Reviewer’s report

Title: Correlations among adiposity measures in school-aged children

Version: 1 Date: 19 April 2013

Reviewer: Stefanie N. Hinkle

Reviewer’s report:

General comments: This is a well-written manuscript discussing the correlation between dual x-ray absorptiometry (DXA) and measures of child adiposity. DXA is treated as the gold standard.

Minor Essential Revisions
1. BMI is not defined.

Discretionary Revisions
1. It would be helpful to the reader to know if the cited studies in the introduction regarding DXA and the gold standard are in children.
2. Page 6: Please clarify if the measures were all taken at the same time as the DXA
3. Page 6: Were there any differences in BMI z-score, sex, race-ethnicity ect. of those children who did and did not complete the DXA scan?
4. Page 7: Please discuss why the Bland-Altman plots and linear regression models are completed using BMI and not BMI percentiles/z-scores? While the age range of the sample is small, given most pediatric researchers and clinicians use percentiles was there a reason for using the unadjusted BMI?
5. Page 9: Indicate that the Bland-Altman plots are not shown or provide.
6. Page 10: “Correlations were stronger in black and Hispanic children than in whites…” Please provide data or indicate that it is not shown.
7. For the tables and figure titles it may be more informative to give the age range rather than “7 years”
8. Authors state that they found a lower sensitivity for BMI-defined obesity than a prior study and that “this difference may be due to the percent body fat cutoffs we used”—This seems to be something the authors could check rather speculate as to why they observed a difference.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.
Declaration of competing interests:

I declare that I have no competing interests