Reviewer's report

Title: Effects of Greenselect Phytosome® on weight maintenance after weight loss in obese women: a randomized placebo-controlled study

Version: 0 Date: 11 Mar 2016

Reviewer: Santiago Navas-Carretero

Reviewer's report:

The research reported in the presented manuscript addresses one of the most challenging issues in the fight against obesity, which is to prevent weight regain. In this context, the research presented is of interest and original.

Unfortunately, I have some essential key points which are lacking in the manuscript and therefore oblige me to reject for publication at this stage.

The most important issue is that to sustain the conclusion raised on the efficacy of the experimental product, a dietary analysis of subjects in each of the phases (weight loss, product consumption, and discontinuation) is lacking. In order to establish the causal relationship between product consumption and weight maintenance, differences in energy intake, in addition to macronutrient intake, must be analysed and taken into account.

In addition if compliance was, as reported by the authors, the same for each groups during weight loss, why there is a difference statistically significant on the weight loss? Was there any difference on energy and macronutrient intakes, physical activity performance,...?

It must also be noted that the claimed effect for the efficacy of the experimental product is the increase in energy expenditure, thus, an indirect calorimetry would have been advisable to do. A comment in discussion would be also valuable.

Furthermore, the authors explain that the study was blind for volunteers, but as CONSORT recommends, it should have been blind also for researchers, if that was the case, it should be specified. If that was not the case, it should be justified, and include an explanation on how potential biases in treatments may have been present.

The use of placebo as control is necessary, but dietary intake evaluation in both groups during all interventions should have been routinely implemented (through 72h food records, for example), in order to control for differences in food intake between intervention and control.
Taking this points into account, I would strongly recommend to rewrite and include dietary analysis to give strength to the results presented in the manuscript, and if considered by the editors, to resubmit a new manuscript version.

**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.

No

**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.

Not relevant to this manuscript

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

Needs some language corrections before being published
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