Reviewer’s report

Title: Type of Vegetarian Diet, Obesity and Diabetes in Adult Indian Population

Version: 1 Date: 20 April 2014

Reviewer: Neal Barnard

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Major Comments:

1. This is a useful and well-written study on the prevalence of diabetes in various diet groups in India. It takes advantage of a good methodology and a large sample size. Although the study has limitations, these are, for the most part, appropriately addressed by the authors.

2. The remarkably low DM prevalence is well-discussed by the authors, but remains puzzling, because it is out of keeping with other observations in India. The reader is left to assume that self-reporting is a serious limitation of this study.

3. In the discussion section, the prevalence of DM among vegans is discussed. The issue here appears not to be the reduced prevalence (all ORs are below 1.0 for the vegan group), but rather the marked variability in this group (the confidence intervals are wide). It would be helpful to discuss whether the small sample size or other factors may have led to this variability in the vegan group. In the limitations section, it would be useful to comment as to whether the small sample sizes in certain groups, particularly the vegan group, which constituted only 1.6% of the sample, influenced the study results. The “precautions” noted in relation to vegan diets do not relate to diabetes prevalence and should be omitted.

Minor Comments:

1. Abstract: In the final sentence of the Results section in the Abstract, there needs to be a basis for comparison for the ORs. That is, the listed groups had a lower or higher diabetes prevalence compared with whom?

2. Methods: Model 2 adjusts for BMI. Models 1 and 3 do not, and that is helpful. For DM, BMI adjustment is not necessarily appropriate, because BMI is rightly considered an intervening variable. That is, dietary patterns influence BMI which, in turn, influences DM risk. Adjustment for BMI can therefore inappropriately mask real differences in DM risk.

3. Results: While BMIs are discussed for the various diet groups, it should be noted that the range between the lowest and highest BMIs was less than 1 kg/m² and that means for all groups were reasonably low.

4. Also, in the Results, the prevalence of DM among vegans is left out of the sentence on this topic.
5. Discussion: The citation of a 1999 commentary (ref 34) seems unnecessary, since considerable information about the healthfulness of vegetarian diets has come forward since then. Also, the presence of unrefined carbohydrate is not unique to vegetarian diets, and the question as to the healthfulness or lack thereof of refined carbohydrate is beyond the scope of this paper (refined rice was commonly consumed in Japan while its DM prevalence was at its lowest). Similarly, all diets—not simply vegetarian diets—need to be well planned. I would suggest eliminating this part of the discussion.

**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:**

No.