Reviewer’s report

Title: Ability of the Nutri-Score front-of-pack nutrition label to discriminate the nutritional quality of foods in the German food market and consistency with nutritional recommendations

Version: 0 Date: 13 Apr 2019

Reviewer: Stefanie Vandevijvere

Reviewer's report:

The introduction of front-of-pack labelling schemes is a hot topic in Europe. The performance of these labels (e.g. Nutri-Score) within country specific contexts is necessary to evaluate to choose the best option. The manuscript is of interest to contribute to the current debate on FOP labels in Germany but has some important limitations as well, in particular the use of crowd-sourced food database. The authors need to give more information in the methods on the collection period of the products included in the study, whether any checks are done to these data submitted by consumers and how representative these products are for all food products currently available on the German market. The latter could be done using Euromonitor data if no other data are available. In addition, some editing is necessary. There are numerous instances where different abbreviations for the same terms are used, and there is a lack of consistent word use.

Abstract:

Background

*Line 10: Be consistent in the way you describe 'foods/foodstuff/food products/…'. Please use the same word across the whole manuscript

Methods

*Line 19: Add years of data collection in the abstract

Results:

*The last line of the results section needs to describe the results underpinning this statement as the current sentence is an interpretation of results which are not described
Keywords:
*I would suggest to add 'food-based dietary guidelines' and 'front-of-pack labeling' to the keywords as these appear recurring in the manuscript

Background:
*Please be consistent in the use of the abbreviations. FSA and NPS are used interchangeably, which is confusing for the reader.

Line 55-57: Please clarify the range of healthiness of the color categories
Line 82-86: Rewrite this sentence so it is clear to the reader that you are still talking about the 'international study' of the sentence before
Line 82-86: Eliminate 'in 12 countries (including Germany)'
Line 86-87: Replace 'the 12' by 'all'
Line 86-87: Eliminate 'to'
Line 92-94: Please rewrite so it is clear the Nutri-Score classification will be compared to 'German' FBDG

Methods:

Food composition database
* How many of the total number of products are current and is this an adequate reflection or representation of products currently on the German market? 8000 products seems a low number at any given time, and especially if the data are across several years. A check on representativeness could be done using Euromonitor data if no other data are available. Please give information on the years that these data were collected.
* Are there any checks on the data that are submitted by consumers?
*Did you recalculate the Nutriscore or just derived it from the OpenFoodFacts?
Food classification

*Be consistent in the way you describe 'food (sub)groups/food (sub)categories' as this can be confusing for the reader. Change also in the rest of the manuscript.

Line 119-121: Rephrase 'missing group labelling'

* Can you please explain the German food based dietary guidelines in more detail in the article

* Lines 119-121: Please specify how many products were excluded

Statistical analyses

Line 124-125: I do not agree with the use of 'FSAm/HCSP' for all different food categories, as this modified algorithm was made for cheeses, added fats and beverages only.

Line 128-129: Please justify why the Nutri-Score performance was considered as 'good' when three or more colours were available in a food category. For some food sub groups it may be fine if this is not the case as some of these groups are considered unhealthy across the board (cfr the WHO Europe NP model)

Results:

* Line 138-142: The categorization of the method section is not corresponding with the one of the results section as the main category 'beverages' is missing.

* Line 183-186/186-187/189-190: The result section should be clear and concise, without any interpretation given of the results, as this belongs to the discussion section of the manuscript. Please rewrite

*Line 186-187: Please clarify 'a majority' with percentages

* It may be nice to add some diagrams for some key food groups such as done in the Netherlands here: https://www.vmt.nl/Nieuws/Een_vijfde_tussendoortjes_scoort_goed_op_Nutriscore-190409072943?utm_source=dlvr.it&utm_medium=twitter

Discussion:

*Please provide a better comparison of the current results with the existing literature
Could you also discuss the implications of the German situation for other countries currently having adopted Nutriscore (i.e. some supermarket chains are controlled in Germany like Aldi and Lidl)

**Level of interest**
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

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

Needs some language corrections before being published

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