Reviewer’s report

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

Version: 1  Date: 6 May 2014

Reviewer: Dagfinn Aune

Reviewer’s report:

Dear authors,

This is an interesting cross-sectional study on vegetarian dietary patterns and prevalence of type 2 diabetes. I have some comments which should be taken into account.

Major compulsory revisions

Please state in the materials and methods section that this is a cross-sectional survey.

The AHS-2 has also published data on incidence and I think it would be good to cite those data as well.


Discussion

Last sentence of first paragraph with regard to the study from Barbados: did they not differ significantly with regard to BMI? Please clarify.

Second paragraph, references 32 and 33 seems to report on fruits and vegetables and fiber intakes, not specifically on vegetarian diets. Please clarify. The references below could be included instead.


Red and processed meat consumption has been associated with increased risk of type 2 diabetes in a large number of cohort studies and this should be discussed as potential explanations for the findings of the study with regard to vegetarian diets as well. I think that would fit into the discussion.

Aune D, Ursin G, Veierød MB. Meat consumption and the risk of type 2 diabetes:


Whole grains should also be mentioned in the discussion of potential contributors to reduced risk in vegetarians as there are several meta-analyses having reported reduced diabetes risk with greater whole grain intake.


Statistical power may also be an issue with regard to the lack of effect of vegan diets on diabetes risk. The OR in vegan men is very similar to that in lacto-vegetarian men, while the result in women is null.

I’m not sure if it should be “reverse causality” instead of “reverse confounding”. I think it might be better to call it some sort of temporal bias, or just bias. It could be rephrased to: As this is a cross-sectional study it is possible that the lack of an association in vegans also could be due to diabetes patients changing to a vegan diet after the diabetes diagnosis.

Reference 29 is not from a UK, but a US study, however, it does not seem to be on vegetarian diets so I wonder if it’s the wrong reference.

Although the results are promising, I think there is a need for more prospective studies in India.

Could the authors include the distribution of cases and controls in table 6 please?

Minor essential revisions

Section on type of vegetarian diet and diabetes
Drop “s” at the end of lacto-ovo vegetarians and semi-vegetarians

References

Usually the references are quoted in the order they are cited. Second paragraph, first line [26-28, 4, 5, 1] should be quoted [1, 4, 5, 26-28]

Quality of written English: Acceptable

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