Reviewer’s report

Title: Adherence to low carbohydrate diet and prevalence of psychological disorders in adults

Version: 0 Date: 13 Aug 2019

Reviewer: Volker Mai

Reviewer's report:

The authors examine in a cross sectional setting the possible correlation between low card diet and prevalence of psychological disorders in adults. It is unclear how identifying differences in individuals already suffering from psychological disorders would help in either identifying etiology or improving treatment. While the study is based in a previously described SEPAHAN project, it is unclear why the total number of responders included is only half of those that provided the questionnaire on psych health. It seems that both phases weren't completely overlapping and that is a bit confusing. Some background on diet, specifically low carb diet, and psych disorders is mentioned but not put sufficiently enough into perspective. There seem to be contradictory findings and that should clearly be pointed out. It is unclear why the authors limit the analysis to low carb diet, it certainly would add value to include a more comprehensive analysis of potential dietary differences in individuals with psych disorders. As etiology can't be explored using the cross sectional design, identifying potential dietary shortcomings in individuals with psych disorders might provide some novel insight and open new avenues for supportive treatment regimen. Two different figure 1's are listed, only one shown and Figure 2 listed but not shown. Range of LCD score in quartiles seems missing, this is crucial as low range would indicate low ability to link with psych disorders.

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