Author’s response to reviews

**Title:** Nationwide shifts in the double burden of overweight and underweight in Vietnamese adults in 2000 - 2005: two national nutrition surveys.

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**Author’s response to reviews:** see over
Dear Editor,

With this letter we would like to resubmit our secondly revised manuscript entitled “Nationwide shifts in the double burden of overweight and underweight in Vietnamese adults in 2000 - 2005: two national nutrition surveys” (MS: 1440701337388786) for your journal, BMC Public Health upon your second request of revision.

The manuscript has been revised extensively upon comments by two reviewers. Each revision made upon each reviewer’s comments has been addressed as followings:

Rebuttal to Reviewer 1

Minor Essential Revisions

Although the authors adjusted most of the reviewers’ comments in the revised version, one comment (regarding multiple logistic regression) was not addressed properly. In my previous report, I suggested the authors to use multiple multinomial logistic regression instead of multiple binary logistic regression. It was necessary as the outcome variable (BMI) has three or more categories (e.g. underweight, normal weight and overweight). Multiple binary logistic regression is used when outcome variable has only two categories. Use of two categories for outcome variable means that the authors merged normal weight with underweight when they estimated odds ratio for overweight and merged normal weight with overweight when they estimated odds ratio for underweight. In both cases, the results are biased (either underestimated/overestimated) due to merging two different groups. In multiple multinomial logistic regression, the authors should take normal weight as reference category.

Rebuttal: We agree with the reviewer’s comment. We have re-analysed the data using multiple multinomial logistic regression, revised the Table 2 and the text accordingly.

Rebuttal to Reviewer 2

Major:

1- Analysis still had not taken into account the complex design of the survey. The answer that “datasets were analyzed using weighing factors of complex samples based on the population structure which were stratified by ecological region, sex gender, age group and urban-rural area in 1999 (NPHC, 1999) and in 2004 (Population Census, 2004) for the datasets of NNS 2000 and NAOS 2005,
respectively.” Is not the answer. There is special software or procedures and statistical packages to account for complex design.

Rebuttal: We did use complex sample procedures of the software SPSS 15.00 to analyse the data which took into account the complex design of the surveys. We have added this information in the Statistical analysis.

2- Table 2- all variables adjusted for all the other variables in the table make no sense, many of the variables are highly correlated.

Rebuttal: We agree with the reviewer’s comment. We have taken out this sentence.

Minors:
1- The phrase in abstract: “…while the level of undernutrition declined was still high in 2005” needs correction.

Rebuttal: We have corrected this sentence.

2- Conclusion is to generic and is not based in the results: “…Multiple Intervention strategies should be implemented to combating double burden of nutrition in Vietnam with relevant interventions for specific groups.”

Rebuttal: We have taken out this sentence.

We have tried our best to improve the manuscript as commented by the reviewers and the editor. We do expect that this revised manuscript will satisfy the reviewers and the editor and it will be accepted for publication.

Thank you very much for giving our manuscript an opportunity to be reviewed and revised.

I am looking forward to your acceptance.

With kind regards, and on behalf of the authors,

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