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: 14 September 2012

Reviewer: Kylie Smith

Reviewer's report:

Major compulsory revisions
1. The authors' have addressed most of my previous comments. However, it is still not clear how participants are recruited – are ALL citizens living in Vasterbotten invited to have a health examination when they turn 40, 50 or 60 years? If not, how are participants selected?
2. Abstract – there were also gender differences for smoking – for men high fish consumers were less likely to smoke whereas for women smoking was not associated with fish intake.
3. Can participants be included in the analysis twice if they attended two health examinations during the study period? Eg. if they attended a health examination in 1993 when they were 40 years old, would their data from the health examination in 2003, when they were 50 years old, also be included in this analysis?
4. Discussion, last para, It is stated that there are no gender-specific confounding factors in the association between fish consumption and the risk of stroke…” you have only measured some socio-economic, lifestyle and dietary factors and it is possible that there are other confounding factors that you have not measured.

Minor essential revision
5. Page 9 para 1, “There is no gender difference in the prevalence of underreporting in the northern Swedish population”, it would be more accurate to say that one previous study has shown no differences in the prevalence....
6. Page 4 para 2 – I think it is important to state that the reference used to show there is no social selection bias was using study data from 1992 and 1993.

Discretionary
7. Consider changing “academic education” to “university education” to make it clearer to the reader.

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:**

I declare that I have no competing interests