Reviewer’s report

Title: Does the inflammatory potential of diet affect disease activity in patients with inflammatory bowel disease?

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Reviewer: Courtney Heisler

Reviewer's report:

This article illustrates the potential effects of inflammatory properties of diets on disease activity in patients with IBD. Despite the small sample size, the non-significant effect trends in the expected direction and could build on existing literature with incorporation of clarifications/adjustments listed below:

BACKGROUND:

- It is not clear what has been done in previous research in this area and why there is a need for the current study.

- Some citations required in background that are missing.

- Provide rates as appropriate when discussing this topic in the background.

- "...links between foods with inflammatory potential in habitual diet and disease activity in patients with IBD have not been previously investigated" - this sentence is not true as there is literature on this area. Please include summary of existing literature in this area to Background.

METHODS:

- Why were the EDIP and DII used if they were not validated for use in the study population?

- Why were only newly diagnosed IBD patients (less than 6 months following diagnosis) recruited?

- What questionnaire was used to obtain data on education, drug consumption, etc?

- It is not clear the tertile category make up. Please clarify.

- Discuss validity of FFQ use in this population.

- Summary of Talbung study is too vague. "Other" fish, "other" vegetables, etc.
- Analysis plan does not state model will be adjusted for the education categories, please clarify.

RESULTS:

- It is not clear if the 67.2% with UC are of the total population of just those with active disease. Please clarify.

- Please explain decision to categorize groups on active versus inactive disease rather than CD and UC, especially given the difficulty to determine disease states in IBD.

DISCUSSION:

- "To our knowledge, this is the first investigation of association between potential of diet-induced inflammation and disease activity in IBD patients" - not true, discuss existing literature on this topic.

- "FFQs are well known to be biased by a number of factors" - requires more information and how this could affect study results.

- Again, why use tools that are not validated in your population? You must provide a reason for this.

- Discuss why Mayo and CDAI scores may not accurately evaluate intestinal inflammatory activity.

Overall: Some spelling/grammar errors throughout. Some citations required in background that are missing. Clarification on above points required.

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