Reviewer’s report

Title: High phosphorus intake and gut-related parameters - results of a randomized placebo-controlled human intervention study

Version: 0 Date: 23 Oct 2017

Reviewer: Douglas Morrison

Reviewer's report:

Were the SCFA measured as umol/dry weight or umol/wet weight? It would be useful to state briefly how the results were obtained so that the reader does not have to dig to other references to understand the units. Similarly for fat content. Why this is important of course is that water content of the stool could explain the results regarding SCFA and nothing to do with bacterial activity per se. Can the authors clarify please? How does the subjective scoring of gut symptoms inform this - is there any relationship between reported diarrhoea or constipation and SCFA?

Both in the SCFA results and the microbiome results, the opening sentence states that overall no significant differences were found. Then the next sentence (in each section) goes on to describe significant differences albeit at gender level. The authors should consider being clearer here as the statements seem diametrically opposed. In the opening sentence (in each section), I presume you mean "When men and women were considered together"... and in the subsequent sentence I presume you mean "In gender specific analysis of the data"....? Please clarify? What firm conclusions can be drawn from a sub-analysis on n=3 per group?

Minor Comments:

Line 47 should read "significantly"

Line 107 - "wellness" would be better than "health" in this context which is rather meaningless in terms of an inclusion criterion.

Figure 1 implies that there was a control group (Placebo; n=66) which operated in parallel to the 3 intervention groups. The text implies that placebo was 2 weeks (n=66) followed by randomisation to one of three groups. Figure 1 should reflect this sequence of events more clearly.
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