2: “Energy-adjusted zinc [median(min, max)]” – I am not sure whether the reader understands what is reading. An explanation about what -1.25, -0.48, 0.01, 0.50 and 1.24 reflect would be helpful

- Minor Essential Revisions
  1. Results, Page 13, line 9: the word depression appears two times

- Discretionary Revisions
  1. Tables: too many decimals in the P-values

Level of interest: An article of importance in its field

Quality of written English: Acceptable
Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

'I declare that I have no competing interests'