Reviewer's report

Title: The effects of varying protein and energy intakes on the growth and body composition of very low birth weight infants

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Reviewer: Nicholas Embleton

Reviewer's report:

This is a nice study. It is small but the methodology looks in general to be good. The authors studied 38 VLBW infants of whom 32 were randomised to 3 differing nutrient intake levels.

The introduction is fine.

The macronutrient intake of breast milk was based on reports rather than directly measured. This means that estimated intakes may have been subject to error.

The methods gives the trade/commercial names for the formula and preparation - we need to know exactly what nutrients those products contain.

Body composition was measured using BIA - it needs to be pointed out that this is not a common methodology and is subject to numerous biases and inaccuracies. The equations that related impedance to water content, from which FFM is then estimated are subject to numerous approximations and assumptions. It might be better than nothing but it is far from perfect.

The longitudinal nature of the study is good.

There was no improvement in FFM accretion but it needs pointing out that most were approximately 32-36wca at the time of study. The needs of babies <30 weeks is likely to be very different.

Table 1 - the numbers are small - I do not think the % helps

Table 1 does not need a p value - the chance that any differences (if they did exist) occurred by chance is 100% - as randomisation is chance

Table 2 has too many significant digits (use 1.9 not 1.93 etc.)

I cannot find how many data points make up table 3 - was it just each patient on one occasion? Group A triglycerides has a much higher mean and large SD - was there 1 child with a very high TG level?

Table 4 is rather complex for a clinician! The layout is too complex and needs to be simplified so the key messages can be seen. With such small numbers there are lots of p tests - some of these will have occurred by chance/ What was the primary a priori hypothesis?

References are fine

Level of interest: An article of importance in its field
Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I have no relevant CoI