Reviewer’s report

Title: Gastric and intestinal barrier impairment in African adults: a randomised controlled trial of micronutrient supplementation

Version: 2 Date: 15 March 2010

Reviewer: john macfie

Reviewer’s report:

This is a well written study describing a large prospective trial in African adults. I have 3 minor points:

1. their measures of intestinal permeability only assess small intestinal (cf colonic) permeability. They should discuss this in context barrier function and bacterial translocation. I am not convinced that sugar probe techniques accurately reflect alterations in barrier function

2. Use of LPS and antibodies as surrogate measures of barrier function should also be justified in their discussion (I think it's a sound approach but rationale needs to be there)

3 I do not think their data permit the conclusion " that bacterial translocation drives immune activation, but at least in Africa this is probably in advanced rather than early HIV infection". This is supposition.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare I have no competing interests