Reviewer's report

Title: Perilla Extract improves GI health in a randomized placebo controlled double blind human study

Version: 4
Date: 4 December 2013

Reviewer: Kylie A. O'Brien

Reviewer's report:

Abstract
Suggest you state that the aim was to investigate rather than demonstrate, as you have no idea of the outcome prior to the study.

Methods section of Abstract: You need to state these were healthy subjects with GI discomfort and reduced bowel movements.

Results section of Abstract: typo 2nd sentence: imoroved (should be improved)

Page 5 IRB- spell out acronym

Page 5 Study Population 3rd sentence: should read 'focused on' not 'focused to'

Another typo: 'non' should be 'none' (of the exclusion criteria)

Need a reference to support statement that 'In general, females tend to suffer more from GI discomfort and reduced bowel movements...'

Page 6: Intervention. Did they take the capsules before or after food or whenever they wanted? Please state.

Page 7, 2nd paragraph, 2nd sentence: delete the word 'different' as it implies that the questionnaires used at the start were in some way different to ones used at the end of the study (English expression).

Page 7: 'self-report' instrument should be 'self-reporting'

Page 9, last sentence of 1st paragraph: suggest change end of sentence to '....were checked with the Wilcoxon Matched Pairs Signed Rank Test and Mann Whitney Test respectively' (English expression).

Page 10, 2nd sentence: strengthened not strengthen (spelling)

Page 11 2nd sentence 84% of responders (plural, add an s)

Discussion Section

you have stated that the validated questionnaires were designed and validated for a diseased population- what is this population? You have then stated that therefore it wasn't suitable for studies in healthy people, yet you used them anyway. The fact that improvements demonstrated in your study only ranged from slight to moderate may or may not have been a consequence of the lack of
sensitivity or unsuitability of the questionnaires- it could simply reflect the limited efficacy of the study medication. So you need to acknowledge this, rather than blame your results on the tests used. You could include your concerns about the tests under a section on Limitations of the study.

Page 13: in discussing limitations, you need to add in a few more. It doesn't appear that you monitored participants for any potential changes in diet and or exercise regime, which could be confounders.

English expression issue: What do you mean by: 'In consequence (this should be 'Consequently'), responder rates couldn't be statistically approved'? Do you mean that you couldn't demonstrate a statistically significant difference between groups in responder rates?

**Level of interest:** An article whose findings are important to those with closely related research interests

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

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare I have no competing interests