Author's response to reviews

Title: The effect of long term combined yoga practice on the basal metabolic rate of healthy Adults

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Author's response to reviews: see over
Dear editor,
We thank you very much for the review of our manuscript. I am attaching the point-by-point rebuttal of the reviewers' comments. The manuscript has been revised by addressing/changing according to the review comments.

Though we had sought an extension of the deadline, we were able to revise the manuscript and send it you before the revised deadline. We sincerely hope that this revised manuscript is suitable for publication in your esteemed journal.

Thank you,
Dr. Chaya M.S

Reply to Reviewers

1. Referee 2: Nicola Maffulli

In general, we agree that one can never completely control for confounders when choosing two groups to study. However, we took care to ensure that we selected subjects from a pool of similar lifestyles (vegetarian, living in similar conditions, that is, they were all residential in the same ashram, non smokers and drinkers, and with a similar philosophical view to life, lifestyle and goals of existence). Perhaps this was not clear in the manuscript, and we have now made this clear (Page 5, para 2). In that sense, the only difference between the groups, although they may have been self selecting, was the yoga practice. Indeed, if the subjects were drawn from the city, it would have been difficult to ensure that they were indeed practicing the same lifestyle. We therefore believe that this criticism is not appropriate in the context of a cross sectional study. We however do agree that the best study would have been a longitudinal one.

We did consider the possibility that the yoga practitioners would ‘activate’ their yoga training during the experiment. However, we were present at the time, and would keep touching the subject gently to ensure they were not asleep or meditating. They also kept their eyes open. Therefore, we are convinced that they were not activating their yoga practice at the time of measurement. This concern has been addressed now in page 7, lines 1-2.

2. Referee 1: Ramesh L Bijlani

We are not certain what is being referred to. We have not stated that the major aim was to study the acute effect of yogic practices. Indeed our statement reads as follows (Page 5, end of para 1, our italics):

*Therefore, the primary aim of this study was to answer these questions by studying the effect of a long term (six months or greater) practice of combined techniques of yoga, on the BMR of young to middle aged men and women.* Secondly, since careful BMR measurements would be available, this study aimed to confirm that the
presently used 1985 FAO [12] predictive equations for the BMR are appropriate for Indians.

We would like to retain the second aim of this paper as stated. We agree that the validation of the WHO equations is a major study in itself, however, we also believe that there is merit in carefully conducted small studies that could add to databases for future meta-analyses. We will be willing for the original data base to be made available to those who ask for it.

The BMR adjusted for weight has now been added into the Tables 2 and 3.

“significant decrease…” has now been addressed.
Non essential revisions:
We would prefer to keep Table 2 and 3 separate as this will enhance readability.

First Para of discussion is necessary: we do believe that readers must have a context of yoga within the other areas of meditation and relaxation.

Agreed about RQ: we have clarified this in the discussion

Agreed, we have toned this down and have added an explanatory sentence about the possible increased energy expenditure with yoga.

3. Referee 3: Selvamurthy William
No comments for revision indicated

4. Referee 4: Andrew Vickers

We do not think we have overstated the conclusions. We have been circumspect, but in accordance with the reviewer’s wishes, we have now toned down the conclusion and have only stated that “… the long term practice of yoga using a combination of stimulatory and inhibitory yogic practices is associated with a significantly lower BMR.”