Reviewer's report

Title: Impact of excess gestational and post-weaning energy intake on vascular function of swine offspring

Version: 2 Date: 6 June 2014

Reviewer: Christina Campbell

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Major Issues.

References regarding obesity and pregnancy are outdated. Your one citation is from 2002...IOM guidelines were updated in 2009. Also, are you referring to obesity during pregnancy (the woman becomes obese while she is pregnant...that's what you have written), or obese prior to pregnancy (this is what the IOM weight gain guidelines are based on).

Is your study based on high energy or high fat? You have gone back and forth between these two throughout the introduction. Your methods indicate that you increased the energy from both fat and CHO. You need to be consistent as this substantially lessens my enthusiasm for this paper.

You stated that you held the protein content between the two diets...yet, the protein content in the high energy is more. Also, the numbers for the "total lysine" are the same as the CHO numbers for both diets. Is that really true? Also, how can total protein be 2-3x less that the numbers you have for lysine, an amino acid. Perhaps this was included and I missed it but why add so much lysine or did this happen as a result of using soy in your diet? Again, all this needs to be clarified.

What relevance does this diet have to a human diet? I have no concept of energy needs for a pig...is 6000 kcals really the normal diet? Do all the pigs weigh the same amount such that each pig is getting the same amount based on body weight?

Level of interest: An article of insufficient interest to warrant publication in a scientific/medical journal

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.