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: 12 April 2012

Reviewer: Elisabeth Rydwik

Reviewer’s report:

General comments
The study evaluated the effect of a public related intervention in regard to diet and physical activity and intervention such as this is warranted in order to evaluate long term effects in the area of public health. However, the design of the intervention is not updated according to the recommendations for example from the WHO and American College of Sports Medicine in relation to physical activity. Also, no consideration has been taken in regard to motivational aspects, which the literature has shown to be vital in order to change and sustain a healthy life style.

Major compulsory revision
The Background need to be more updated in relation to public health interventions and health promotion strategies. It should also state the evidence for how a physical exercise program should be performed in order to improve health and fitness related factors.

In the Method section it needs to be stated during the subheading Subject how the randomization procedure was performed and why it was not a “completely randomized trial” as is stated in the Discussion. The DVS needs to be more thoroughly described. It is not clear if the frequency is part if the DVS or not. If it is, it doesn’t make sense that the total score is 10. Also the DVS and the frequency are reported separately in the tables. Also, the DVS is reported with mean (sd), according to the description of the measure, I cannot judge whether this is appropriate or not. The description of the physical activity measure needs to be elaborated. The content of the exercise sessions needs to be described. Did it constitute the same type of exercises as in the home-based exercises? This is not clear. In addition, as stated above, the intervention program is not based on the current knowledge following recommendations from health and research organizations. At least, this must be discussed. Also, why did the authors evaluate the stretching program with a physical activity measure asking for walking, mild exercise and sports habits?

Table 3 is difficult to read since it contains a lot of information and only report frequencies. I suggest either collapsing categories or finding another way of presenting data.

I lack a discussion about the content of the intervention and also in relation to the
outcome measures used. Also, what might an increase in DVS of 1.2 mean, do the authors consider this to be clinically significant?

Minor essential revision

The wording “elderly” is used throughout the manuscript, which implies that the subjects are very old and frail. I suggest using the term “older adults” instead. The term self-related or self-rated health is used, which is confusing, the correct wording should be self-rated health.

In the Background section, the first sentence, the word “and” is used several times; I suggest using it only at the end of the sentence. The sentence starting “However, realistically…” is not clear to me and need to be clarified.

In the Method section, the sentence starting “Twenty candidates did not satisfy…” should be rewritten, for example 94 is spelled with letters within in the sentence. Also the wording “.became the subjects..” should be altered to “were included..”. Why has parenthesis been used around the sentence starting “Subjects were allowed…”. Baseline is written as one word.

During the sub-heading Outcome measures the TMIG-index should be spelled out the first time it is mentioned.

In the Result section, I suggest the word parameters should be changed to variables. Also, the attendance rate “was” 68.1% instead of “is”.

The Discussion starts with a reference. I suggest starting with a short summary of the results and then discussing the results in relation to other studies.

**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:**

I declare that I have no competing interests.