Reviewer's report

**Title:** Does Glycine max leaves or Garcinia Cambogia promote weight-loss or lower plasma cholesterol in overweight individuals: A randomized control trial

**Version:** 1  **Date:** 20 July 2011

**Reviewer:** Carlos Vasques

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1. Is the question posed by the authors new and well defined?
   Although the theme is not new, the clinical-pharmacological evaluation using controlled studies of soybean and Garcinia extracts, in order to verify the effectiveness as useful herbal medicines for the treatment of obesity, is relevant facing the lack of conclusive studies.
   The problem of the study is well defined.

2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work?
   **Minor Essential Revisions:**
   The exclusion criteria did not indicate if it was excluded subjects who were in hypocaloric diet or using hypolipemiants or anorexic drugs. Thus, considering that weight and lipid profile are key variables analyzed in this study, it is important to evidence if the subjects who used other methods for weight reduction or control of lipids were included in the study.
   To describe the equation used to determine body composition from the data of electrical impedance.
   The soy extract is standardized? If so, indicate the phytochemical marker and its percentage in the extract, as was done for hydroxycitric acid in relation to the extract of G. cambogia.
   **Discretionary Revisions:**
   Considering that the sample consists of subjects of both sexes, it would be interestingly to adjust the sex-dependent variables. For example, to adjust to the sex the WHR (Waist to Hip Ratio), BFP, Body fat percentage, leptinemia, HDL-cholesterol, between others.
   The same could be done about the variables dependent of the adiposity level, adjusting them to BMI or% BF. For example, lipid profile variables and adipokines.

3. Are the data sound and well controlled?
Although there is no standardized diet prescription, which would allow a better methodology control, the study appears to be well conducted.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?

Minor Essential Revisions:
The presentation and description of the results seems appropriate, showing the data needed to meet the problem proposed by the study. However, it should be pointed out if the increase of total caloric intake and nutrient analysis (such as carbohydrates, fats and dietary cholesterol) was significant for groups (show p values), comparing pre- and post-treatment.

5. Are the discussion and conclusions well balanced and adequately supported by the data?

Minor Essential Revisions:
Although it is mention in the discussion and abstract of the study a significant increase in HDL-C for EGML and GCE groups when compared to placebo after 10 weeks of treatment, the results only describe the significant difference for the group EGML versus placebo. In fact, comparing visually the post-treatment graphics between GCE and placebo it is not noticed the difference (Figure 1B). It is important to highlight this difference in the presentation of the results if it actually exists; if it does not, rephrase the statement in the abstract and discussion.

The conclusions are supported by the results.

6. Do the title and abstract accurately convey what has been found?
Yes, both the title and the abstract convey what has been found.

7. Is the writing acceptable?
 Needs some language corrections before being published.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**
'I declare that I have no competing interests.