Reviewer's report

Title: A community-based intervention to improve dietary habit and to promote physical activity among the elderly: A cluster randomized trial

Version: 2 Date: 25 April 2012

Reviewer: Benedetta Bartali

Reviewer's report:

The research question posed by the authors is interesting and potentially important but it should be clearly stated in the abstract and in the background section (e.g.: “examine the effect of TAKE10!” on what?). As specified by the authors, one of the main limitations of this study is that information on dietary intake and physical activity is self-reported. Therefore, it is unknown whether the observed differences in food consumption between the intervention and the control group really reflect changes in dietary intake. Also, the following points need to be addressed:

Major Compulsory Revisions

1) Please specify in the abstract: a) what is TAKE10! Program in the methods and b) what are the food groups with increased consumption in the intervention group
2) It is not clear how the participants were enrolled in the study. Why the number of women is substantially higher?
3) Subjects were allowed to choose the nearest site from their home among the six sites. Socio-economical status and education may be associated with living in specific sites and these differences might have affected the results. Please provide information on socio-economical status/education in Table 1 and also on physical activity level and self-reported health at baseline and adjust the analyses accordingly.
4) What is the range for the TMIG-Index score? Please clearly specify each item included in the index (e.g.: what are the IADLs included in the score?) and provide a reference to support the validity of this Index.
5) Please clarify how the DVS score has been created and its range.
6) Because of the low number of participants, categories could be grouped for self-reported health (e.g. : very good grouped with good, and not so good with not good) and for food frequency (e.g <=2 times/week; >2 times/week) as it is not meaningful to compare categories with only 1-2 subjects. The same for physical activity. The authors should show that the sample size ensures sufficient power to detect clinically meaningful effects of the intervention; if it does not, the limitation related to the lack of power should be discussed.
7) Table 2. Please report each component of the TMIG-Index of competence, as specified in table 1
8) Please revise English.

Minor Essential Revisions

1) Please clarify this sentence in the background section: “However, realistically, for the community-dwelling elderly, materials are needed to allow which they can keep track of and maintain…”

2) Please note that there is a typo in the name of the categories for self-reported health in the control group, it should be “very good”, “good”… not “almost everyday”…

3) Please replace the term “self-rerated health/self-related health” with “self-reported health” throughout the manuscript.

Discretionary Revision

1) It would be interesting if the authors could show the TAKE10 check sheet, TAKE10 calendar and the DVS variety score sheet as Appendix.

Level of interest: An article whose findings are important to those with closely related research interests

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:

No conflict of interests