Reviewer’s report

Title: Zingiber officinale R. rhizomes (ginger): effect on pain relief in primary dysmenorrhea

Version: 2 Date: 5 January 2012

Reviewer: Patricia Herman

Reviewer’s report:

Overall this is an interesting study. It just needs to be reported with more detail and clarity.

Major Compulsory Revisions

1. Please have paper edited by a native English speaker. Most of the text was generally understandable, but the syntax and grammar need to be brought up to professional levels.

2. No indication was given as to how moderate and severe dysmenorrhea was determined. The name of the "multidimensional scoring system" should be reported as well as the score ranges that determined each level of dysmenorrhea.

3. Adverse events should be reported in the manuscript. Also, as stated on page 5, were gastrointestinal adverse effects the only ones subjects were asked to report?

4. The authors do not address the fact that they lost 13 (22%) of the placebo group to "discontinued due to dislike" and lost no subjects in the treatment group. This strongly suggests that there was a discernible difference between the ginger and placebo pills in terms of taste or adverse reactions. It also strongly suggests that blinding may not have been complete. There is also no information given on the 13 subjects lost from the placebo group to see if they were significantly different than those who remained in the study. If they were substantially different than those who remained the results of the study can be biased. It should also be noted that the statistical analysis was 'per protocol' since it ignored the 13 who left the study.

5. The study by DeLoach et al is referenced in the introduction and in the discussion section. It would be good to give the results of that study and how it compared or did not compare to the results seen in this study.

6. The discussion should include some information on the clinical significance of the changes seen. For example, the 1.4 point reduction in pain severity seen under protocol 1 is statistically significant (Table 2), but is it clinically significant?

7. The limitations should include the fact that 13 left the study, all from one group, they were not included in the analysis, and that they left due to a probable difference in acceptability of the capsules used in each group.
Minor Essential Revisions

1. Please report all p-values to a standard number of decimal places. The usual is 3 decimal places.

2. It is unclear what the pain severity section of Table 1 is reporting. What number (n) of subjects fell into each of the groups (mild, moderate, and severe)? It is possible that what is reported is the number in each group and the percent of subjects in each group who had moderate and severe dysmenorrhea. If so, please use "number (%)" instead of "frequency (%)" in the labels. Also, can you report the average score for each group?

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

Quality of written English: Not suitable for publication unless extensively edited

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

Declaration of competing interests:

'I declare that I have no competing interests'