Reviewer’s report

Title: Characterization, dietary habits and nutritional intake of omnivorous, lacto-ovo-vegetarian and vegan runners – a pilot study

Version: 0 Date: 13 Mar 2019

Reviewer: Paola Rodriguez Giustiniani

Reviewer's report:

Characterization, dietary habits and nutritional intake of omnivorous, lacto-ovo-vegetarian and vegan runners - a pilot study.
Nebl et al.

The study was designed to compare nutrient intake of omnivorous, lacto-ovo-vegetarian and vegan recreational runners with energy and nutrient intake recommendations for general population from the German, Austrian and Swiss Nutrition Societies. Since many people is switching to a plant-based diet it is of interest to know whether vegetarian and/or vegan athletes are covering their nutritional needs. The authors' main findings highlight that more than half of each group was not reaching the recommended energy intake, carbohydrate intake was below of that recommended in the omnivorous population whereas it was adequate in lacto-ovo-vegetarians and vegans, protein recommended intake was exceeded in all the groups, vitamin D and cobalamin intake in lacto-ovo-vegetarians and vegans depended on supplement use and that surprisingly for some nutrients as iron, the recommended intake was covered through food in female vegans while it was covered via supplements in female omnivorous and lacto-ovo-vegetarians. This study conclusion is supported by the data presented. Please refer to some general and specific comments below, that, in my opinion, would further improve the manuscript.

General Comments:

In my opinion, improvements in grammar and writing style are required. Please proof-read the document several times throughout before re-submitting.

Specific Comments:

Abstract
L36: training sessions might sound better that training alone
L41: include absolute values and p-values (when significant) relating to every result included
L50: be specific when referring to the results regarding VEG
L57: keywords should not include words included in the title

Background
L61: check writing style and grammar throughout this paragraph
L62: nutritional form might not be the best wording
L65: add "of the population" or similar after 10%
L72: associations with instead associations on
L96: practice might not be the best word, consider change it (example: follow)

Methods
L125: no need to start with a capital letter after colon (:)
L128: no need to start with a capital letter after colon (:)
L130: rephrase last sentence
L139: check reference cited (37) as it's not the appropriate one
L155: change word surveyed
L156: describe BMI formula
L170: why SE? I'd rather see SD values
L179: P should be p, as that's how it's reported in the results

Results
L185: should not be reporting similarity in weight, height or circumferences. In my opinion, it's enough to refer the reader to see the table or just report the mean+SD
L204: use was instead of were; males and females instead of male and female. There are more cases in which you should check the use of females/males instead of the singular form: female/male
L230: consider changing the term: nutritional form
L241: men had higher intake…it is not clear higher intake of what…please re-phrase
L258: it should read "two subjects" instead "two subject". Please check singular and plural forms thorough the manuscript.
L296: "the" is not needed before zinc
L300: is there a way to measure how much of that iron consumed came from HEM and not HEM sources? If so, it would be really interesting to see. I would strongly recommend differentiating between iron sources when evaluating iron ingestion from foods

Discussion
L317: for the first time sounds too strong, you could say for the first time in German…(describe your population)
L328: please consider rephrasing this paragraph and avoid the question mark, try to make it a statement
L331: please add the word levels "athletes with general physical activity levels" or rephrase completely to make it more understandable
L342: "source" instead of "sources"
L354: "general fitness" instead of "the general fitness"
L368: "regarding to adequate fat intake" instead of "with regard…"
L431: if you add the iron sources consumed in the results, please add more discussion about this in the discussion
L446: "…with an intake below the reference range"

Conclusion
L468: when referring to the surprising advantages in the vegan population, please describe. In general, the conclusion should be rewritten and amplify more on the mean findings (example: information on fat intake, protein and carbohydrates as well as energy)

References
Please check references throughout, in some cases the reference listed in the manuscript corresponds to the reference number on the list (example: the reference for the German, Austrian and Swiss Nutrition Societies [34] it's listed ad [37] several times)
Tables
Please refer to p-values the same way you are referring to them throughout the manuscript. Either all with the capital letter (P) or without (p)

Figures
Please use SD instead of SE

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.

Unable to assess

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

Yes

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:

Needs some language corrections before being published

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