Reviewer’s report

Title: Development and Relative Validation of a Food Frequency Questionnaire for French-Canadian Adolescent and Young Adult Survivors of Acute Lymphoblastic Leukemia

Version: 0 Date: 17 Sep 2017

Reviewer: Sandra Crispim

Reviewer's report:

This manuscript provides the results of validation and reproducibility of a FFQ developed for survivors of Acute Lymphoblastic Leukemia. While it could make a contribution to the work of researchers in the field, the manuscript, in my opinion, deserves further work to become suitable for publication.

- The most appropriate term to be used for referring to this type of validation is "Relative validity", as it compares two methods of dietary recall that have similar and distinct type of bias.

- Introduction, Line 59, vitamins and minerals could be specified or infered they were some, as previous mentioned calcium and Vit D are also part of these nutritional components.

- Introduction, Line 73, Compared to FFQs, food records can provide more precision in quantities and types of food. In that sense, it is not so clear to make this statement for the rationale of the study in the introduction.

- Methods, Line 125, it seems strange to affirm that the FFQ is a 60 minute FFQ, as we could expect variation in time between subjects. Do you have this information to provide?

- Methods, Line 143-157, A major aspect to be revised refers the way of calculation of nutrient values. It becomes doubtful if identical foods captured in the food recall and FFQ could have different sources of information on nutrient amounts. Food composition data may also introduce systematic and random errors (depending in which level of analysis). Therefore, it is suggested that only form of quantification could be adopted for the comparison in the validation and reproducibility study. Why not to use the Nutrific application for both (or the adhoc calculation in excel)? An eleven % in overestimated protein intake observed in the FFQ could be influenced by this difference in analysis, for instance.

- Methods, if data were not normally distributed, the mean and the standard deviation is not a good way of presenting the data. Medians and other form of variability should be chosen.
- Energy adjustment and forms of correlation classification interpretation are not necessary proposed by Goulet and colleagues. They only followed this proposal that was done by others.

- Results: There is no need to have the information on Caucasian and French speaking information both in the text and in the table. Only one mention is sufficient.

- Results: For the observed differences in % in the validation and reproducibility, a measure of variability should be shown. How much, for instance, the 11,3% in energy intake varies?

- Discussion, Line 309-310, what can you say about the use of this FFQ in other seasons then? Can you warranty the results will be the same. Something should be elaborated about this. You will mention later again saying this could explain differences (Line 333)

- Discussion, Line 324-327, there could be many reasons why this study had a different result than the other in cancer child survivor. In fact, we should not expect how the results should be. This is a different FFQ, different foods, different population, different reference method.

- The manuscript seems too optimistic for the results of lipids.

- Discussion, Line 388-389, did you assess the results separate for sex? Based on the limitation presented, one could expect the FFQ would have a better application in boys?

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