Reviewer's report

Title: Goat milk with and without increased concentrations of lysozyme improves repair of intestinal cells damage induced by enteroaggregative Escherichia coli

Version: 1 Date: 13 June 2012

Reviewer: Paul Kelly

Reviewer's report:

This paper describes experiments which show that several aspects of the pathophysiology of EAEC infection can be prevented/reversed by goat milk with or without lysozyme. The paper is well written and original and a significant contribution to the literature on treatment of diarrhoeal pathogens. The only significant weakness of the study in my view is that the authors do not dissect out the antimicrobial activity of the lysozyme in goat milk by using it without milk in control experiments. However, they do analyse the literature on this point, pointing out that the incubation is too short for this effect to influence the adhesion experiments, and acknowledge that this may be a contribution to some of the other results. The last paragraph of the Discussion on p14 should be more cautious in this respect.

Minor essential revisions
1 p4 “Goat milk... in the form of meat and milk”. This needs correction.
2 Some verbs need singular/plural to be sorted out, such as “The bacteria was...” on p6, “the media was removed...” on p7, and “…remain poorly defined” on p12.
3 The legend to Fig 5 does not explain well the 6 panels of this figure.

Level of interest: An article of importance in its field

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