Reviewer’s report

Title: Dietary factors associated with the Metabolic Syndrome in Brazilian adults

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Reviewer: João Mota

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The article by Dr. Oliveira et al., evaluated the association of diet with the presence of Metabolic Syndrome in adult population sample (n=305). The authors measured body composition, dietary intake, biochemical analyses and clinical assessment was made did clinical evaluation. They concluded that higher intake of saturated fat is a risk factor to Metabolic Syndrome and fruit and high diet variety are protective factors. No Brazilian study investigated the influence of dietary intake on Metabolic Syndrome.

Major Comments:
Methods section:
Authors not mentioned how many people had to diagnose conditions of Metabolic Syndrome.
Authors adjusted the logistic regression by two models. The second model was adjusted for gender, age, BMI and TCV. Why not adjusted for waist circumference and fat percentage?

Results and Discussion section:
Diet variety was represented by major consumption of fruits, vegetables, fiber and dairy products. This result could be influence only by fruits servings. Is it correct? The authors should explain this result.
I suggest performing a multivariate logistic regression to confirm that higher intake of saturated fat was a risk factor for MS and varied diet and adequate fruit were protective factors.

Minor Comments:
I suggest that the text goes through a review of a native English.
Page 2, abstract: Authors used abbreviations that are not explained (TCV). After explaining the abbreviation for the first time, authors should use only the initials MS. Adaptation on Metabolic Syndrome criteria was not mentioned.
Page 3, line 5: authors used some abbreviations that are not explained. These proteins in parentheses are not necessary to understand the text.
Page 5, line 10: the correct translation of HDL-c is high density lipoprotein cholesterol.
Page 6, results, line 1: exclude parentheses.
Page 7, line 15: data of macronutrients was not observed in figure 2.
Level of interest: An article of importance in its field

Quality of written English: Not suitable for publication unless extensively edited

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.