Reviewer's report

Title: Association of sleep duration and insulin resistance in Taiwanese vegetarians

Version: 1 Date: 20 May 2012

Reviewer: Daiki Kobayashi

Reviewer's report:

This study was conducted to evaluate association between sleep duration and insulin resistance vegetarians. This is an interesting topic, because this study supports previous studies in specific people. However, there are some points to strengthen this study.

Major points

First, authors partition sleep duration into two groups (#8, >8). According to the previous studies, which evaluated relationship between sleep duration and metabolism, obesity, or diseases, such as hypertension, short sleep duration is also risk factor. Moreover, these kinds of study partition sleep duration into 4 or 5 groups (6<, 6-7, 7-8, >8, etc). Please explain why authors decided to do so.

Second, the AUC with multi-variate logistic regression analysis is low. There may be more important factors to predict insulin resistance.

Minor points

First, how different are the dietary nutrition between people with normal food intake and vegetarians? Because this study deals with metabolism (insulin resistance), nutrition such as carbonate are important. Please describe these differences from normal people.

Second, I don't think that univariate logistic regression analysis is necessary, because authors had already performed univariate analysis with t-tests or Wilcoxon ank-sum tests, and multi-variate logistic regression analysis. Too much analysis may induce # error.

Finally, this kind of study sometimes mentions SAS (Sleep apnea syndrome). Authors should refer this disease, even if there is no data about SAS.

Thank you for giving me the chance to review your article.

Level of interest: An article of limited interest

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