Reviewer’s report

Title: Associations between BMI and 10 candidate genes at ages 4, 7 and 10 in a large UK sample

Version: 2 Date: 6 September 2007

Reviewer: Hyung Doo Shin

Reviewer’s report:

General

In this manuscript, the author describes an association between BMI and 10 candidate genes at ages 4, 7, and 10 in a large UK sample. But, none of the associations were significant after correction for multiple testing. Overall, this MS is not well describing their results from large sample size. On the study, there are several points of concerns as below.

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

1. There may be miss information of parents in qTDT analysis. I do not find any description about parents. Did they qTDT without information of parents?
2. The discussion was very insufficient to fully address their results.
3. Description about statistical methods should be added.

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

1. In chi-square analysis, I wonder how to divide by three groups (obese, overweight and normal). There may be provided the range of BMI of three groups in Material and Method session.
2. A childhood BMI is very changeable by their age, even several months. If authors investigated the comparison between BMI z-score differences and genotype per annual or 6 months, there may be obtain more valuable results.
3. Clinical profiles of subjects are missing
4. The author may provide the results of analysis in form of supplementary document (not just saying "data not shown).

Discretionary Revisions (which the author can choose to ignore)
What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests.