Reviewer's report

Title: Milk is not just food but most likely a genetic transfection system activating mTORC1 signaling for postnatal growth

Version: 1 Date: 17 June 2013

Reviewer: Joe Millward

Reviewer's report:

This is an important concise and basically well written review and i have only one concern which I would judge requires a major compulsory revision. This relates to the difference between breast milk feeding compared with formula feeding and subsequent intakes of cows milk. The authors through this review raise the important possibility that routine milk consumption may have adverse long-term biological consequences. Some distinction needs to be made between the current WHO and universally accepted advice to mothers supporting exclusive breast feeding for 6 months and cows milk consumption in older infants and young children. As shown by the data in reference 10, the metabolic response to human milk in terms of plasma amino acids and hormones is much less marked compared with the responses to formula based on cows milk especially high-protein cow milk formula. Thus to the extent that milk intake may pose a problem for long term human health there is no evidence presented here (or that I am aware of) that this applies to human milk intake during breast feeding. On the contrary breast feeding is known to be protective against subsequent overweight and obesity.

This point needs to be made prominently.

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