Reviewer’s report

Title: Relationship between ethanol consumption and TBL2 rs17145738 on LDL-C concentration in Japanese adults: a four season 3-day weighed diet record study

Version: 0 Date: 03 Jul 2019

Reviewer: Reviewer 2

Reviewer's report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses a testable research question(s) (brief or other article types: is there a clear objective)?
Yes - there is a clear objective

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?
No - there are minor issues

EXECUTION - Are the experiments and analyses performed with technical rigor to allow confidence in the results?
Yes - experiments and analyses were performed appropriately

STATISTICS - Is the use of statistics in the manuscript appropriate?
Yes - appropriate statistical analyses have been used in the study

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?
No - there are minor issues

OVERALL MANUSCRIPT POTENTIAL - Is the current version of this work technically sound? If not, can revisions be made to make the work technically sound?
Probably - with minor revisions

PEER REVIEWER COMMENTS:

GENERAL COMMENTS: The study does provide novel information, though there are several limitations in the study.

REQUESTED REVISIONS:
I believe the information provided by this study, though on limited subjects residing in a confined geographical location, can provide insights into the correlation between dietary and genetic factors. One issue that could be raised is that majority of SNPs identified in this study were not shown to be associated with LDL levels or LDLr (see below) previous genome wide association study.
1) rs651007 (T allele) is shown to be associated with Endoglin (a type I membrane glycoprotein).
2) rs1160985 is associated with diversity in Gut Microbiota (that can influence LDL levels
3) rs17145738 is associated with HDL and Triglyceride levels.

More explanation is needed for methods used.

In addition, Authors need to explain their results in regard to previous studies showing how moderate alcohol intake improved HDL levels. More explanation is needed for methods to assess alcohol intake (different % alcohol levels are present in sake, beer and whiskey).

Previous study from Moura lab, evaluating the lipid profiles of 227,359 Brazilian individuals, found an average increase of 7mg/dL during the winter compared to summer. Author needs to explain the lower average increase observed in their study.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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