Reviewer's report

**Title:** Impact of physical activity on energy balance, food intake and choice in normal weight and obese children in the setting of acute social stress: A randomized controlled trial

**Version:** 2  
**Date:** 14 July 2014

**Reviewer:** Janine M Jurkowski

**Reviewer's report:**

Overall this study is interesting and adds to the literature. There are several issues that limit its ability to contribute. The main two are the size of the study, which limited its statistical power and the sampling bias between the NW and OW/OB group. More on this later.

Line 76- Define social stress. Consider moving the more detailed description in lines 93-94 up to near line 76.

Line 101-102-- Be more specific why ADHD was mentioned in the introduction. Unless they are studying it, discuss how ADHD is relevant to study such as a growing population of children with ADHD. Present data. Otherwise, there is no reason why impulsivity needs to be discussed with mention of ADHD.

Methods are strong but the fact that the refusals to participate in the OW/OB group is greater (appears to be significantly greater) causes the reviewer to question potential sampling bias. Please address this in either or both the Methods and limitations.

Limitations section needs discussion of issue of sample size. This is a significant limitation. Also, again, the discussion of sample bias.

**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.