Reviewer's report

Title: Fluorescence imaging in vivo visualizes delayed gastric emptying of liquid enteral nutrition containing pectin

Version: 2 Date: 28 May 2014

Reviewer: James Hollis

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Fluorescence imaging in vivo visualizes delayed gastric emptying of liquid enteral nutrition containing pectin

This paper describes an innovative method for measuring gastric emptying in mice. It is applied to determine the gastric emptying rate of a novel pectin based enteral nutrition product. As expected, the addition of pectin to the bolus increased viscosity in simulated gastric environment. However, a viscosity measurement was only conducted at one speed on the viscometer and it is not clear how the material would respond at other speeds (e.g., is it sheer thinning or sheer thickening) (discretionary revision – may be worth mentioning in discussion). The bolus with the added pectin reduced gastric emptying rate as indicated by the fluorescence imaging. While this result would not be unexpected the use of the fluorescence imaging to measure the gastric emptying rate makes it of interest.

The paper is generally well written and easy to follow. The paper is brief and the results may be limited in scope. Moreover, I feel the authors should discuss the limitations of this approach in a little more depth (compulsory revision). However, I feel this is a worthwhile addition to the literature.

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

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