Reviewer's report

Title: Reliability of dietary patterns assessed with a food-frequency questionnaire

Version: 1 Date: 8 May 2015

Reviewer: Garden Tabacchi

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Major Compulsory Revisions

- Reliability in statistics is related to assess consistency of a measure. In this paper, actually, a proper reliability was not evaluated. It is more a “comparison” between two food patterns in two populations (even though they were recruited through the same manner) after seven years. This should be then modified throughout the paper. I would avoid the term “reliability” or “reproducibility” and use “comparison”. This reflects on the objective of the study, and of the title, which have to be slightly revised.

- All the sections of the abstract should be revised, as they do not provide a clear idea of all the paper and are imprecise.

Minor Essential Revisions

- In the title, the Canadian Newfoundland and Labrador population should be included.

- In the section “background” of the abstract, add that Newfoundland and Labrador populations are from Canada.

- background of the abstract: “The objective of this study is to examine if the dietary pattern identified in one study can be replicated in another similar study carried out several years later using identical methods...”. Please modify. From the paper, it looks like the actual objective is to identify dietary patterns of these two populations and compare them.

- In the section “methods” of the abstract, something about the factor analysis should be written.

- In the section “results” of the abstract, the percentages in parenthesis are the percentages of the variance explained? In this case it should be clarified.

- In the section “conclusion” of the abstract, what is exactly meant with “anticipated reliability”?

- Line 47: The second objective of the study has to be reviewed: “to examine if the dietary pattern identified in one study can be replicated in another similar study conducted several years afterwards”. “Whether there are differences in
dietary patterns between two studies conducted several years afterwards”
- Line 56: check “from 2011 to 2005” (change 2011 into 2001)
- The response rate is quite low. Maybe it could be interesting to explain why they did not send the survey package back.
- Lines 118-124: these have to be included in the methods section, and not in the statistical analysis.
- Line 126: specify that the Bartlett’s test is used to test the homogeneity of variances, and the Kaiser-Meyer-Olkin measurement is for the sampling adequacy.
- In the methods section, the cut-offs for the KMO have to be mentioned.
- Results: revise the “demographic information” section.
- An analysis after stratification by age was not done. It could be expected, for example, that younger people can have different patterns compared to older ones...

**Quality of written English:** Needs some language corrections before being published

**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