Reviewer's report

Title: Disparities in fruit and vegetable consumption by demographic and socioeconomic characteristics in Canada

Version: 2 Date: 8 October 2011

Reviewer: Warapone Satheannoppakao

Reviewer's report:

After reading the revised manuscript and the authors’ response to review messages, they make the whole picture clear about the work the authors intend to express to the readers. However, some issues have to explain and/or change before resubmitting.

Major Compulsory Revisions

1. OVERALL:

Due to reviewing this revise manuscript, a dependent variable in this research is a FREQUENCY of fruit and vegetable consumption. However, the word “F&V consumption” or “F&V intake” is used repeatedly. These might make some confusion to the readers whether they refer to “FREQUENCY,” “AMOUNT” or both. Clarification should be made. Perez CE’s paper, as mentioned in the authors’ reference#21, is one of good examples. A frequency of F&V consumption is pointed out. (Web link: http://www.statcan.gc.ca/studies-etudes/82-003/archive/2002/6103-eng.pdf).

On the topic of an adequate consumption of fruit and vegetables, as seen in the authors’ reference#3, the authors are right it means eating F&V 5 servings every day. Nonetheless, in this revised manuscript, the frequency of F&V intake is the main point. This may not absolutely refer to whether one who eats F&V more often will get a recommended adequate amount of F&V, #5 servings/day. Unless, the authors have the evidence to confirm it. I would like to give a little suggestion, please see the reference#16 in the “Dependent Variables” part of paper. Riediger&Moghadasian stated that “It is assumed that f&v intake one time per day is approximately equal to one serving; therefore consuming f&v less than five times per day was below recommendations according to previous Canada's Food Guide [7].” The way Riediger&Moghadasian wrote could elucidate any ambiguity about an adequate F&V intake.

2. TITLE, ABSTRACT&INTRODUCTION: Please consider my suggestions above. Changes are required.

3. METHODS:

In the “Data” part, page#5 lines#85-88, the authors give detials related to a method used to collect fruit&vegetable data. Nevertheless, after reading a paper on the reference#24, there are 8 items related to fruit and vegetable intake. As I assume, did the authors use only the item#7 “Daily Consumption – Total Fruit nd
Vegetable” but or item #8 “Grouping of Daily Consumption – Total Fruit nd Vegetable” to analyse the differences in a frequency of F&V intake across certain independent variables? It will be useful if the readers could know this matter.

4. DISCUSSION: Interesting previous studies are used to compare their findings with the authors’ findings. Anyhow, it is more valuable, if the reasons are given why demographic and socioeconomic characteristics are related to or affect a frequency of F&V intake. About research limitations, the weakness of using simple food frequency questionnaire must be explained.

Minor Essential Revisions

1. METHODS: In the “Statistical Analysis” part, page#6 lines#109, I have advice about “lifestyle”. As I understand, the independent variables the authors intend to study are a demographic factor, a socioeconomic factor, and a lifestyle factor. The word “lifestyle” was stated in the Key words, Introduction and Statistical Analysis parts, but not in the Title, Abstract and Objective parts. Consistency is needed here. If the authors would like to employ merely “demographic and socioeconomic characteristics or factors,” its term of definition should be made clear by covering a lifestyle factor. As well, page#5 lines#88, please add “somewhere else” after the sentence “For detailed survey questions and methods used Statistics Canada see…..”

2. DISCUSSION: On page#9 lines#180-183 in the Results part, it is a discussion, so moving it to the Discussion part is recommend. Also, on page#11 lines#213-214, “….the intake of F&V is based on the daily number of servings rather than the actual quantity consumed.” According to the reference#10, Statistics Canada website (http://www.statcan.gc.ca/pub/82-625-x/2011001/article/11461-eng.htm), “Fruit and vegetable consumption data are based on a survey question that measures the number of times respondents reported that they consumed fruit and vegetables, rather than the actual quantity consumed.” Change is recommended.

Level of interest: An article of importance in its field

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

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

'I declare that I have no competing interests'