Reviewer's report

Title: Steps/day predict changes in anthropometric outcomes: HUB City Steps

Version: 1 **Date:** 12 September 2012

Reviewer: Shigeru Inoue

Reviewer's report:

Thank you for giving me a chance to review this article. My comments are as below.

Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

1. Methods, Results

Because this study includes clinical outcomes in the analyses, stratified analyses by gender is ideal. However, the number of participants seems small for men. Thus I recommend subgroup analyses just for women to check if the results change by stratified analyses or to restrict participants to women only.

2. Method, Study design, first paragraph

Although the study protocol was already published in another journal (reference 25), I felt that fundamental information of the method is lacking, for example recruitment method for participants, inclusion and exclusion criteria. Participants' flow would also be useful for readers to understand this study.

3. Methods, Results

Medication status of participants was unclear. Did participants include persons who take medicine for hypertension, dyslipidemia and diabetes? How did authors deal with change of medication status during the study?

4. Method, Measures, 2nd paragraph,

Data procedures for steps/day were not very clear. I wonder if authors collected any data regarding how long participants wore pedometer. Or they may include all data reported by participants. Please make this issue clear in method section.

5. Method, Measures, 2nd paragraph,

Did authors include all participants who reported steps/day for at least one day? Or did authors have any inclusion criteria of minimum number of days which participants reported their step counts?

6. Study limitation and strengths

I think that there are some other limitations.

1) We are not sure how seasonal change affected the results. Intervention started from winter and finished in summer. It may cause the increase of physical

activity and decrease of body weight.

2) There is no data on diet which also affect clinical and anthropometric outcomes.

3) Lack of data on medication status, non-fasting measure of triglycerides and glucose are also limitations of this study.

Authors should discuss these issues in limitation section. Regarding 3), authors might have addressed this issues, for example, doing blood sampling at the same timing in a day or asking participants how long had passed after meal at blood sampling. If authors did those efforts, descriptions about those in method section might be useful.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

7. Result, Anthropometric and clinical parameter associations

Descriptions such as "-0.13 # r # -0.14" in line 250 should be corrected as "-0.14 # r # -0.13". This comment is also applicable to line254 and 256.

8. Method, Measures, 1st paragraph,

Method of measuring body fat had better be described. Does Tanita scale use impedance measurement method?

9. Table2

Please indicate the number of participants for "Full dataset", "Truncated dataset", and "Excluded dataset"

Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore)

10. Table3

If authors agree, title had better include "full dataset".

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

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.