Reviewer’s report

Title: A Randomized Controlled Trial to Investigate the Impact of a Low Glycemic Index (GI) Diet on Body Mass Index in Obese Adolescents

Version: 1 Date: 19 December 2013

Reviewer: XIAOZHONG WEN

Reviewer’s report:

Overall, this is a well-designed and –conducted study. The writing is quite clear and straightforward. The results make sense. This study has significant contribution to the rare literature particularly RCT on weight management in Chinese adolescents. The manuscript can be strengthened if the authors can address the following comments.

Major Compulsory Revisions

1. It will be interesting to examine which changes in dietary/nutrient components (i.e. decreased calorie intake, increased fiber intake, reduced fat intake, or increased protein, or any combinations) could explain the larger reduction in obesity indices among the low GI group.

2. The completion rate was higher in the low GI group (65.4%) than that in the control group (51.9%). How much does this contribute to the observed differences in obesity indices between the two groups?

3. The participants’ acceptance may be an important factor for both short-term and long-term success of any obesity intervention programs like this study, especially if calorie restriction is used. Was the information of acceptance collected in this study? If so, which diet is more acceptable by subjects, low GI or conventional diet?

4. How many of the study participants finally met the dietary requirements of low GI diet or American Diabetes Association conventional diet? It is useful to address participants’ compliance during the intervention and follow-up.

5. Was statistical power estimated during study design? Is current sample size (52 per group at baseline, 27/34 at 6-month follow-up) sufficient to detect the changes/differences in cardiometabolic risk factors?

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

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

Declaration of competing interests:

None.