Reviewer’s report

Title: Dietary antioxidant capacity of the patients with cardiovascular disease in a cross-sectional study

Version: Date: 16 November 2014

Reviewer: Lidia Wadolowska

Reviewer’s report:

1. Is the question posed original, important and well defined? YES
2. Are the data sound and well controlled? YES
3. Is the interpretation (discussion and conclusion) well balanced and supported by the data? YES/NO see below
4. Are the methods appropriate and well described, and are sufficient details provided to allow others to evaluate and/or replicate the work? YES/NO see below
5. What are the strengths and weaknesses of the methods? see below
6. Can the writing, organization, tables and figures be improved? YES/NO see below

Major Compulsory Revisions

The objectives and references:
1. The Authors are not only one scientific team working in this area so others Polish papers must be cited, e.g. a paper “Total Antioxidant Capacity and Its Dietary Sources and Seasonal Variability in Diets of Women with Different Physical Activity Levels”, M. Czlapka-Matyasik, K. Ast, Pol. J. Food Nutr. Sci., 2014, 64(4) should be included into references.

Abstract and Conclusion section:
2. The conclusions must be revised:
   (1) there is no evidence regarding “an increasing dietetic knowledge of CVD patients” because of the manuscript provides a comparison between CVD patients and healthy subjects, and no changes with time were investigated;
   (2) no data regarding “usually consumption of foods” exist since a short time consumption was investigated using the 24-hour recall method;

Methods section, statistical analysis:
3. To present food consumption data the median and range of 25–75 percentile is the better choice than mean;

Results:
4. The data related to correlation analysis are not presented in the tables although in results sections were discussed.
Discussion:

5. The first paragraph of discussion should contain a short summary of own findings followed by discussion of other authors findings.

Table 2:

6. The p-values for comparisons between groups are missing (at least for total beverages, total vegetables, etc.) although in results sections were discussed.

7. The percentage contribution food items in consumption of total beverages, total vegetables, etc. should be given.

8. For means (or medians) the 95%CI or 25th/75th percentiles must be given, at least for total beverages, total vegetables, etc.

Table 3

9. The p-values for comparisons between groups are missing (at least for total beverages, total vegetables, etc.).

10. For means (or medians) the 95%CI or 25th/75th percentiles must be given, at least for total beverages, total vegetables, etc.

Discussion section:

11. The seasonal variability in dietary antioxidant capacity should be discussed.

12. The weakness of 24-hour recall method in relation to own findings should be discussed.

Minor Essential Revisions

13. Table 3: “DTAC - µmol TE”, “DTPC - mg GAE”, “DTFC - mg QE” should be explained.

14. Background, the first paragraph: “inverse association” instead the “inverse correlation” should be used; It was a correlation analysis used to find relation between antioxidant-rich food consumption and CVD risk or varied type of statistical analysis in references 3 and 4?

15. Methods section, the first paragraph: “study sample” term instead “study population” should be used; the same “approx. 11% of studied sample” instead the “approx. 11% of studied population” should be used;

16. Methods section, Assessment of total polyphenols….: Explanation for FRAP method must be given.

Discretionary Revisions

Methods section

17. To prepare a figure with sample choosing and study design is suggested.

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.
Declaration of competing interests:

I declare that I have no competing interests.