Reviewer’s report

**Title:** Dietary supplement users vary in attitudes and sources of dietary supplement information in East and West geographic regions: a cross-sectional study

**Version:** 1 **Date:** 26 November 2012

**Reviewer:** Brenda Cartmel

**Reviewer’s report:**

Major revisions:

1. The Discussion section should be shortened. Please ensure discussion is directly relevant to the manuscript. Some statements appear without being adequately referenced, for example p14 last sentence in the first paragraph ‘Adding discussion of dietary supplements …’. The only reference on physician knowledge of DS is almost 10 years old and may not reflect the current knowledge of physicians.

2. A limitation is the volunteer nature of the study population. Volunteer populations often differ from general population in health behaviors and education level and this can affect the generalizability of findings. This is not addressed in the discussion.

3. The manuscript would be enhanced by inclusion of additional comparisons of DS usage and attitudes towards DS, such as inclusion of comparisons by education, race/ethnicity and obesity. There is reference to collection of anthropometric data, so data on BMI may be available. Such comparisons have been reported for NHANES, so it would be interesting to see these comparisons reported for the current study. In addition these comparisons may help explain some of the observed differences between the East and West coasts. The reasons for these differences or implications of these differences in DS usage/attitudes are not addressed in the paper.

Minor revisions:

1. Abstract, results, line 4: insert ‘in’ after (49.8%)

Background

2. Paragraph 1, first sentence – include the time frame for which the NCHS reported prevalence of use (2003-2006).

3. Paragraph 1, second sentence – DS is defined as encompassing ‘botanicals’ – elsewhere in the text ‘herbs’ is used – be consistent when possible.

4. Paragraph 2, first sentence – two factors are suggested for the increase in supplement use, however on page 12 of the discussion section in the paper a third reason, increasing medical costs, is suggested as a reason for increasing usage. This reason should be included in the first sentence along with references
for the source of this information.

5. Paragraph 2, last sentence – ‘herbs and’ should be deleted as herbs are part of the definition of DS used in the study.

6. Paragraph 3, sentence 2 – a reference needs to be included for the 2007 survey.

7. Paragraph 3, third sentence – should read ‘common sources of DS’.

8. Paragraph 4, first sentence – should read ‘The objective of this study was to examine two separate geographic regions of the US to test…’. Also, the sentence seems incomplete with motivation and confidence level being ill defined.

Methods

9. Paragraph 1, sentence 4 – it is unclear what age- and sex-matched is referring to in this sentence. Which groups were matched on age and sex?

10. DS assessment – the authors refer to a question asking ‘whether a specific supplement has been recommended by a doctor’ but the data resulting from this question is not reported. Again this would be of interest to readers particularly in light of the finding that physicians are the most common source of information about DS in this study population.

11. Suggest replacing ‘which supplements are helpful’ with ‘which supplements were right for me’ as this is the wording on the questions.

12. Sources of DS Information – TV/radio does not appear to have been on the list of sources of information about DS in the study questionnaire in spite of this being one of the most common sources listed in some studies. This point needs to be addressed in the discussion.

Results

13. Paragraph 1 – Suggest deleting ‘healthy’ and including the time frame ‘in the past year’ at the end of the sentence.

14. Paragraph 2 – Delete the first sentence as it is a repeat of paragraph 1.

15. East vs. West Coast participants, Paragraphs 1 and 2 – Need to include information on which comparisons referenced in these paragraphs were statistically significantly different, this is currently unclear in the text and not indicated in Table 2.

16. Attitudes about DS supplementation, paragraph 1 - replace ‘more that 40%’ with the actual percentage and delete (data not shown) at the end of the sentence.

17. The data presented in Table 4 should be analyzed and presented as a three level variable ‘Agree’ ‘Neutral’ and ‘Disagree’.

18. Sources of DS, second paragraph – it is unclear if the categories ‘physicians’ and ‘books’ were combined as a single source or whether both were individually reported at 52.4%. Please clarify.

19. DS Usage – compare the percentage of those using supplements in the current study to NHANES. Could also comment on the difference in reference
period between NHANES and the current study.

20. Attitudes regarding DS supplementation, paragraph 1, second sentence. The meaning of this sentence is unclear to the reviewer. The third sentence states ‘patient may feel that health care providers will disapprove of their usage’ yet the findings from the study reported here suggest that physicians are the most common source of data on DS, please provide a relevant reference regarding disapproval of health care providers. The reference provided (#5) appears to encourage patients to discuss DS use with health providers but does not contain any information regarding perceived disapproval of usage by health care providers. If included, this reference needs to include date accessed.

21. Sources of DS information, paragraph 1. The authors have omitted to reference the study referenced in the Background section that did find physicians the most commonly reported source of information on DS (reference 3).

22. At the bottom of paragraph 1, there is discussion regarding training of health care providers, however this was not assessed in this study and the reference provided regarding health care provider knowledge is rather dated, almost 10 years old. Are any more recent relevant references available? The length of this discussion does not seem warranted.

23. Strengths and limitations, final sentence – ‘Finally, participants …’ This does not seem to be a study limitation.

24. Conclusion, last sentence. There is no data or evidence for the statement made in the last sentence of the discussion, suggest deleting.

25. Table 1 – p-value include only two significant figures with the exception of 0.001.

26. Table 3 – Delete footnotes ‘d’ and ‘*’. 

**Level of interest:** An article of limited interest

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests