Reviewer's report

Title: Association between difficulty initiating sleep in older adults and the combination of leisure-time physical activity and consumption of milk and milk products: a cross-sectional study

Version: 2
Date: 23 August 2014
Reviewer: Jae-Young Lim

Reviewer's report:

Major Compulsory Revisions

This is a meaningful trial to investigate independent associations between DIS (difficulty initiating sleep) and engaging in LTPA (leisure time physical activity) or consuming milk and milk products, and to examine whether combining these two habits is more strongly associated with a lower prevalence of DIS. However, this manuscript doesn’t seem to have appropriate sample size and well-control baseline characteristics of old people to support whether the author’s conclusions are valid.

I wonder whether one subgroup (Not engaging LTPA and Not consuming milk) had enough sample size (n=19, 4.8%) for statistical power to find out the association between DIS and LTPA along with milk consumption (Table 4). Sample size for analysis of odds ratio was relatively small compared to other subgroups (n=38, 86, 254). Therefore, the procedure to determine proper sample size of subgroups needs to be included.

Second, I’m concerned about the accuracy of milk, yogurt, or cheese consumption amount measured by self reported questionnaire.

Third, DIS (difficulty initiating sleep) is one of the insomnia, and may be related to other neuropsychiatric disorders (eg. depression, anxiety disorder, cognitive impairment, etc.). Therefore, these conditions which may have a potential influence on DIS need to be considered in the baseline characteristics of older people. If necessary, they could be included in multiple logistic analysis as a confounding factor.

Thanks.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

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.