Reviewer’s report

Title: Anti-Saccharomyces cerevisiae antibodies (ASCA) are associated with body fat mass and systemic inflammation, but not with dietary yeast consumption: a cross-sectional study

Version: 0 Date: 21 Mar 2017

Reviewer: John Dube

Reviewer’s report:

The article by Kvehaugen et al., investigates ASCA in morbidly obese subjects to examine the associations between anthropometrics, diet, co-morbidities and biomarkers of inflammation and gut permeability. Of the subjects investigated, only 22% were positive for IgG. The examination of the IgG positive subjects indicated differences in age, body fat mass, and CRP. The authors conclude that dietary consumption was not associated with higher ASCA, but rather those subjects had higher levels of systemic inflammation linked to increased adiposity.

Major concerns:

1. There needs to be a better description of why the subjects were admitted to the 'special hospital'. Although they were referred due to morbid obesity, there's no information regarding the weight stability of the patients. Further, were the patients trying to manage their obesity through alterations in diet prior to being admitted to the hospital.

2. There's no indication by the authors as to the nutrient status at the time of the blood draw.

3. Were the subjects taking any medications?

4. The one major flaw I see is the adding in missing data with the least pathological response. The authors should report what data was missing and how that may have skewed the results and interpretation.

5. The authors mention inclusion criteria as a possible explanation for differences between studies, however, the inclusion criteria for this study is incomplete.

6. Have the authors considered that food patterns likely change throughout the year, thus the intake of yeast may vary throughout the year?

Minor concerns:

1. Minor typos

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?
If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal