Reviewer's report

**Title:** Effect of seasonality on the estimated mean value of nutrients and ranking ability of a self-administered diet history questionnaire

**Version:** 1  
**Date:** 21 April 2014

**Reviewer:** Pilar Guallar-Castillón

**Reviewer's report:**

This is an interesting, well-designed and well-written manuscript. The aim of the article was to assess the effect of seasonality and the ability to rank participants using a self-administered semi-quantitative questionnaire. This questionnaire was validated against 16 semi-weighed dietary records.

The authors may take into account the following comments:

**Major comments:**

1. The self-administered questionnaire was not properly a diet history. First of all, because it was semi-quantitative. Second, it was self-administered. Third, it was not organized following the different eating occasions throughout the day (simulating a clinical history). So, we suggest the authors change the name for the tool used to collect diet information. Indeed, the tool described seems to be similar to a food frequency questionnaire.

2. The results in tables 3 and 4 are based mainly on the statistical significance instead of on the magnitude of the coefficients. In my opinion this is a wrong approach. I encourage the authors to present (at least in the abstract) what nutrients suffered bigger seasonal differences.

3. The authors should discuss if the reduced number of items in the self-administered questionaire (150 out of 1299) can explain seasonal differences at least partially.

**Minor comments:**

1. The abstract should indicate the reference period of the self-administered questionnaire.

2. It is not clear to me the meaning of "group orientations".

3. The authors should point out that the results are only valid if the information relates the preceding month (no further conclusions can be made for a longer period of time)

**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