Reviewer’s report

Title: Impact of the intervention program “JolinchenKids – Fit and Healthy in Daycare” on energy balance related-behaviors: Results of a cluster controlled trial

Version: 0 Date: 30 Jul 2019

Reviewer: Joanna Myszkowska-Ryciak

Reviewer's report:

Dear Authors,

This is a very interesting article in which many aspects of eating behaviours and other lifestyle elements of pre-school children were raised. However, to improve the clarity of the manuscript, I would suggest to consider the following comments:

1. It is not entirely clear to me whether the kindergartens could choose and implement for one year only one module from the 5 proposed ones? I understand that by choosing the module on the promotion of the health of staff, no other activities concerning kindergartens contained in the children's module were carried out in kindergartens? If that was the case, it is worth emphasising in the discussion of the results. It may be worth considering splitting and discussing results in groups of institutions implementing the same program/module. It seems that the implementation of the mental well-being may have a smaller impact on e.g. children's diet/BMI ect.
2. This also raises the question whether other programs on nutrition and physical activity have been implemented in DCs in the period preceding the study or during the intervention. If so, it is worth adding this information to the limitations. Are such topics included in pre-school education programs/curriculum? If so, are they obligatorily implemented in kindergartens?
3. Line 228: What does it mean "normal clothes"?
4. In line 230 it is written: "children were classified as underweight/normal or overweight/obese…" however in the table 1 there are two categories: normal weight and overweight/obese? Please clarify.
5. Antropometry - general remark: I would appreciate information about the percentiles which were used to assess body mass, not just a reference to literature. This would make it easier to follow the methodology of the study because different criteria for assessing the correctness of body weight in children are used.
6. Healthy eating: I do not know if only the intake at home was evaluated, or were the meals consumed by children in the kindergarten also included in the assessment? The time spent by the child in the kindergarten (1-5 hours or more) could influence the results. Was this taken into account? Please clarify.
7. Please explain what you mean by unsweetened beverages. Is zero cola/light beverages, for example, fit this category? The same applies to snacks. How they were defined?
8. Was the FFQ questionnaire used in the study validated? Please add this information.
9. I am little uncertain by the criterion of no more than one snack a day (line 278). I think that the definition of a snack has an impact on it. If fruit or dairy products are used as a snack (i.e. a product
consumed between the main meals), this is good nutritional behaviour.

10. General remark for healthy eating part: It seems to me that an important criterion for the quality of the diet in this age is the consumption of milk and dairy products (source of calcium). Such data was collected but no such criterion was included in the results. It seems to me that this criterion is more important than drinking &gt; 4 glasses of non-sweet drinks.

11. The tables are not fully clear; there is no information on statistical significance.

General remark: I would suggest to consider whether it is worth to focus in this manuscript on physical activity and mental well-being, but in a separate article to discuss in more detail the data related to nutrition.

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

No

**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?**
If not, please explain in your comments to the authors.

No

**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 recommend additional statistical review

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Acceptable

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