Author's response to reviews

Title: Omega-3 fatty acids status in human subjects estimated using a food frequency questionnaire and plasma phospholipids levels

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Nehme Gabriel, MD
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Re: MS: 6334169463696890R2

Thank you for your email of March 18th, 2012 indicating that our manuscript entitled “Omega-3 fatty acids status in human subjects estimated using a food frequency questionnaire and plasma phospholipids levels” (MS: 6334169463696890) by Véronique Garneau, Iwona Rudkowska, Ann-Marie Paradis, Gaston Godin, Pierre Julien, Louis Pérusse, and myself may be acceptable for publication in the Nutrition Journal, after appropriate revision. On behalf of my coauthors, I am happy to resubmit a revised version of this manuscript (MS: 6334169463696890R2) for further consideration by the editorial board of your journal.

We wish to thank again the reviewer for their constructive comments about our manuscript. Please find included the manuscript as well as the reply to reviewer’s comments. On behalf of my coauthors, I hope that in its revised form, the present MS may be deemed acceptable for publication in your journal.

Should you require additional information, please feel free to contact me.

Thank you, in advance for your attention.

Sincerely,
Will the FFQ be available for others researchers to use? Is it scannable and how readily can nutrient intakes being computed?

If the readers are interested in obtaining the full version of the FFQ, they should contact the corresponding author. It is important to note that the FFQ is in French; thus, it would not be pertinent to include the FFQ in this particular journal. In addition, the FFQ has been published in a thesis by Julie Goulet, 2007, « Le mode alimentaire méditerranéen chez des femmes québécoises en santé: applicabilité et effets sur la santé. » Département des sciences des aliments et de nutrition. Faculté des sciences de l’agriculture et de l’alimentation, Université Laval, Québec. (Pages: 318-319). (www.theses.ulaval.ca/2007/24684/24684.pdf) The reference has been added to the current manuscript. In addition, the FFQ is easy to use and has been previously used in various clinical studies in Quebec.

Minor essential revisions

1. Line 39. Fix ‘women subgroup’ as previously suggested.
   The following sentence was modified as suggested by reviewer. (line: 41)

2. Line 40, insert ‘were also’ between intakes and correlated.
   The following sentence was modified as suggested by reviewer. (line: 41)

3. Line 42: Insert ‘Estimated’ at the start of the sentence.
   The following sentence was modified as suggested by reviewer. (line: 43)

4. Line 42 Insert something to indicate that your findings in this sample of the French-Canadian population are not necessarily representative of the whole French-Canadian population.
The following sentence was modified as suggested by reviewer. (lines: 43-44)

5. Line 44. Insert ‘this’ or ‘our’ between overall, and FFQ.

The following sentence was modified as suggested by reviewer. (line: 46)


This has been removed as suggested by reviewer.

7. Line 60. Delete ‘the’ before French-Canadian women, and ‘Further’; before Correlations.

This has been removed as suggested by reviewer.

8. Line 66, replace ‘to’ at end of line with ‘with’.

The following sentence was modified as suggested by reviewer. (line: 69)

9. Line 75. Explain the ‘electronic messages’ more clearly. Were these sent to specific people or to a whole group?

The following sentence was modified as suggested by reviewer. (line: 80)

10. In this section on study population you need to provide information on response rate.

This study was part of a larger study that was previously published; the response rates are available in the original manuscript (Paradis et al., Nutr J 2008). This information was added to the current manuscript. (Lines: 77-79)

11. Line 91-92. Delete this sentence. I apologise if I was not clear here, I really wanted to know when the dietary data was collected in relation to the blood for comparison, and what year the nutrition data used to analyse the FFQ was from. You have provided this information elsewhere.

This has been removed as suggested by reviewer.

12. Line 96. Delete ‘of the study participants’.

This has been removed as suggested by reviewer.

13. Line 98. Replace ‘can’ with ‘may’ and ‘reliable’ with ‘valid’. Reliable is usually used to mean repeatable.

The following sentence was modified as suggested by reviewer. (line: 102)

14. On line 120 it is stated that there was no difference between men and
women, for what?

The following sentence was modified as suggested by reviewer. (line: 124)

15. In line 126 it is stated that fish and seafood were the main sources of n-3 intake, yet ALA was the main n-3 fatty acid consumed and this is not found in fish but in plants. Discuss this inconsistency.

As suggested by reviewer, the information of ALA and DPA sources were added to the current manuscript. (lines: 131-132)

16. In line 128 the proportion of people taking n-3 supplements is reported. This is not mentioned in the methods and it does not seem to be clear whether this was included in the total intake estimates.

The following sentence was modified as suggested by reviewer. (lines: 95-96)

17. Line 132-133. Change to ‘…plasma PL DHA was the FA found in the greatest percentage…’. At end of line 133 insert ‘a’ after have.

The following sentence was modified as suggested by reviewer. (lines: 137-139)

18. Line 135. Change to ‘Correlations between dietary intakes of n-3 FA and the levels of the same FA in plasma are presented in Table 4. Adjustment for n-3 supplementation did not alter the correlation coefficients (data not shown).

The following sentence was modified as suggested by reviewer. (lines: 140-142)


The following sentence was modified as suggested by reviewer. (line: 143)

20. Line 140. Replace ‘both sex groups’ with ‘either gender’.

The following sentence was modified as suggested by reviewer. (line: 144)

21. Given that the correlations between diet and plasma PL fatty acids appeared to vary by gender, would it be better to do the classification into quartiles by gender as well? You would probably need to use sex-specific quartile cut-points.

This was added to the manuscript. (lines:145-147)

22. Line 145. Change to ‘…n-3 intakes in relation to corresponding FA levels in plasma PL’.

The following sentence was modified as suggested by reviewer. (line: 151)

23. In the discussion, para lines 147 to 161. You cannot call your study population the ‘French-Canadian’ population without establishing whether it is
representative of the general population.

The following sentence was adjusted according to reviewers comment. (lines: 153-154)

24. In the comparison with studies refs 25-31 the data shows that your sample consumed more ALA and total n-3 but less of the long-chain n-3s. Discuss the meaning of this a bit more, noting point 15, above.

Two sentences were added to discuss the consumption of ALA and its potential effects in the current manuscript. (lines: 154-157)

25. Line 150. Change to read ‘…was below the level of 0.5 g/d recommended to decrease the risk of CVD’.

The following sentence was modified as suggested by reviewer. (lines: 159-160)

26. Line 151. Delete ‘data demonstrates that’.

This has been removed as suggested by reviewer.

27. Line 154. Change to read ‘However, in our study the n-3 FA intake was higher than that reported in the NHANES 1999-2000….’.

The following sentence was modified as suggested by reviewer. (lines: 163-164)

28. Line 156. ‘This is consistent with the lower rates of heart disease (5.4%) in Quebecers compared with Americans 11.8%. Not sure if this is a valid comparison, were these figures both based on self-reported heart disease? If not could just be an artefact of different measures.

This has been removed as suggested by reviewer.

29. Line 159. Insert ‘the’ between ‘of’ and ‘lowest’, and replace ‘for’ with ‘of’.

The following sentence was modified as suggested by reviewer. (lines: 166-167)

30. Delete the sentence from line 159-161.

This has been removed as suggested by reviewer.

31. Line 162. Insert ‘the’ between ‘though’ and ‘FFQ’.

The following sentence was modified as suggested by reviewer. (line: 168)

32. Lines 173-174. Which bit of data shows that plasma PL may be a better biomarker to reflect dietary intakes in women than in men? To say this you would need to know what the true dietary intake was.

This has been removed as suggested by reviewer.
33. Line 183-184. This sentence still needs work. You have shown as have others that correlations between diet and biomarkers are stronger for the longer chain n-3s than for ALA, you also showed that although ALA was the main FA consumed, it was the one with the lowest percentage in blood. These observations are consistent with what is known about the metabolism of ALA to longer chain FAs.

The following sentence was adjusted according to reviewer’s comments. (lines: 188-190)

34. Should be some comment on the fact that the plasma PL cannot help you evaluate the actual intakes estimated by the FFQ, only the relative ranking of the intakes.

The following sentence was adjusted according to reviewer’s comments. (lines: 206-207)

35. Line 186. Fix to either female subgroup or women.

The following sentence was modified as suggested by reviewer. (line: 191)


The following sentence was modified as suggested by reviewer. (line: 196)

37. Line 191-192. Change to ‘…plasma PL should be a reasonable biomarker to evaluate this information against as it reflects fatty acid intake over the last 21 days.

The following sentence was modified as suggested by reviewer. (lines: 196-197)

38. Line 193. Delete ‘of the study participants.’

This has been removed as suggested by reviewer.

39. Line 195. Replace ‘can’ with ‘may’.

The following sentence was modified as suggested by reviewer. (line: 200)

40. Line 199. Change to ‘…portions they eat…’

The following sentence was modified as suggested by reviewer. (line: 203)

41. Line 200. Replace ‘results with ‘estimates’.

The following sentence was modified as suggested by reviewer. (line: 206)

42. Line 201 Insert ‘this’ between ‘of’ and ‘FFQ’.
The following sentence was modified as suggested by reviewer. (line: 206)

43. Line 203. Insert ‘our’ before results and add ‘s’ to ‘intake’.

The following sentence was modified as suggested by reviewer. (line: 208)

44. Given that the study population is quite young and well educated, as well as
not being representative of the general population, they may also be better at
completing an FFQ than others who are less educated. Authors should comment
on this in relation to their findings. Ie would you expect the FFQ to do as well in
other population groups?

We agree with the reviewer that individuals which are less educated or older may
have more difficulties answering the FFQ. A comment was added in the
conclusion as suggested by reviewer. (lines: 213-214)