Additional file 1. Risk of bias assessment explanation

10-item risk of bias assessment criteria and an explanation of the scoring details for each item

| Criteria | Yes | No |
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| i) Did the study report a power calculation and was the study adequately powered to detect intervention effects? | If a power calculation was provided and the sample size allowed for detection of intervention effects. | If power calculation was not provided or sample size was inadequate. |
| ii) Was the randomization procedure adequately described and carried out? | If a random assignment sequence was used and described (computer generated random number tables; use of sealed opaque envelopes. | If the process was not random or adequately described. |
| iii) Did the study include a control group? (randomized participants not a comparison group) | If the study contained a control group (or usual care group) with randomized participants. | If allocation was not random or there was a treatment. |
| iv) Did the study present baseline characteristics separately for treatment groups? | If baseline characteristics were presented separately. | If baseline characteristics were not presented separately. |
| v) Did the study analyses account for potential differences at baseline? | If the statistical procedures accounted for potential differences at baselines e.g. ANOVA or ANCOVA. | If statistical measures did not account for potential differences at baseline. |
| vi) Were the assessors blinded to treatment allocation at baseline and post-test? | If assessors were blinded to participant allocation at baseline and posttest. | If assessors were not blinded to participant allocation. |
| vii) Did the study have a dropout of <20% (<6 month follow-up) or <30% (>6 month follow-up) for the primary outcome of weight? | If dropout was <20% for <6 months studies or <30% for studies >6 months. | If dropout was >20% for <6 months studies or >30% for studies >6 months |
| viii) Did the study use an intention to treat analysis? | If intention to treat analyses was used. | If intention to treat analyses was not used. |
| ix) Did the study report summary results for each group? | If summary results for each group were presented. | If no summary results were presented. |
| x) Did the study report precision estimates (e.g., 95% confidence interval) and/or effect sizes? | If precision estimates and/or effect sizes were included. | If precision estimates and/or effect sizes were not included. |