Reviewer's report

Title: Effect of an individually tailored one-year energy balance programme on abdominal fat and body weight in recent retirees: a cluster randomised controlled trial

Version: 1  Date: 1 July 2009

Reviewer: Andres Digenio

Reviewer's report:

This study examines the effect of an energy balance program on the prevention of abdominal fat accumulation and weight gain in recently retired Dutch subjects. This paper is important because a successful lifestyle intervention in this population group could have a significant impact in reducing the risk of chronic diseases.

A detailed description of their study protocol has been previously published. The effectiveness of the intervention is tested in a cluster randomized controlled trial. The intervention focuses on increasing awareness of energy balance and help subjects modify behaviors according to their preferences. Follow-up is provided at 12 months (end of intervention) and at 24 months (to test for sustainability).

The study failed to demonstrate that the intervention program was effective in reducing waist circumference, body fat, body weight, or blood pressure. Inadequate power, the recruitment strategy, the study participation in itself -in control group-, possible low exposure to the intervention and the format of delivery were cited as possible explanations for the lack of an effect. An interesting finding was a reduction in waist circumference in a subgroup of men with low education.

General Comments:
The manuscript is written in a logical way, the methods utilized to answer the hypothesis are appropriate, the results and study limitations are clearly discussed.

However, the authors should revise the manuscript and report on additional data (dietary and physical activity habits and psychosocial determinants of these behaviors) collected as per their original method's study published in this journal in 2006. I strongly believe that the manuscript could be enriched considerably if that data was presented. Once that data is incorporated the manuscript will need to be reviewed by a statistician.

Specific Comments:
Methods Section:
- Need to specify that the intervention is of 12 months duration and that the 24 month is simply a follow-up for sustainability in the methods section

- The assessment of program utilization is not clear. It seems to be based on returning a CD-ROM indicating what behavioral aspect they are most interested in modifying. However unless the CD contains continuous login information from the subjects it does not indicate program utilization, only compliance with the study request. This needs to be further clarified.

Discussion section:

- The results at 24 months –that is the lack of sustainability- should be discussed.

- The discussion needs to finish with what the authors plan to do with their intervention program in the future. The earlier methods paper (2006) stated that if the intervention was effective and sustainable it may be implemented in about 100,000 retirees per year. Are the authors planning to stop the program or maybe test the program in a larger cohort trying to use a different recruitment system?

- Limitations: The authors need to acknowledge that the fact that few women were included limit the generalization of the results of the study. Additionally, visits to the community health centers may have also confounded the results by acting as an intervention in the control group. Personal contact with a known individual could be a very strong motivator for behavior change. This may be important considering that exposure to the real intervention was perceived to be low.

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, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests.