Reviewer’s report

Title: Fecal pancreatic elastase-1 levels in older individuals without known gastrointestinal diseases or diabetes

Version: 1 Date: 28 October 2010

Reviewer: John S Leeds

Reviewer’s report:

The authors describe an interesting investigation into faecal elastase-1 levels in older people showing a decline. This is a nice paper and only requires a small amount of work to revise.

Major compulsory revisions
The authors report their results using medians (non-parametric) but have used a one way ANOVA test which is a parametric test. Either the data should be reported as means with 95% confidence intervals or use the Kruskal Wallis test for comparison.

Similarly, as faecal elastase-1 can be considered as positive or negative, have the authors looked at proportional analysis using CHI square or fisher exact testing?

Minor essential revisions
It is unclear in the methods section which faecal elastase-1 sample was used in each participant. They state that 3 samples were used from each participant. Was the lowest result used or was this the average? This requires clarification.

There are a few spelling/grammatical errors that require correction:
Introduction: noninvasive should be non-invasive.
Discussion: "Our results are well comparable with other studies." The word "well" is unnecessary.
Discussion: "In contrast, its sensitivity in mild pancreatic insufficiency in different studies has been reported to be 16.7 % [19], 22 % [16], 40 % [18], 47 % [20], 63 % [17] or 65 % [13]." This sentence would read better if the range was given followed by the references.
Discussion: "Irritable and inflammatory bowel disease [26-28]." This sentence is unclear. Does this mean irritable bowel syndrome and inflammatory bowel disease? If so, there should be a reference relating to irritable bowel syndrome.
Discussion: "Is a considerable portion of subjects who might benefit of pancreatic enzyme supplementation therapy." should read "benefit from pancreatic..."
Discussion: "One fifth of the individuals had abnormal fecal elastase-1 levels stool
indicating pancreatic exocrine insufficiency". The word stool is unnecessary.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests.