Reviewer's report

**Title:** Diet and lifestyle factors associated with fish consumption in men and women: A study of whether gender differences can result in gender-specific confounding

**Version:** 2  **Date:** 17 September 2012

**Reviewer:** Anu Turunen

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**MAJOR COMPULSORY REVISIONS**

In my opinion, the hypothesis regarding fish as a marker of unhealthy diet is still mentioned for the first time in Discussion (last paragraph). Even after revision, it is not clearly stated in Introduction. If it is mentioned as a hypothesis in the Discussion, the same kind of expression should be found also in Introduction.

In Introduction, it should be made clear that reference 12 is the Authors’ own work. It should be mentioned in the first sentence (Page 3, row 14: In a prospective... --> In our prospective...)

At present, the Authors’ previous work (12) is emphasised too strongly in aims and discussion. The previous work can, of course, be used as an example, but this publication has to be able to stand alone. The importance of this current work in general has to be clarified to the readers and the previous work should be “faded out”.

Page 8, paragraph 2: The structure of the first sentence is a bit difficult to understand. Overall, the whole paragraph sounds weird since it is completely related to the Authors’ previous work. Maybe this would work better in Discussion than in Results of the current work? The Editors might have an opinion about this?

Page 9, paragraph 2: Regarding fish consumption and hypertension, salt intake should be discussed or at least mentioned.

In Discussion, comparisons with previous studies are still scarce, after revision. Maybe the Editors could give their opinion about this shortcoming.

**MINOR ESSENTIAL REVISIONS**

In Background: protective association --> protective EFFECT (when interventions) or fish consumption is ASSOCIATED with decreased risk of (when observational studies)

At the end of Background (Page 4, row 3-5), word “correlated” is used - this sounds like results. The meaning probably is that the association between fish consumption and self-reported intake of foods and lifestyle were studied.
A short rationale for the division of fish consumption >3 times/week (high) and <=3 times/week (low-to-moderate) should be added to Methods.

Page 9, paragraph 1: In my opinion, it would be much more straightforward to represent over- and underreporting together first, and then give examples of both. Expressions “well-known” and “widely known” in two consecutive sentences - this does not sound fluent.

Page 8, paragraph 4: The last sentence sounds a bit awkward - what is the message? Should it be something like “Spearman correlation coefficients between fish consumption from the FFQ and EPA and DHA in erythrocytes were satisfactory (around 0.42-0.51)”?

The use of English language still needs some revision (e.g., Northern Sweden population --> Northern Swedish population (?); consider as healthy --> consider healthy; lifestyle behaviors --> lifestyle (factors)

DISCRETIONARY REVISIONS

In Abstract, expressions/choice of words could be more precise. For example, concerned alcohol --> was alcohol consumption; moderate consumers --> moderate fish consumers; was only the situation --> was true only; lifestyle is not different between --> lifestyle does not differ between; lifestyle variables --> lifestyle factors

In Abstract, Conclusions should be written in past tense.

What is strong beer (alcohol content?) and why only strong beer was taken into consideration? Maybe this needs explanation?

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:

None