Reviewer’s report

Title: The impact of iodine supplementation and bread fortification in a mildly iodine deficient population of pregnant women in South Australia

Version: 1 Date: 18 December 2012

Reviewer: Angela Leung

Reviewer’s report:

This was a prospective cohort study of urinary iodine status among pregnant women at 12, 18, 30, and 36 weeks of gestation in South Australia, stratified by use of an iodine-containing supplement. There was also a secondary paired analysis of urinary iodine concentrations among the pregnant women before and following the introduction of iodized bread to the country. The authors’ findings add to the growing literature regarding iodine nutrition during pregnancy globally.

Minor essential revisions:

1. The phrase “iodine supplements” can be confusing and seems to imply pure potassium iodide or kelp supplements that these pregnant women are taking. Consider switching to the term “iodine-containing multivitamins”.

2. Methods, study participants: It is stated that 30% used dietary supplements that did not contain iodine. Is this 30% of the 47% who used any supplements, or of the total 196 women. I assume the latter, but please clarify in the text.

3. Results, third paragraph: The sentence stating that women who took non-iodine containing supplements were grouped together with those who did not take any iodine supplements based on the similarity of their UICs should be more clearly restated in the Methods section.

4. Results, last paragraph: Although the overall median UIC is provided (82 mcg/L), please divide and also report the UICs for the women who were using iodine supplements vs. those who were not.

5. Table 2: The total n’s for each of the two columns should be included in the table, which I think should be 103 and 93, respectively. If this is true, the percentages do not make sense (i.e. at 12 weeks for women without supplementation, 16 of 103 does not equal 18%). The percentages should be clarified overall for this table.

Figure 1 is very nice.

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.