Author’s response to reviews

Title: Lifestyle factors associated with underweight among Japanese adolescents: a cross-sectional study

Authors:

Hirotaka Ochiai (h-ochiai@med.showa-u.ac.jp)
Takako Shirasawa (shirasawa@med.showa-u.ac.jp)
Hinako Nanri (nanrih@med.showa-u.ac.jp)
Rimei Nishimura (rimei@jikei.ac.jp)
Shohei Nomoto (s_nomoto0731@yahoo.co.jp)
Hiromi Hoshino (hhiromi@med.showa-u.ac.jp)
Akatsuki Kokaze (akokaze@med.showa-u.ac.jp)

Version: 2 Date: 25 Jun 2017

Author’s response to reviews:

Reviewer 1

Dear Dr. Frayon,

Thank you very much for your review and detailed comments.

We have revised our manuscript according to your comments. In this revised manuscript, the revisions were highlighted in blue color. The revised manuscript was edited by a native English speaker.

Our responses to your comments are described below.

Reviewer #1: The authors correctly respond to most of my concerns. However, there is still some points needing clarification.

Even if authors try to explain the used of the birthweight in their models, the reference add by authors showed that birthweight affect BMI of adolescents only in boys. Moreover, the
birthweight is not categorized using the gestational stage at birth: a weight of 2500 g may be accurate for premature children?

Response: We added “the reference that showed the association between birthweight and BMI in girls” to this revised manuscript (line 138, P9). Furthermore, the gestational age was described as a limitation because it was not considered in this study (line 272, P17). We appreciate your comment.

Gender was used to adjust OR in table 6 but analysis of the effect of the gender as a variable in the model was not made. Please indicate the OR for girls using boys as a reference.

Response: According to your comment, we calculated the OR and it was indicated in Results (lines 187-188, P12).

The paragraph comparing underweight in Japan and other country (lines 209-225) need to be rewrite to avoid multiple sentence repetition. Moreover, the method used to obtain underweight prevalence in the reference 26 cited (% of overweight ?) is not clear.

Response: Based on your comment, we rewrote the manuscript and the manuscript was edited by a native English speaker (lines 207-223, P13-14). In addition, the detail of the method was described and the reference regarding the detail was added (line 210, P13). Thank you for your comment.

Concerning age, even if authors indicated that subjects were asked to fill in their age, I believe that participants indicate a single round value (12 or 13) and not an age determinate by the date of birth (12.1, 12.2, 12.3...). Because BMI cut-off by Cole differs by age decimal range, cut off used need clarification. Did the authors used 12.0 value for all participants with 12 years old age or did they used 12.5 cut off value? In all the case, this need to be indicated in limitations.

Response: Based on your comment, we indicated it in limitations (lines 277-280, P17). Thank you very much for your comment, which helped us improve our manuscript.

Lines 140-142: I dont understand what the authors want to explain?

Response: We revised the sentence (line 140, P9). Description about effect modifications was specified in Results (lines 188-189, P12).
Lines 154-155: Please simplify: 'Boys were significantly higher and heavier than girls.'
Response: In accordance with your comment, the sentence was revised (lines 152-153, P10).

Lines 155-156: Please correct the syntax of the sentence.
Response: Based on your comment, we revised the sentence (lines 153-154, P10).

Lines 156-157: Please suppress unnecessary information: A statistically significant association between boys and girls was observed in physique;
Response: In accordance with your comment, the information was omitted.

Lines 231-233: Is not clear if the authors analysed data by others authors or their own results? Total energy intake is not measured in this study so authors may present carrefully their hypothesis and clearly indicate hypothesis and results.
Response: Because the sentence was based on our hypothesis, we clearly indicate it in the sentence (lines 229 and 232, P14).

We thank you again for your helpful comments. We really appreciate your review.

Dear Prof. Dr. Herman Van Oyen,

Thank you very much for your review and detailed comment.

We have revised our manuscript according to your comment. In this revised manuscript, the revisions were highlighted in blue color. The revised manuscript was edited by a native English speaker.

Our response to your comment is described below.
Please revise the text to improve the English

Response: According to your comment, we revised the text and the text was edited by a native English speaker.

We thank you again for your helpful comment. We really appreciate your review.