Reviewer's report

Title: IgG and IgG4 antibodies in subjects with irritable bowel syndrome: a case control study in the general population

Version: 1 Date: 2 July 2012

Reviewer: Lena Öhman

Reviewer's report:

In this paper, the authors aimed to compare IgG and IgG4 food and yeast antibodies in subjects with and without IBS. Blood samples were collected, and IgG and IgG4 food and yeast antibodies were measured in 269 subjects with IBS and 277 control subjects. All subjects completed questionnaires.

This is an interesting and important paper, trying to reveal whether IgG and IgG4 food and yeast antibodies are associated with IBS.

General comments

It is unclear how gastrointestinal symptoms were assessed. This ought to be described in detail. Also the questions regarding food and drink ought to be described in some detail, although these have been described in a previous paper.

The ELISA analysis of IgG and IgG4 antibodies should be described in more detail; at least manufacturer and detection limits ought to be given.

Supposedly the subjects self-estimated their food intake; it may be discussed whether this method may affect the results. What is the correlation and /or difference between self-estimated food intake and a food diary?

Will serum levels of food specific antibodies be the best way to determine food intolerance? What about specific antibodies in fecal samples or mucosal biopsies? What about sensitivity of available assays?

Many readers would benefit from an introduction to why the IgG4 subclass is interesting to measure. It is also unclear from the paper why Candida albicans is related to sugar.

The “multiple imputation” used to handle missing values also need to be described in more detail.

Level of interest: An article of importance in its field

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'