Reviewer’s report

Title: A novel school-based intervention to improve nutrition knowledge in children: Cluster Randomised Controlled Trial

Version: 6 Date: 19 August 2009

Reviewer: Vera Verbestel

Reviewer’s report:

DISCRITIONARY REVISIONS

Comment 1 (Introduction):
See last sentence of the third paragraph in the introduction:
“In order to achieve this it would be useful to increase knowledge of nutritional content of commonly consumed foods and understand food labeling”. What is the purpose of mentioning the importance of understanding food labeling in reaching the key targets to improve the nation’s diet? Is this relevant for the content of the article? This was not part of the intervention?

Comment 2 (Method section: recruitment and randomization of schools):
In the author’s response to the fourth comment of the first revision, arguments for matching the schools for deprivation and size are raised. I should also integrate the argument in the article as it will add to the foundation of the research.

MINOR ESSENTIAL REVISIONS

Comment 3 (Method section – Delivery of the intervention):
The first paragraph describes the procedure for the questionnaires and is in my opinion not part of the intervention delivery (see also comment 9).

Comment 4 (Method section – Development of the nutrition knowledge questionnaire):
What is the reason for only assessing knowledge about recommended portions of fruit and vegetables and not about recommended portions of the other nutrition components included in the intervention? Can the author comment on this?

Comment 5 (Method section – Secondary outcomes)
“We also asked whether they would try to eat a healthy diet”. Can the author clarify which scale has been used to assess this item?

Comment 6 (Method section – Secondary outcomes)
As a reader you can assume that the attitudes towards healthy eating have been assessed in the knowledge questionnaire (pre – post). However, this is not explicitly stated in the article and it is advisable to add this in the questionnaire section.
MAJOR COMPULSORY REVISIONS

Comment 7 (Introduction):
The introduction does not reflect a solid theoretical basis. In particular, the influence of nutrition education/nutrition knowledge in establishing a healthy diet is not sound enough. In addition, the introduction seems to implicitly accept that knowledge will lead to behavioral changes while previous research has shown that only improving knowledge will not be sufficient. Can the author comment on this and/or revise the introduction?

Comment 8 (Introduction):
See last sentence of the third paragraph in the introduction: “In order to achieve this it would be useful to increase knowledge of nutritional content of commonly consumed foods and understand food labeling”. Can the author support this aspect by more recent evidence and in particularly in 9-11 years old children? The reference which is currently mentioned is quite general and not the most relevant in describing the role of nutrition knowledge in establishing healthy food behaviors in the age group of the article.

Comment 9 (Method section – Development of the nutrition knowledge questionnaire)
It is in my opinion advisable to broaden this part of the method section and to not only restrict it to the development of the questionnaire. This means that it is advisable to include the procedure of distributing the questionnaire in this section (see comment 3) and to describe the entire content of the questionnaire (see comment 6).

Comment 10 (Discussion)
In my opinion, the discussion still needs to be improved. The focus is now put on the prevention of overweight and different (multi component!) school based interventions are discussed. However, the current intervention is implemented at the classroom level and was aimed at increasing nutrition knowledge and these areas are not thoroughly/directly discussed. Can the author comment on this and/or revise the discussion?

Level of interest: An article of limited interest

Quality of written English: Acceptable

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