Reviewer's report

Title: Gender and the double burden of economic and social disadvantages on healthy eating: Cross-sectional study of older adults in the EPIC-Norfolk cohort

Version: 1 Date: 2 March 2015

Reviewer: Sakari Bertel Alfred Suominen

Reviewer's report:

This is the second version of the reviewer's report since the first one was erroneously sent away too early. Please, ignore the previous version if it is visible although it corresponds to the beginning of the present review.

This is a ms about an important topic, namely the association of economic and social disadvantage with healthiness of diet in a cross-sectional setting in a large population based sample of the prospective EPIC-Norfolk cohort study. The study focuses on older individuals, i.e. persons over 50 years of age and on potential gender differences. The results add to existing knowledge about the topic and gender differences and the study is relevant from a public health perspective. The statistical analysis is thorough and has as far as I can evaluate been carried out with appropriate methods. The Tables and Figures contribute to the understanding of the study and help interpreting the results.

I have only one minor essential comment that should lead to revision of the ms. In my opinion the complete original sample and hereby the response rate are not clearly enough described. Although this information could easily be checked from the references the authors give I find that this information should also be given in the present ms including the Abstract. It would also be valuable if the potential influence of the response rate on how well the results can be generalized could briefly be dealt with in the Discussion section.

Moreover, the authors are native speakers and the ms is fluently written so I have no linguistic comments besides that I noticed some typos which were: on page 7 line 113 there is an extra ) sign, page 10 line 171 I would add increase the 'risk of' type II error...., on page 11 lines 205 and 207 in the sentence 'Marital status combined with social class, education and paying bills to alter their independent associations with variety of fruit or vegetable intake (Figure 1).' there seems to be a word or phrase missing since the sentence is hard to understand, and on page 12 line 215 I would add 'being', i.e. 'of low economic resources and being non-married showed.'

I have still one comment that might lead to a discretionary revision of the ms. In the heading of the whole ms and also in headings on pages 8 and 11 the authors use the term 'healthy eating' instead of 'fruit and vegetable variety' which actually was the subject of the study. Why not at least in most of these cases replace 'healthy eating' with the more specific term 'fruit and vegetable variety' since
according to my opinion there are also other ways of determining healthiness of diet, e.g. the share of saturated fat etc. In my opinion it would be sufficient to state that ‘fruit and vegetable variety’ is a good measure of ‘health eating’ but subsequently for the most talk about ‘fruit and vegetable variety’.

In a further study it would be very interesting to see whether these findings could also be substantiated in a prospective setting.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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.