Reviewer's report

**Title:** Weight change in control group participants in behavioural weight loss interventions: A systematic review and meta-regression study.

**Version:** 1 **Date:** 16 March 2012

**Reviewer:** Lorna Aucott

**Reviewer's report:**

This paper picks up on a phenomenon commonly associated with RCTs whereby control groups have some improvement as well as the intervention group. While common, it has not been investigated in weight change studies – the focus for this paper.

This is a simple concept nicely presented. They find that there is no change in weight for weight loss intervention control groups.

**Major compulsory**

1. In real life such participants are very likely to put on weight – So the ‘stability’ perhaps doesn’t indicate a non-effect but perhaps points towards an inadvertent positive impact of just being on a trial. This point is not considered here and I think needs to be properly considered.

**Minor essential**

1. Page 5, 2nd Para, 1st sentence: I wasn’t clear what was meant here: “It currently reads: Intervention trials were excluded for the review.” Did you mean other interventions not behavioural Weight loss interventions?

2. Page 5, just before electronic searches section: The maintenance period for weight loss interventions is almost more important that the delivery period. However, given your control group focus that perhaps wouldn’t be the case. None-the-less I feel rather the exclusion of maintenance needs more rational.

3. Page 9, 1st Para: I wondered why you had categorised variables – loss of power? There may have been good reasons – please give them?

4. Page 9, last sentence of middle para: The replacement of p-values from 0.01 to 0.005 and 0.0001 to 0.00005 when SD’s (SE’s) are estimated seems extreme. Justify?

5. I did not have figure 2!!

**Discretionary**

1. Surprised you didn’t search Medline?

2. Page 10-11: When describing the number of trials you use ‘n’... While not critical would it makes any sense to change this to say ‘t’ so as not to be confused with sample size?
3. Page10-12: The Description of studies included, characteristics of control treatment and participants. Would these be better presented as tables?

**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'