Reviewer’s report

Title: The obesity-risk variant of FTO is inversely related with the cautious, low-appetite, and slim “So-Eum” constitutional type: Genome-wide association and replication analyses

Version: 4 Date: 25 November 2014

Reviewer: Yun Qian

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Major Compulsory Revisions
1. In Abstract, the authors stated “Therefore, the obesity-risk variant of FTO might be involved not only in body mass increase but also in the determination of body constitution type.” This statement does not seem to be appropriate. The study didn’t analyze the relationship between the genetic variants in FTO gene and body mass increase at all. So it is not suitable to draw this conclusion.
2. Are there any differences between SE and NSE in characteristics, such as age, gender, BMI, waist circumference, fasting blood glucose, etc? Between TE and NTE? As FTO gene related to diabetes has been reported, the authors should consider the potential confounding effect.

Minor Essential Revisions
1. In Materials and Methods, the ethnicity of the subjects should be stated clearly.
2. In order to minimize the subjectivity for classification, the SCAT was used to classify subjects. The authors should explain what advantage SCAT has and how it can demonstrate the subjectivity.
3. The authors should state the criteria for inclusion and exclusion of participants in Materials and Methods.
4. There are continuous variables and categorical variables in Table 1. The footnotes should be revised.

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.