Reviewer's report

Title: A meta-analysis of weight gain in first year university students: the case for the Freshman 15?

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Reviewer: Mu Chen

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The authors conducted a meta-analysis of prospective studies on the weight gain of first year college students and on average freshmen gained 1.4kg. Overall this meta-analysis was well written and carefully conducted, but it has several major concerns and minor issues as listed below.

Major Compulsory Revisions
1. Low publication bias was found in the meta-analysis and the “trim and fill” method could be used to show whether the result of original analysis is robust. Also, sensitivity analysis could be conducted to examine whether publication bias still exists when removing some particular studies.
2. The heterogeneity of this meta-analysis was high and the author suggested that it could be attributed to sample size and duration of follow-up. However, several stratified analyses including stratifying by study length were conducted but heterogeneity remained high in each of the sub-groups. The reason of the high heterogeneity is still unclear and the author could further stratify the studies by sample size if that might be the source of heterogeneity.
3. The second author should conduct the entire screening independently and then the results should be compared with those from the first author. Whereas in current study only a small fraction of studies were screened by the second author.

Minor Essential Revisions
1. More details of the study flow should be depicted in Figure 1, showing numbers of studies being excluded in title and abstract screening stage as well as full-text review stage due to different inclusion criteria.
2. More primary characteristics, including percentage of men, baseline BMI, age, retention rate, study design, of the included studies should be shown in Table 1.
3. For studies with missing SDs for measurements of weights, the author should mention how exactly SDs/SEs were imputed.

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