Reviewer's report

**Title:** A protocol for assessing maternal skinfold thickness measurements and inter observer variability among pregnant women who are overweight and obese.

**Version:** 1  **Date:** 7 October 2012

**Reviewer:** Suzanne Barr

Reviewer's report:

Overall the manuscript is well written and clearly identifies the need for a protocol to assess maternal skinfold thickness measurements and inter observer variability among pregnant women who are overweight and obese. This protocol is particularly useful for both future and on-going studies, as there is currently no standard for body composition measurement in overweight or obese pregnant women for assessing body composition. The limitations of existing methods are defined, such as those of BIA and BMI, and the manuscript describes the usefulness of the skinfold method in identifying maternal adiposity. The data is sound and statistical analysis appears appropriate and in line with previous studies assessing inter-measurement variability.

General comments on manuscript: All are Minor Essential Revisions (MER) or Discretionary Revisions (DR)

**Abstract:**

Abstract is well written and appropriate.

Abstract methods: Second line – missing ‘a’: were measured as part of ‘a’ prospective cohort study (MER). Fourth line- perhaps useful to define what a ‘set’ consists of i.e. 4 measures (DR)

Abstract conclusion – is ‘multiple observers’ perhaps misleading as there were only 2 observers for each measure? (DR)

**Background:**

Line 2 – estimation of women entering pregnancy with a BMI greater than 25kg/m2 – It is not clear whether this is an Australian specific statistic or applicable to populations worldwide. References stated are Australia /New Zealand in origin, therefore perhaps the statistic should be clarified as such, or additional reference added which applies to populations outside of ANZ? (MER)

The question proposed by authors is well defined, however the last sentence of the background is missing ‘the’: Therefore ‘the’ purpose (MER)

**Methods:**

Methods are appropriate and well defined.

First sentence ending ‘with 2 measures taken’: perhaps better clarified as ‘with measures repeated on 2 occasions’. (DR)
Paragraph starting 'measurement of bicep and tricep' – should this be a continuation of the previous ‘bicep’ paragraph? (DR)

Inter-observer variability section: Approximately how long was left between each of the observer measures e.g. minutes / hours / days? It would be useful to comment on this. (DR)

Results section: clear and appropriate

Discussion:
Paragraph beginning ‘Nordhamn and colleagues’ - suggest including the reference for this in parenthesis. (DR)

Conclusions are appropriate, however it could be acknowledged these was a homogenous population in terms of age and ethnicity. (DR)

Discussion lacks any discussion of study limitations. These should be identified. (MER)

Table 1: ‘BMI >=’. Suggest better using the symbol ‘#’ (MER)

Table 2: SFTM to be written in full.

**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 declare that I have no competing interests