Author's response to reviews

Title: Feasibility and antihypertensive effect of replacing regular salt with mineral salt- rich in magnesium and potassium- in subjects with mildly elevated blood pressure

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Author's response to reviews: see over
Dear Editorial Team

We thank for the valuable comment by the Reviewer Jianjun Mu. We made the suggested changes to the manuscript and in the following we will give the point by point comments the responses:

1. We agree that the sample size is small. This was a proof of concept study and therefore one of the aims was to find the size and magnitude of the potential effect. The observed changes in blood pressure were surprisingly large and thus the statistical significance was achieved already with quite modest sample size. We agree that results should be confirmed in a larger population. This is now discussed on p. 19 in the manuscript.

2. We calculated the individual changes in the systolic blood pressure (SBP) and diastolic blood pressure and a mean for those changes. These means are shown as a bar chart in the Figure 2: SBP $\pm 10.1$ mmHg Smart Salt group; $+3.8 \pm 9.9$ mmHg Regular Salt. The p-value $p < 0.002$ is the statistical difference between these changes in SBP Smart Salt vs Regular (i.e same p-value as indicated in the Figure 2 for SBP). We present these figures for both groups and p-value between them in the abstract of the revised version in order to clarify this aspect. Net difference was simple calculation (7.5 + 3.8 = 11.3) from these mean changes and not as appropriate to present like reviewer pointed out. Net difference is omitted now from abstract and text on p. 14.

In addition, in the result section we now provide the net difference only for those variables for which mean of change with standard deviation for both groups is already given in the tables 2-4. Net difference is provided to avoid replication of the table data in the text. We like to emphasize that statistical testing or p-values are not based on net difference figures, but testing is always based on mean values or mean variables for changes (0 vs 8 wk) tested by GLM or appropriate nonparametric test like indicated in statistical section and footnotes of tables.

3. Indeed it would have been interesting to collect 24-h urine more frequently like indicated by the reviewer, but we made a choice to have only two collections (baseline and end) since 24-h collections are quite laborious to the study volunteers. Initially this study was quite demanding for the study subjects because major part of their diet was intervened. We hesitated to risk the compliance to the study with too many 24 h urine collections and therefore we lack the 3 and 6 wk urinary data.
4. It is challenging to look the relationship between BP and urine sodium in this kind of study design because both groups are intervened at certain pre-defined level of sodium intake (Smart Salt low intake and Regular Salt normal intake). In other words there is no natural variation in their diet in respect of sodium intake since major part their daily diet was provided to them and certain sodium intake targeted. Single urine collection gives a reliable estimate at group level only. Therefore the only reasonable way to assess relationship of BP and urinary sodium excretion according to our view was to look for the sodium intake at group level like we show it in the table 4.

5. We fully agree that this Smart Salt replacement increase the compliance to the salt restriction. This is now further discussed in the discussion p. 18.

6. Native speaker has now checked the grammar of the manuscript.

I hope that manuscript is now acceptable for publication in the Nutrition Journal

We hope to hear from you in the near future.

Your sincerely

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