Reviewer’s report

Title: Dietary quality indices modifies the effects of Melanocortin-4 receptor (MC4R) rs17782313 polymorphism on cardio-metabolic risk factors and hypothalamic hormones in obese adults

Version: 0 Date: 03 Jan 2020

Reviewer: Johnny Chahine

Reviewer's report:

The objective of this study to assess the interaction between MC4R rs17782313 polymorphism and diet quality indices on cardio-metabolic traits. The authors found that having the CC genotype is associated with a worse metabolic profile, mainly in those with low diet quality indices. This is very interesting because it further highlights the interaction between our genome and the external environment; none of them alone can fully explain the picture.

The sample size is adequate, the tests used are validated and the conclusion is adequately supported.

Minor comments are inserted in the PDF attached.

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

Yes

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

Yes

Are the conclusions drawn adequately supported by the data shown?
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Yes
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
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I am able to assess the statistics

Quality of written English
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Acceptable

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