Reviewer's report

Title: Disparities in fruits and vegetables consumption by demographic and socioeconomic characteristics in Canada

Version: 1 Date: 6 September 2011

Reviewer: WAEL SABBAH

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Disparities in fruits and vegetables consumption by demographic and socioeconomic characteristics in Canada.

This is an interesting paper that addresses the determinants of consumption of fresh fruits and vegetables in Canada.

Minor Essential Revisions

1- The objective of the study should be placed at the end of the introduction rather than in the first sentence.

2- The authors emphasized the importance of using quantile regression to assess the effect of demographic and SES at different levels of F&V Consumption. This should be clearly stated in the objective of the study.

Methods

3- Data source and data management is part of the method. The heading (method) should precede the subtitle (data).

4- The authors should justify the inclusion some of “the other control variables” in the regression model (namely: marital status, household with kids, social interaction, being an immigrant, province).

5- Immigration status does not reflect ethnicity and should not be referred to as ethnicity (page 5, line 91 and page 6 line 106).

6- The authors should state clearly if all the covariates were included in the final model presented in Table 2.

7- The assumption is that the variable (province) was analyzed as a level 2 variable (province level “j”). This was not stated clearly in the text. On the other hand, if the province variable was included at the individual level, it will lead to an overestimate of the effect of the province on F&V consumption.

Results

8- What was the effect of (regional and other cultural influences at the province level) that was stated in the method (page 6, line 107).

9- Table 2 should report the reference group for each categorical variable for clarity.

10- The overall number of participants cannot be the same as the number in each quantile (Table 2, last line).
Discussion

11- The authors should elaborate on discussing the benefits of using quantile regression in assessing the determinants of F&V and its policy implications as opposed to using Logistic Regression examining variation in consumption below the recommended daily consumption.

12- One interesting observation was that all the provinces had significantly lower levels of consumption of F&V than Quebec. Consumption of F&V is related to food policies, prices, display and packaging in the supermarket, and advertisement. What was unique about Quebec in relation to food policy and marketing of F&V? The authors should comment on this important finding.

Level of interest: An article of importance in its field

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

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests