

Best Evidence Summaries of Topics in Mental Healthcare

BEST in MH *clinical question-answering service*

Question

For people diagnosed as overweight, obese or having a binge eating disorder, are psychological interventions more effective than standard weight loss interventions (including primary care), in improving patient outcomes?

Clarification of question using *PICO* structure

Patients: People diagnosed as overweight, obese or having a binge eating disorder
Intervention: Psychological interventions
Comparator: Standard weight loss interventions (including primary care)
Outcome: All patient outcomes

Clinical and research implications

Evidence from three systematic reviews and two trials showed mixed results regarding the effectiveness of psychological interventions for overweight, obese or binge-eating people. There was moderate evidence that motivational interviewing can improve weight loss, but a trial of group CBT plus standard care compared to standard care alone found no benefit for group CBT in terms of achieving weight loss targets.

For reducing binge or emotional eating there was a small amount of evidence supporting mindfulness-based interventions, and a larger amount of evidence supporting psychotherapy, structured self-help and pharmacotherapy although this came from a less reliable review.

These findings are in line with the NICE and Scottish guidelines and do provide some support for psychological interventions in reducing weight loss and binge eating.

What does the evidence say?

Number of included studies/reviews (number of participants)

Three systematic reviews (Armstrong (11 studies, 1448 participants), Katterman (14 studies, 426 participants), Vocks (38 studies, 1973 participants) and two randomised controlled trials (Hilbert (205 participants) and Muggia (163 participants)) were included.

The three reviews evaluated a range of psychological interventions including: motivational interviewing; behavioural weight loss programmes; mindfulness-based interventions; psychotherapy; CBT; self-help. The two trials compared: interpersonal psychotherapy with CBT guided self-help with behavioural weight loss intervention; and group CBT plus a supported balanced diet with a supported balanced diet alone (standard care).

Main findings

Systematic reviews

The review of motivational interviewing found no effect of motivational interviewing on body mass (BMI or body weight). When these two outcomes were analysed separately motivational interviewing significantly reduced body weight but not BMI. Treatment duration longer than 6 months, an attention control, treatment fidelity measures and a behavioural weight-loss programme were all associated with an increased effectiveness of motivational interviewing (Armstrong).

The review of mindfulness-based interventions found a lack of evidence with only two out of the four studies comparing to a control group finding a significant reduction in binge or emotional eating with the mindfulness intervention (Katterman). The final review of mixed interventions found the largest, significant effects were seen for psychotherapy, structured self-help and pharmacotherapy compared to placebo or waiting list controls for a range of different binge eating and weight-related outcomes.

RCTs

One paper was an additional analysis of a trial (Hilbert). This split participants into rapid responders (a reduction of 70% or more in binge eating after 4 weeks of treatment) or not, for comparisons between the 3 treatments. There was no significant difference in rapid response between interpersonal psychotherapy, CBT guided self-help and behavioural weight loss. In the CBT guided self-help group rapid responders had a significantly greater binge eating remission compared to non-responders, but this was not seen in the other 2 groups. The other trial found no significant difference between group CBT plus standard care, and standard care alone in the proportion of participants achieving a 10% reduction in body weight after 12 months, or a 5% reduction after 6 months (Muggia).

Authors' conclusions

Systematic reviews

Armstrong: Motivational interventions may be a promising addition for weight-loss interventions in obesity management and its effectiveness may be enhanced when it is provided alongside behavioural weight management programmes. It is consistent with recommendations for "patient-centred" care and provides practitioners with a way for working with patients who are ambivalent about change.

Katterman: Mindfulness meditation is effective in reducing binge eating across a variety of populations and can also reduce emotional eating and is worthy of further research.

Vocks: Psychotherapy, specifically CBT should be recommended as the first-line treatment of binge eating disorder. Structured self-help based on CBT may also be beneficial, but the available evidence base is too small to make positive conclusions. Further research is needed into which CBT components are the most effective and which therapies are best suited to which patients.

RCTs

Hilbert: Rapid response (early evidence of a response to treatment) is a treatment-specific prognostic indicator of sustained remission from binge eating for CBT with guided self-help, but not for interpersonal psychotherapy or behavioural weight loss.

Muggia: Brief CBT in addition to standard care was not superior to standard care alone for weight reduction in obese patients, which may have been due to the fact the CBT was only given for 6 months and lacked a pure cognitive analysis. Further research using longer interventions is required.

Reliability of conclusions/Strength of evidence

The reliability of the evidence was varied. One systematic review (Armstrong) was of high quality with few limitations and is likely to be the most reliable, although it contained the smallest number of studies. This was also the only review to fully assess and report on the quality of the evidence which was low to moderate. The mindfulness review was moderate quality as it had a limited literature search, and a lack of information about the study results. The mixed intervention was poor quality, with a very limited search and lack of detail about the analysis methods and results.

The trials were moderate to low quality. One was a further analysis of a trial and most of the methods were not reported, making it difficult to assess its reliability, so it has been considered to be low quality. The other trial was moderate quality due to the lack of blinding. The interventions used meant it would not have been possible to blind the participants, but outcomes such as weight loss could be measured blind to the treatment group and it was not reported whether this was done.

What do guidelines say?

The Scottish Intercollegiate Guidelines Network guideline, 'Management of Obesity' (2010), makes the following comment on the effectiveness of psychological interventions for obese adults compared with standard weight loss interventions (including primary care) in improving patient outcomes:

"A meta-analysis conducted for the 2006 NICE guideline examined studies combining psychological interventions into weight management programmes. 64 Studies were sourced mainly from four key reviews.

A systematic review compared psychological interventions for weight loss in overweight or obese patients with control (no treatment). Two studies (n=1,254) were identified which had duration of 12 months or longer. Both found a beneficial effect for behavioural therapy over control.

A combination of active support for diet plus behavioural therapy (problem solving, relapse prevention, stimulus control, dealing with problem situations, assertion, and behaviour chain analysis) is effective for weight loss at 12 months. Median weight change across three studies was a loss of approximately 3.86 kg (range -2.10 kg to -5.50 kg) for active support and a loss of 0.50 kg (range -0.30 kg to -0.70 kg) for passive intervention (advice or self-help).

In a comparison of diet plus behavioural therapy versus diet alone at 12 months, a combination of diet and behavioural therapy (cue avoidance, self-monitoring, stimulus control, slowing rate of eating, social support, planning, problem solving, assertiveness, cognitive restructuring, modifying thoughts, reinforcement of changes, relapse prevention, strategies for dealing with weight gain) was more effective for weight loss than diet alone. This was based on two small studies. Median weight loss was 7.70 kg (low calorie diet plus behavioural therapy) and 12.89 kg (protein sparing modified fast plus behavioural therapy) compared with a loss of 0.9 kg for LCD alone and a loss of 4.70 kg for protein sparing modified fast alone.

Involving family members (usually spouse/partner) in behavioural treatment programmes is generally more effective for weight loss than targeting the overweight individual alone.

A well conducted systematic review comparing group versus individual interventions included five RCTs. At 12 months, significantly greater weight loss was found in the group based interventions; weighted mean difference of 1.4 kg weight loss (95% CI, -2.7 to -0.1 kg, p=0.03). Sub-analyses showed that increased effectiveness was associated with the use of financial reward and with psychologist-led interventions. In two of the five trials no explicit details were given on the training received by facilitators delivering group interventions." (p27)

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Date searches conducted: 14/07/2015
Date answer completed: 30/07/2015

References

Systematic reviews

1. Armstrong, M. J., Mottershead, T. A., Ronksley, P. E., Sigal, R. J., Campbell, T. S., & Hemmelgarn, B. R. (2011). Motivational interviewing to improve weight loss in overweight and/or obese patients: a systematic review and meta-analysis of randomized controlled trials. *Obesity reviews*, 12(9), 709-723.
2. Katterman, S. N., Kleinman, B. M., Hood, M. M., Nackers, L. M., & Corsica, J. A. (2014). Mindfulness meditation as an intervention for binge eating, emotional eating, and weight loss: A systematic review. *Eating behaviors*, 15(2), 197-204.
3. Vocks, S., Tuschen-Caffier, B., Pietrowsky, R., Rustenbach, S. J., Kersting, A., & Herpertz, S. (2010). Meta-analysis of the effectiveness of psychological and pharmacological treatments for binge eating disorder. *International Journal of Eating Disorders*, 43(3), 205-217.

Randomised controlled trials

4. Hilbert, A., Hildebrandt, T., Agras, W. S., Wilfley, D. E., & Wilson, G. T. (2015). Rapid response in psychological treatments for binge eating disorder. *Journal of consulting and clinical psychology*, 83(3), 649.
5. Muggia, C., Falchi, A. G., Michelini, I., Montagna, E., De Silvestri, A., Grecchi, I., & Tinelli, C. (2014). Brief group cognitive behavioral treatment in addition to prescriptive diet versus standard care in obese and overweight patients. A randomized controlled trial. *e-SPEN Journal*, 9(1), e26-e33.

Guidelines

The Scottish Intercollegiate Guidelines Network (2010). Management of Obesity: Full Guideline, SIGN 115. Retrieved from: <http://www.sign.ac.uk/pdf/sign115.pdf>

Results

Systematic reviews

Author (year)	Search date	Inclusion criteria	Number of included studies (participants)	Summary of results	Risk of bias
Armstrong et al. (2011)	11/2009	<p><i>Participants:</i> Overweight or obese adults, defined by having a BMI of 25.0 kg m⁻² or higher.</p> <p><i>Intervention:</i> Motivational Interviewing (MI), ranging in time/intensity from one face-to-face session followed by brief phone sessions, to long-term MI delivery until weight-loss gains were complete.</p> <p><i>Comparator:</i> Usual care from GP (2 studies); Behavioural weight-loss programme (5 studies); Standard dietary care (1 study); No intervention (1 study); Support from dietitians (1 study); Health promotion & education materials (2 studies);</p> <p><i>Outcome:</i> Change in body mass (weight and BMI). Follow-up durations ranged from 3 to 18</p>	12 in systematic review; 11 in meta-analysis (n = 1,448)	<p>The quality of the 11 included studies was moderate to low with common problems being lack of blinding of the research staff; lack of descriptions of randomisation methods and intention to treat analysis.</p> <p>Mean participant ages ranged from 41 to 62 years, proportion of females ranged from 3 to 100% (6 studies were all female). Motivational interviewing reduced body mass (BMI or body weight) compared to control but it was not statistically significant (standardised mean difference - 0.51, 95% CI -1.04 to 0.01). However there was a high level of variation between the study results.</p> <p>Body weight and BMI were also analysed separately. This found a statistically significant reduction in body weight with motivational interviewing (mean difference</p>	<p>Low</p> <p>The inclusion criteria were clearly specified. A range of databases were searched without any language restrictions and experts were also contacted.</p> <p>Study selection, data extraction and quality assessment were performed by two reviewers. Quality was assessed using the Jadad scale for RCTs.</p>

		<p>months.</p> <p><i>Study design:</i> Systematic review and meta-analysis of randomised controlled trials (RCTs).</p>		<p>-1.47 kg, 95% CI -2.05 to -0.88 kg) but not a significant reduction in BMI (mean difference -0.25 kg²/m, 95% CI -0.50 to 0.01 kg²/m).</p> <p>In stratified analyses, studies where weight was the primary outcome, with treatment duration of more than 6 months, the use of an attention control, a treatment fidelity measure and a behavioural weight-loss programme, were all associated with an increased effect of motivational interviewing on body mass.</p>	<p>Studies were pooled using random effects meta-analysis. There was a high level of heterogeneity for the combined analysis but this was explored using stratified analyses.</p>
Katterman et al. (2014)	05/2013	<p><i>Participants:</i> Adults who are obese, overweight, who binge eat, including those diagnosed with Binge Eating Disorder, veterans, post-bariatric surgery participants, adults with Diabetes type-II, those who have paid for a stress mindfulness-based reduction intervention, and women who eat out at least 3 times per week.</p> <p><i>Intervention:</i> Mindfulness-based intervention (mindfulness-based cognitive therapy (MBCT), mindfulness-based stress reduction (MBSR) or mindful eating intervention).</p>	<p>14 (7 RCTs & 7 pre-post studies) n = 426</p>	<p>Women were the largest population in all apart from one study (87.5% male); target populations varied (see the inclusion criteria); and participant ages ranged from 18 to 75 years with a mean age between 40 and 60 years. Intervention durations ranged from 6 to 16 weeks.</p> <p>When comparing interventions with controls (4 studies): one study showed that mindfulness plus diet was significantly better than diet alone for reducing emotional eating (effect size- 0.53); another that mindfulness was significantly better than control (effect size -1.1) but not CBT for reducing binge eating.</p>	<p>Moderate</p> <p>Inclusion criteria were clearly stated.</p> <p>The search covered 2 databases, Google Scholar and reference sections of included studies, but was restricted to English, so relevant studies may have been missed.</p>

		<p><i>Comparator:</i> In 7 RCTs: Control group (4 studies); Diet intervention (1 study); Cognitive behavioural therapy (2 studies).</p> <p><i>Outcome:</i> Cravings (2 studies); Body image disturbance (1 study); emotional eating (3 studies); Binge eating (5 studies); Weight (10 studies); Stress & gastrointestinal symptoms (1 study); Glycemic control, blood pressure & stress (1 study); Diet (1 study); Range of health related outcomes (1 study).</p> <p><i>Study design:</i> Systematic review of studies including 6 RCTs and 8 pre-post intervention studies.</p>		<p>When evaluating changes in the mindfulness group only, binge eating was measured in 7 studies and all found a significant reduction in binge eating with the mindfulness intervention (effect sizes from -0.43 to -2.08). Five studies measured emotional eating but only 2 found a significant reduction (effect sizes -0.54 and -0.94) with the mindfulness intervention.</p>	<p>Study selection and data extraction were performed by two reviewers independently. Study quality was assessed, but only on limited factors (attendance, compliance and reporting).</p> <p>Meta-analysis was not performed. However, not all the study results were reported in full.</p>
Vocks et al. (2010)		<p><i>Participants:</i> Participants with Binge Eating Disorder (BED)</p> <p><i>Intervention:</i> Psychotherapy (17 studies); Self-help (4 studies); Pharmacotherapy (15 studies); Weight-loss treatment (3 studies); Combined treatments (10 studies).</p> <p><i>Comparator:</i></p>	<p>38 (21 RCTs & 17 pre-post intervention studies) n = 1973</p>	<p>There was no statistically significant difference in the male/female ratio between the different treatments, however, overall there was a significant difference in age and BMI between the treatments.</p> <p>Between group comparisons from RCTs: Statistically significant moderate to large effect sizes compared to control treatments were seen for psychotherapy,</p>	<p>High</p> <p>The inclusion criteria were clearly reported. Only 2 databases were searched with additional reference searching, so the</p>

		<p>For 21 RCTS: Waiting list (10 studies); Placebo (11 studies).</p> <p><i>Outcome:</i> Binge eating frequency; Days with binge eating; Binge eating abstinence rates; Dietary restraint; Eating concern; Weight concern; Shape concern; Depressive symptoms; Body weight; Dropout weight.</p> <p><i>Study design:</i> Meta-analysis of 38 studies (21 RCTs & 17 pre-post intervention studies), with a total of 77 intervention conditions (36 from intervention or control groups of RCTs, and 41 from pre-post intervention studies).</p>		<p>structured self-help and pharmacotherapy with effect sizes ranging from 0.52 to 0.84. Statistically significant benefits were also seen for psychotherapy for days with binge eating, binge eating abstinence, eating concern, weight concern, and depressive symptoms. Statistically significant benefits in binge eating abstinence, dietary restraint, weight concern, shape concern were seen for structured self-help; and for pharmacotherapy in days with binge eating, binge eating abstinence, and depressive symptoms.</p> <p>Within group comparisons: changes over time within groups showed similar results, with psychotherapy, structured self-help, pharmacotherapy, weight-loss treatments and combined treatments all showing a statistically significant benefit in binge eating frequency (effect sizes ranging from 0.77 to 1.57). Psychotherapy and pharmacotherapy showed the most positive results for other binge eating and weight-related outcomes.</p>	<p>search was fairly limited.</p> <p>Studies were selected and data extracted by 2 authors but there was no assessment of study quality.</p> <p>The synthesis methods used for the between group analysis were unclear and did not explain how randomisation was preserved. Some of the analysis methods were not appropriate.</p>
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Randomised controlled trials

Author (year)	Inclusion criteria	Number of participants	Summary of results	Risk of bias
Hilbert et al. (2015)	<p><i>Participants:</i> Adults aged over 18 diagnosed with Binge Eating Disorder (confirmed by Diagnostic and Statistical Manual of Mental Disorders (4th ed; DSM-IV), with a body mass index of between 27kg/m² and 45kg/m². Those with current psychosis, bipolar disorder, active suicidality, alcohol or drug dependence, medical conditions or treatments that would affect weight and/or ability to participate were excluded.</p> <p><i>Intervention:</i> Interpersonal psychotherapy (IPT); CBT-guided self-help (CBTgsh) for 24 weeks.</p> <p><i>Comparator:</i> Behavioural weight loss intervention (BWL) for 24 weeks.</p> <p><i>Outcome:</i> At pre-treatment, post-treatment, and after 12, 18 and 24 months: Primary outcome: Binge eating episodes over the past 28 days (measured through</p>	205	<p>No details of the study participants were reported.</p> <p>Rapid response was seen in 70.7% of participants (145/205) but there was no statistically significant difference between the 3 treatments (73.4% BWL, CBTgsh 74.2% and IPT 65.3%).</p> <p>Rapid responders had a significantly greater remission from binge eating compared to nonrapid responders in the CBTgsh group only (p = 0.01) after 6, 12 and 18 months of follow-up.</p> <p>Rapid responders in each treatment group had significantly lower global eating disorder psychopathology than nonrapid responders with, on average, a score of 0.35 EDE points less. Rapid responders in the CBTgsh and IPT groups had lower eating disorder psychopathology than those in the BWL group and also nonrapid responders.</p>	<p>High</p> <p>No information was given about the methods of randomisation and allocation concealment.</p> <p>Due to the nature of the treatments it would not have been possible to blind the clinicians and participants. Outcomes were assessed by interviewers who were blinded to treatment.</p> <p>All participants were included in the intention to treat analyses by using</p>

	<p>the Semi-structured Eating Disorder interview (EDE)). Rapid response (a reduction in binge eating $\geq 70\%$ by 4th week of treatment).</p> <p>Secondary outcome: Severity of eating disorder (measured using the EDE global score).</p>			<p>imputation of missing data. It was unclear if all outcomes were reported, and the results reported were very brief.</p>
<p>Muggia et al. (2014)</p>	<p><i>Participants:</i> Adults (18-65), who were overweight (BMI of 25-29.9kg/m² or obese (BMI of 30-39.9kg/m²) outparticipants of a cardiovascular and metabolic care team. Participants with a BMI in excess of 40kg/m² were excluded from the study, as were those taking medications that may affect fluctuation of weight.</p> <p><i>Intervention:</i> Group CBT consisting of 90-minute sessions every month over 6 months, followed by visits of 30 minutes at 9, 12, 18 and 24 months; plus a low-calorie balanced diet and 30-minute visits every three months over a 12-month period:.</p> <p><i>Comparator:</i> A low-calorie diet and 30-minute visits</p>	<p>163</p>	<p>The mean participant age was 45 years with a mean baseline BMI of 32.2 kg²/m and weight 85 kg; 26% were male.</p> <p>At the 12 month assessment there was no statistically significant difference between the groups in the proportions achieving a 10% reduction in body weight (odds ratio 0.85, 95% CI 0.39 to 1.87).</p> <p>There was also no statistically significant difference in the proportion of participants achieving a 5% reduction in body weight at 6 months (odds ratio 0.98, 95% CI 0.44 to 2.19).</p> <p>HDL cholesterol levels increased in both groups during the trial and triglycerides and blood glucose levels decreased. Systolic and diastolic blood pressure decreased in both groups in the first six months, then increased but did not reach the baseline values.</p>	<p>Moderate</p> <p>Participants were randomised using a statistical computer package and the list was kept at a Biometric unit so clinicians were not aware of the allocation.</p> <p>The clinicians and participants were not blinded, but due to the type of intervention this would have been difficult. It was unclear if the weight</p>

	<p>every three months over a 12-month period</p> <p><i>Outcome:</i> Primary outcome: Percentage of participants in each group achieving at least 10% body weight reduction from baseline weight at 12 months; Secondary outcomes: (i) Percentage of participants in each group achieving at least 5% body weight reduction from baseline weight at 6 months; (ii) Change of metabolic profile, measured by glucose & lipid levels); and (iii) blood pressure, both at 12 months.</p>			<p>measurement was blinded, when this could have been done.</p> <p>Dropout rates were high (30.1% at 6 months and 52% at 12 months) but all participants were included in the analysis by using imputation methods. All outcomes have been reported.</p>
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Risk of bias

Systematic reviews

Author (year)	RISK OF BIAS				
	Inclusion criteria	Searches	Review process	Quality assessment	Synthesis
Armstrong (2011)					
Katterman (2014)					
Vocks (2009)					

Randomised controlled trials

Study	RISK OF BIAS					
	Random allocation	Allocation concealment	Blinding of participants and personnel	Blinding of outcome assessment	Incomplete outcome data	Selective Reporting
Hilbert (2015)						
Muggia (2014)						

 Low risk

 High risk

 Unclear risk

Search details

Source	Search Strategy	Number of hits	Relevant evidence identified
<i>Guidelines</i>			
NICE	psychological intervention overweight obese binge	5	1
<i>Systematic Reviews</i>			
MEDLINE	<ol style="list-style-type: none"> 1. Medline; exp OVERWEIGHT/ OR exp OBESITY/; 153657 results. 2. Medline; BULIMIA/ OR BULIMIA NERVOSA/; 6422 results. 3. Medline; "Binge eating".ti,ab; 3558 results. 4. Medline; 1 OR 2 OR 3; 160584 results. 5. Medline; exp PSYCHOTHERAPY/; 162570 results. 6. Medline; MIND-BODY THERAPIES/ OR exp BEHAVIOR THERAPY/ OR exp COGNITIVE THERAPY/; 55103 results. 7. Medline; "cognitive behav*".ti,ab; 16659 results. 8. Medline; "interpersonal psychotherapy".ti,ab; 622 results. 9. Medline; exp PSYCHOTHERAPY, GROUP/; 12059 results. 10. Medline; 5 OR 6 OR 7 OR 8 OR 9; 169482 results. 11. Medline; WEIGHT LOSS/; 25528 results. 12. Medline; exp DIET THERAPY/; 42695 results. 13. Medline; exp DIET/; 202577 results. 14. Medline; "restricted diet*".ti,ab; 3004 results. 15. Medline; "low calor*".ti,ab; 2743 results. 16. Medline; 11 OR 12 OR 13 OR 14 OR 15; 232246 results. 17. Medline; 4 AND 10 AND 16; 1756 results. 18. Medline; (systematic adj1 review OR meta-analytic* OR metanalysis OR metaanalysis OR meta adj1 analysis OR meta-synthesis OR metasynthesis OR meta adj1 synthesis OR meta-regression OR metaregression OR meta adj1 regression OR synthes* adj3 literature OR synthes* adj3 evidence OR integrative adj1 review OR data adj1 synthesis OR research adj1 synthesis OR narrative adj1 synthesis OR systematic adj1 study OR 	63	2

	<p>systematic adj1 studies).ti,ab; 128143 results.</p> <p>19. Medline; META-ANALYSIS AS TOPIC/; 14045 results.</p> <p>20. Medline; meta-analysis.ti,ab,pt; 81638 results.</p> <p>21. Medline; (systematic adj1 comparison* OR systematic adj1 overview* OR "evidence based review" OR comprehensive adj1 review OR critical adj1 review OR quantitative adj1 review OR structured adj1 review OR realist adj1 review OR realist adj1 synthesis).ti,ab; 28219 results.</p> <p>22. Medline; 18 OR 19 OR 20 OR 21; 173157 results.</p> <p>23. Medline; review.ti,ab,pt; 2386384 results.</p> <p>24. Medline; (medline OR pubmed OR cochrane OR embase OR cinahl OR psyclit OR psycinfo OR psychinfo OR literature adj3 search OR database* adj3 search OR bibliographic adj3 search* OR electronic adj3 search* OR electronic adj3 database* OR computerized adj3 search* OR computerised adj3 search* OR internet adj3 search* OR included adj1 studies OR inclusion adj3 studies OR inclusion adj1 criteria OR selection adj1 criteria OR "predetermined criteria").ti,ab; 185453 results.</p> <p>25. Medline; (predefined adj1 criteria OR assess* adj3 (quality OR validity) OR select* adj3 (study OR studies) OR data adj3 extract* OR extracted adj1 data OR data adj2 abstracted OR data adj3 abstraction OR published adj1 intervention OR (study OR studies) adj2 evaluat* OR intervention adj2 evaluat* OR confidence adj1 interval OR heterogeneity OR pooled OR pooling OR odds adj1 ratio* OR Jadad OR coding).ti,ab; 950822 results.</p> <p>26. Medline; 23 OR 24 OR 25; 3273838 results.</p> <p>27. Medline; 22 AND 26; 139483 results.</p> <p>28. Medline; review.ti; 285620 results.</p> <p>29. Medline; 26 AND 28; 285620 results.</p> <p>30. Medline; (review* adj4 (papers OR trials OR studies OR evidence OR intervention* OR evaluation*)).ti,ab; 134956 results.</p> <p>31. Medline; 22 OR 27 OR 29 OR 30; 477658 results.</p> <p>32. Medline; (letter OR editorial OR comment).pt; 1404081 results.</p> <p>33. Medline; exp ANIMALS/; 17905365 results.</p> <p>34. Medline; exp HUMANS/; 13884983 results.</p> <p>35. Medline; 33 not 34; 4020382 results.</p> <p>36. Medline; 32 OR 35; 5370109 results.</p> <p>37. Medline; 31 not 36; 446600 results.</p> <p>38. Medline; 17 AND 37; 128 results.</p>		
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	<p>39. Medline; 38 [Limit to: Publication Year 2010-2015]; 58 results.</p> <p>40. Medline; PRIMARY HEALTH CARE/; 56495 results.</p> <p>41. Medline; GENERAL PRACTITIONERS/ OR GENERAL PRACTICE/; 6911 results.</p> <p>42. Medline; FAMILY PRACTICE/; 60289 results.</p> <p>43. Medline; 16 OR 40 OR 41 OR 42; 349059 results.</p> <p>44. Medline; 4 AND 10 AND 43; 1830 results.</p> <p>45. Medline; 37 AND 44; 133 results.</p> <p>46. Medline; 45 [Limit to: Publication Year 2010-2015]; 63 results.</p>		
EMBASE	<p>21. EMBASE; exp OVERWEIGHT/ OR exp OBESITY/; 331696 results.</p> <p>21. EMBASE; exp OVERWEIGHT/ OR exp OBESITY/; 331696 results.</p> <p>22. EMBASE; BULIMIA/ OR BULIMIA NERVOSA/; 11411 results.</p> <p>22. EMBASE; BULIMIA/ OR BULIMIA NERVOSA/; 11411 results.</p> <p>23. EMBASE; "binge eating".ti,ab; 4689 results.</p> <p>23. EMBASE; "binge eating".ti,ab; 4689 results.</p> <p>24. EMBASE; 21 OR 22 OR 23; 343267 results.</p> <p>24. EMBASE; 21 OR 22 OR 23; 343267 results.</p> <p>25. EMBASE; exp PSYCHOTHERAPY/; 192081 results.</p> <p>25. EMBASE; exp PSYCHOTHERAPY/; 192081 results.</p> <p>26. EMBASE; BEHAVIOR THERAPY/ OR COGNITIVE THERAPY/ OR MIND-BODYTHERAPIES/; 96965 results.</p> <p>26. EMBASE; BEHAVIOR THERAPY/ OR COGNITIVE THERAPY/ OR MIND-BODYTHERAPIES/; 96965 results.</p> <p>27. EMBASE; "cognitive behav*".ti,ab; 24577 results.</p> <p>27. EMBASE; "cognitive behav*".ti,ab; 24577 results.</p> <p>28. EMBASE; "interpersonal psychotherapy".ti,ab; 792 results.</p> <p>28. EMBASE; "interpersonal psychotherapy".ti,ab; 792 results.</p> <p>29. EMBASE; exp PSYCHOTHERAPY, GROUP/; 16847 results.</p> <p>29. EMBASE; exp PSYCHOTHERAPY, GROUP/; 16847 results.</p> <p>30. EMBASE; PRIMARY HEALTH CARE/; 49877 results.</p> <p>30. EMBASE; PRIMARY HEALTH CARE/; 49877 results.</p> <p>31. EMBASE; GENERAL PRACTITIONERS/ OR GENERAL PRACTICE/; 127578 results.</p> <p>31. EMBASE; GENERAL PRACTITIONERS/ OR GENERAL PRACTICE/; 127578 results.</p>	6	0

	<p>32. EMBASE; FAMILY PRACTICE/; 70732 results.</p> <p>32. EMBASE; FAMILY PRACTICE/; 70732 results.</p> <p>33. EMBASE; 25 OR 26 OR 27 OR 28 OR 29 OR 30 OR 31 OR 32; 393897 results.</p> <p>33. EMBASE; 25 OR 26 OR 27 OR 28 OR 29 OR 30 OR 31 OR 32; 393897 results.</p> <p>34. EMBASE; WEIGHT LOSS/; 97290 results.</p> <p>34. EMBASE; WEIGHT LOSS/; 97290 results.</p> <p>35. EMBASE; exp DIET/; 221379 results.</p> <p>35. EMBASE; exp DIET/; 221379 results.</p> <p>36. EMBASE; exp DIET THERAPY/; 262713 results.</p> <p>36. EMBASE; exp DIET THERAPY/; 262713 results.</p> <p>37. EMBASE; "restricted diet*" .ti,ab; 3753 results.</p> <p>37. EMBASE; "restricted diet*" .ti,ab; 3753 results.</p> <p>38. EMBASE; "low calor*" .ti,ab; 3696 results.</p> <p>38. EMBASE; "low calor*" .ti,ab; 3696 results.</p> <p>39. EMBASE; 34 OR 35 OR 36 OR 37 OR 38; 517397 results.</p> <p>39. EMBASE; 34 OR 35 OR 36 OR 37 OR 38; 517397 results.</p> <p>40. EMBASE; 24 AND 33 AND 39; 4684 results.</p> <p>40. EMBASE; 24 AND 33 AND 39; 4684 results.</p> <p>41. EMBASE; ("systematic* review*" OR "systematic* literature review*" OR meta-analytic* OR meta-analysis OR metanalysis OR metaanalysis OR "meta analysis" OR meta-synthesis OR metasynthesis OR "meta synthesis OR meta-regression OR metaregression OR " AND meta AND regression" OR synthes* adj3 literature OR synthes* adj3 evidence OR synthes* adj2 qualitative OR "integrative review" OR "data synthesis" OR "research synthesis" OR "narrative synthesis" OR "systematic study" OR "systematic studies" OR "systematic comparison*" OR "systematic overview*" OR systematic adj2 search* OR " AND systematic* AND literature AND research*").ti,ab; 13648 results.</p> <p>42. EMBASE; (review adj3 "scientific literature" OR "literature review" adj2 "side effect*" OR "literature review" adj2 "adverse effect*" OR evidence-based adj2 review OR "comprehensive review" OR "critical review" OR "critical analysis" OR "quantitative review" OR "structured review" OR "realist review" OR "realist synthesis" OR pooled adj2 analysis OR medline AND inclusion adj3 criteria OR "search strateg*" OR "search</p>		
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	<p>term*" OR "pooled data" adj6 (studies OR trials).ti,ab; 14462 results.</p> <p>43. EMBASE; (medline OR pubmed OR cochrane).ti,ab; 129223 results.</p> <p>44. EMBASE; (medline OR pubmed OR cochrane OR embase OR cinahl OR psychlit OR psylit OR pscynfo OR psychinfo OR lilacs OR literature adj3 search* OR database* adj3 search* OR bibliographic adj3 search* OR electronic adj3 search* OR electronic adj3 database* OR computerized adj3 search* OR computerised adj3 search* OR internet adj3 search* OR "included studies" OR inclusion adj3 studies Or "inclusion criteria" OR "selection criteria" OR "predefined criteria" OR predetermined adj2 criteria OR assess* adj3 (quality OR validity) OR select* adj3 (study OR studies) OR data adj3 extract*).ti,ab; 43392 results.</p> <p>44. EMBASE; (medline OR pubmed OR cochrane OR embase OR cinahl OR psychlit OR psylit OR pscynfo OR psychinfo OR lilacs OR literature adj3 search* OR database* adj3 search* OR bibliographic adj3 search* OR electronic adj3 search* OR electronic adj3 database* OR computerized adj3 search* OR computerised adj3 search* OR internet adj3 search* OR "included studies" OR inclusion adj3 studies Or "inclusion criteria" OR "selection criteria" OR "predefined criteria" OR predetermined adj2 criteria OR assess* adj3 (quality OR validity) OR select* adj3 (study OR studies) OR data adj3 extract*).ti,ab; 43392 results.</p> <p>45. EMBASE; SYSTEMATIC REVIEW/; 91955 results.</p> <p>46. EMBASE; META ANALYSIS/; 95961 results.</p> <p>47. EMBASE; ("extracted data" OR data adj2 abstracted OR data adj3 abstraction OR "published intervention*" OR (study OR studies) adj2 evaluat* OR intervention* adj2 evaluat* OR "confidence interval*" OR heterogeneity OR pooled OR pooling OR "odds ratio*" OR Jadad OR coding).ti,ab; 861756 results.</p> <p>48. EMBASE; evidence-based.ti,ab; 85030 results.</p> <p>49. EMBASE; 43 OR 44 OR 47 OR 48; 1041360 results.</p> <p>50. EMBASE; 41 OR 42 OR 45 OR 46; 164024 results.</p> <p>51. EMBASE; review.ti; 330301 results.</p> <p>52. EMBASE; 49 AND 51; 62458 results.</p> <p>53. EMBASE; (review* adj8 (papers OR trials) OR trial AND data OR studies OR evidence OR intervention* OR evaluation* OR outcome* OR findings OR retriev* adj8 (papers OR trials OR studies OR evidence OR intervention* OR evaluation* OR outcome* OR findings)).ti,ab; 7134639 results.</p> <p>54. EMBASE; 50 OR 52 OR 53; 7170951 results.</p> <p>55. EMBASE; (letter OR editorial).pt; 1370843 results.</p>		
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	<p>56. EMBASE; 54 NOT 55; 7119389 results.</p> <p>57. EMBASE; NONHUMAN/; 4554279 results.</p> <p>58. EMBASE; ANIMAL/; 1669028 results.</p> <p>59. EMBASE; 57 OR 58; 6206554 results.</p> <p>60. EMBASE; exp HUMAN/; 16027110 results.</p> <p>61. EMBASE; 59 not 60; 4835993 results.</p> <p>62. EMBASE; 61 [Limit to: Publication Year 2010-2015]; 993176 results.</p> <p>63. EMBASE; 40 AND 62 [Limit to: Publication Year 2010-2015]; 6 results.</p>		
PsycINFO	<p>21. PsycInfo; exp OVERWEIGHT/ OR exp OBESITY/; 18855 results.</p> <p>22. PsycInfo; BULIMIA/ OR BULIMIA NERVOSA/; 7007 results.</p> <p>23. PsycInfo; "binge eating".ti,ab; 4184 results.</p> <p>24. PsycInfo; 21 OR 22 OR 23; 27621 results.</p> <p>25. PsycInfo; exp PSYCHOTHERAPY/; 47925 results.</p> <p>26. PsycInfo; BEHAVIOR THERAPY/ OR COGNITIVE THERAPY/ OR MIND-BODY THERAPIES/; 31127 results.</p> <p>27. PsycInfo; "cognitive behav*".ti,ab; 30365 results.</p> <p>28. PsycInfo; "interpersonal psychotherapy".ti,ab; 1062 results.</p> <p>29. PsycInfo; exp PSYCHOTHERAPY, GROUP/; 35 results.</p> <p>30. PsycInfo; PRIMARY HEALTH CARE/; 13730 results.</p> <p>31. PsycInfo; GENERAL PRACTITIONERS/ OR GENERAL PRACTICE/; 5345 results.</p> <p>32. PsycInfo; FAMILY PRACTICE/; 165 results.</p> <p>33. PsycInfo; 25 OR 26 OR 27 OR 28 OR 29 OR 30 OR 31 OR 32; 111212 results.</p> <p>34. PsycInfo; WEIGHT LOSS/; 3029 results.</p> <p>35. PsycInfo; exp DIET/; 994 results.</p> <p>36. PsycInfo; exp DIET THERAPY/; 7 results.</p> <p>37. PsycInfo; "restricted diet*".ti,ab; 275 results.</p> <p>38. PsycInfo; "low calor*".ti,ab; 412 results.</p> <p>39. PsycInfo; 34 OR 35 OR 36 OR 37 OR 38; 4573 results.</p> <p>40. PsycInfo; 24 AND 33 AND 39; 256 results.</p> <p>41. PsycInfo; WEIGHT CONTROL/; 4046 results.</p>	8	1

	<p>42. PsycInfo; 39 OR 41; 7268 results.</p> <p>43. PsycInfo; PSYCHODRAMA/; 1940 results.</p> <p>44. PsycInfo; 33 OR 43; 112974 results.</p> <p>45. PsycInfo; 24 AND 42 AND 44; 427 results.</p> <p>46. PsycInfo; (systematic adj1 review OR meta-analytic* OR metanalysis OR metaanalysis OR meta adj1 analysis OR meta-synthesis OR metasynthesis OR meta adj1 synthesis OR meta-regression OR metaregression OR meta adj1 regression OR synthes* adj3 literature OR synthes* adj3 evidence OR integrative adj1 review OR data adj1 synthesis OR research adj1 synthesis OR narrative adj1 synthesis OR systematic adj1 study OR systematic adj1 studies).ti,ab; 35283 results.</p> <p>47. PsycInfo; meta-analysis.ti,ab,pt; 16118 results.</p> <p>48. PsycInfo; (systematic adj1 comparison* OR systematic adj1 overview* OR "evidence based review" OR comprehensive adj1 review OR critical adj1 review OR quantitative adj1 review OR structured adj1 review OR realist adj1 review OR realist adj1 synthesis).ti,ab; 12294 results.</p> <p>49. PsycInfo; 46 OR 2 OR 47 OR 48; 46419 results.</p> <p>50. PsycInfo; review.ti,ab,pt; 310557 results.</p> <p>51. PsycInfo; (medline OR pubmed OR cochrane OR embase OR cinahl OR psyclit OR psycinfo OR psychinfo OR literature adj3 search OR database* adj3 search OR bibliographic adj3 search* OR electronic adj3 search* OR electronic adj3 database* OR computerized adj3 search* OR computerised adj3 search* OR internet adj3 search* OR included adj1 studies OR inclusion adj3 studies OR inclusion adj1 criteria OR selection adj1 criteria OR "predetermined criteria").ti,ab; 3653190 results.</p> <p>52. PsycInfo; (predefined adj1 criteria OR assess* adj3 (quality OR validity) OR select* adj3 (study OR studies) OR data adj3 extract* OR extracted adj1 data OR data adj2 abstracted OR data adj3 abstraction OR published adj1 intervention OR (study OR studies) adj2 evaluat* OR intervention adj2 evaluat* OR confidence adj1 interval OR heterogeneity OR pooled OR pooling OR odds adj1 ratio* OR Jadad OR coding).ti,ab; 135102 results.</p> <p>53. PsycInfo; 50 OR 51 OR 52; 3654628 results.</p> <p>54. PsycInfo; 49 AND 53; 46190 results.</p> <p>55. PsycInfo; review.ti; 122999 results.</p> <p>56. PsycInfo; 53 AND 55; 122999 results.</p>		
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	<p>57. PsycInfo; (review* adj4 (papers OR trials OR studies OR evidence OR intervention* OR evaluation*)).ti,ab; 52677 results.</p> <p>58. PsycInfo; 49 OR 54 OR 56 OR 57; 186943 results.</p> <p>59. PsycInfo; (letter OR editorial OR comment).pt; 156316 results.</p> <p>60. PsycInfo; exp ANIMALS/; 6773 results.</p> <p>61. PsycInfo; exp HUMANS/; 1795 results.</p> <p>62. PsycInfo; 60 not 61; 6460 results.</p> <p>63. PsycInfo; 59 OR 62; 162445 results.</p> <p>64. PsycInfo; 58 not 63; 180392 results.</p> <p>65. PsycInfo; META ANALYSIS/; 14573 results.</p> <p>66. PsycInfo; 64 OR 65; 182232 results.</p> <p>67. PsycInfo; 66 [Limit to: Publication Year 2010-2015]; 60285 results.</p> <p>68. PsycInfo; 45 AND 67 [Limit to: Publication Year 2010-2015]; 8 results.</p>		
<i>Primary Studies</i>			
MEDLINE	<p>1. Medline; exp OVERWEIGHT/OR exp OBESITY/; 153657 results.</p> <p>2. Medline; BULIMIA/OR BULIMIA NERVOSA/; 6422 results.</p> <p>3. Medline; "binge eating".ti,ab; 3558 results.</p> <p>4. Medline; 1 OR 2 OR 3; 160584 results.</p> <p>5. Medline; exp PSYCHOTHERAPY/; 162570 results.</p> <p>6. Medline; BEHAVIOR THERAPY/OR COGNITIVE THERAPY/OR MIND-BODY THERAPIES/; 40390 results.</p> <p>7. Medline; "cognitive behav*".ti,ab; 16659 results.</p> <p>8. Medline; "interpersonal psychotherapy".ti,ab; 622 results.</p> <p>9. Medline; exp PSYCHOTHERAPY, GROUP/; 12059 results.</p> <p>10. Medline; PRIMARY HEALTH CARE/; 56495 results.</p> <p>11. Medline; GENERAL PRACTITIONERS/OR GENERAL PRACTICE/; 6911 results.</p> <p>12. Medline; FAMILY PRACTICE/; 60289 results.</p> <p>13. Medline; 5 OR 6 OR 7 OR 8 OR 9 OR 10 OR 11 OR 12; 284536 results.</p> <p>14. Medline; WEIGHT LOSS/; 25528 results.</p> <p>15. Medline; exp DIET/; 202577 results.</p> <p>16. Medline; exp DIET THERAPY/; 42695 results.</p>		0

	<p>17. Medline; "restricted diet*".ti,ab; 3004 results.</p> <p>18. Medline; "low calor*".ti,ab; 2743 results.</p> <p>19. Medline; 14 OR 15 OR 16 OR 17 OR 18; 232246 results.</p> <p>20. Medline; 4 AND 13 AND 19; 2040 results.</p> <p>21. Medline; randomized.ab; 317570 results.</p> <p>22. Medline; placebo.ab; 160359 results.</p> <p>23. Medline; randomly.ab; 229734 results.</p> <p>24. Medline; trial.ab; 319924 results.</p> <p>25. Medline; groups.ab; 1439454 results.</p> <p>26. Medline; "randomized controlled trial".pt; 390963 results.</p> <p>27. Medline; "controlled clinical trial".pt; 89085 results.</p> <p>28. Medline; 21 OR 22 OR 23 OR 24 OR 25 OR 26 OR 27; 2089222 results.</p> <p>29. Medline; 20 AND 28; 750 results.</p>		
EMBASE	<p>41. EMBASE; random*.ti,ab; 988952 results.</p> <p>42. EMBASE; factorial*.ti,ab; 25384 results.</p> <p>43. EMBASE; (crossover* OR cross-over*).ti,ab; 74625 results.</p> <p>44. EMBASE; placebo*.ti,ab; 216839 results.</p> <p>45. EMBASE; (doubl* ADJ blind*).ti,ab; 152395 results.</p> <p>46. EMBASE; (singl* ADJ blind*).ti,ab; 16021 results.</p> <p>47. EMBASE; assign*.ti,ab; 263651 results.</p> <p>48. EMBASE; allocat*.ti,ab; 94267 results.</p> <p>49. EMBASE; volunteer*.ti,ab; 189633 results.</p> <p>50. EMBASE; CROSSOVER PROCEDURE/; 43555 results.</p> <p>51. EMBASE; DOUBLE BLIND PROCEDURE/; 121819 results.</p> <p>52. EMBASE; RANDOMIZED CONTROLLED TRIAL/; 376895 results.</p> <p>53. EMBASE; SINGLE BLIND PROCEDURE/; 20561 results.</p> <p>54. EMBASE; 41 OR 42 OR 43 OR 44 OR 45 OR 46 OR 47 OR 48 OR 49 OR 50 OR 51 OR 52 OR 53; 1558228 results.</p> <p>55. EMBASE; exp OVERWEIGHT/OR exp OBESITY/; 331696 results.</p> <p>56. EMBASE; BULIMIA/OR BULIMIA NERVOSA/; 11411 results.</p>	1013	1

	<p>57. EMBASE; "binge eating".ti,ab; 4689 results.</p> <p>58. EMBASE; 55 OR 56 OR 57; 343267 results.</p> <p>59. EMBASE; exp PSYCHOTHERAPY/; 192081 results.</p> <p>60. EMBASE; BEHAVIOR THERAPY/OR COGNITIVE THERAPY/OR MIND-BODYTHERAPIES/; 96965 results.</p> <p>61. EMBASE; "cognitive behav*".ti,ab; 24577 results.</p> <p>62. EMBASE; "interpersonal psychotherapy".ti,ab; 792 results.</p> <p>63. EMBASE; exp PSYCHOTHERAPY, GROUP/; 16847 results.</p> <p>64. EMBASE; PRIMARY HEALTH CARE/; 49877 results.</p> <p>65. EMBASE; GENERAL PRACTITIONERS/OR GENERAL PRACTICE/; 127578 results.</p> <p>66. EMBASE; FAMILY PRACTICE/; 70732 results.</p> <p>67. EMBASE; 59 OR 60 OR 61 OR 62 OR 63 OR 64 OR 65 OR 66; 393897 results.</p> <p>68. EMBASE; WEIGHT LOSS/; 97290 results.</p> <p>69. EMBASE; exp DIET/; 221379 results.</p> <p>70. EMBASE; exp DIET THERAPY/; 262713 results.</p> <p>71. EMBASE; "restricted diet*".ti,ab; 3753 results.</p> <p>72. EMBASE; "low calor*".ti,ab; 3696 results.</p> <p>73. EMBASE; 68 OR 69 OR 70 OR 71 OR 72; 517397 results.</p> <p>74. EMBASE; 58 AND 67 AND 73; 4684 results.</p> <p>75. EMBASE; 54 AND 74; 1013 results.</p>		
PsycINFO	<p>21. PsycInfo; exp OVERWEIGHT/OR exp OBESITY/; 18855 results.</p> <p>22. PsycInfo; BULIMIA/OR BULIMIA NERVOSA/; 7007 results.</p> <p>23. PsycInfo; "binge eating".ti,ab; 4184 results.</p> <p>24. PsycInfo; 21 OR 22 OR 23; 27621 results.</p> <p>25. PsycInfo; exp PSYCHOTHERAPY/; 47925 results.</p> <p>26. PsycInfo; BEHAVIOR THERAPY/OR COGNITIVE THERAPY/OR MIND-BODY THERAPIES/; 31127 results.</p> <p>27. PsycInfo; "cognitive behav*".ti,ab; 30365 results.</p> <p>28. PsycInfo; "interpersonal psychotherapy".ti,ab; 1062 results.</p> <p>29. PsycInfo; exp PSYCHOTHERAPY, GROUP/; 35 results.</p> <p>30. PsycInfo; PRIMARY HEALTH CARE/; 13730 results.</p>	173	1

	<p>31. PsycInfo; GENERAL PRACTITIONERS/ OR GENERAL PRACTICE/; 5345 results.</p> <p>32. PsycInfo; FAMILY PRACTICE/; 165 results.</p> <p>33. PsycInfo; 25 OR 26 OR 27 OR 28 OR 29 OR 30 OR 31 OR 32; 111212 results.</p> <p>34. PsycInfo; WEIGHT LOSS/; 3029 results.</p> <p>35. PsycInfo; exp DIET/; 994 results.</p> <p>36. PsycInfo; exp DIET THERAPY/; 7 results.</p> <p>37. PsycInfo; "restricted diet*".ti,ab; 275 results.</p> <p>38. PsycInfo; "low calor*".ti,ab; 412 results.</p> <p>39. PsycInfo; 34 OR 35 OR 36 OR 37 OR 38; 4573 results.</p> <p>40. PsycInfo; 24 AND 33 AND 39; 256 results.</p> <p>41. PsycInfo; WEIGHT CONTROL/; 4046 results.</p> <p>42. PsycInfo; 39 OR 41; 7268 results.</p> <p>43. PsycInfo; PSYCHODRAMA/; 1940 results.</p> <p>44. PsycInfo; 33 OR 43; 112974 results.</p> <p>45. PsycInfo; 24 AND 42 AND 44; 427 results.</p> <p>46. PsycInfo; random*.ti,ab; 143437 results.</p> <p>47. PsycInfo; (doubl* ADJ blind*).ti,ab; 19490 results.</p> <p>48. PsycInfo; (singl* ADJ blind*).ti,ab; 1710 results.</p> <p>49. PsycInfo; RANDOMIZED CONTROLLED TRIAL/; 716 results.</p> <p>50. PsycInfo; groups.ti,ab; 390564 results.</p> <p>51. PsycInfo; exp EXPERIMENTAL DESIGN/; 9849 results.</p> <p>52. PsycInfo; controlled.ti,ab; 88711 results.</p> <p>53. PsycInfo; (clinical adj3 study).ti,ab; 11917 results.</p> <p>54. PsycInfo; trial.ti,ab; 75669 results.</p> <p>55. PsycInfo; 46 OR 47 OR 48 OR 49 OR 50 OR 51 OR 52 OR 53 OR 54; 603614 results.</p> <p>56. PsycInfo; 45 AND 55; 173 results.</p>		
CENTRAL	<p>#1 MeSH descriptor: [Overweight] explode all trees 8594</p> <p>#2 MeSH descriptor: [Obesity] explode all trees 7902</p> <p>#3 MeSH descriptor: [Bulimia Nervosa] explode all trees 157</p>	481	1

	#4 MeSH descriptor: [Binge-Eating Disorder] explode all trees 62 #5 #1 or #2 or #3 or #4 8833 #6 MeSH descriptor: [Psychotherapy] explode all trees 16314 #7 MeSH descriptor: [Cognitive Therapy] explode all trees 5295 #8 MeSH descriptor: [Psychotherapy, Group] explode all trees 2508 #9 "interpersonal psychotherapy" 437 #10 MeSH descriptor: [Mind-Body Therapies] explode all trees 4608 #11 MeSH descriptor: [Behavior Therapy] explode all trees 10909 #12 #6 or #7 or #8 or #9 or #10 or #11 17771 #13 MeSH descriptor: [Primary Health Care] explode all trees 3990 #14 MeSH descriptor: [General Practice] explode all trees 2337 #15 GP 6445 #16 #12 or #13 or #14 or #15 28886 #17 MeSH descriptor: [Weight Reduction Programs] explode all trees 187 #18 MeSH descriptor: [Weight Loss] explode all trees 3723 #19 MeSH descriptor: [Diet Therapy] explode all trees 4173 #20 MeSH descriptor: [Diet] explode all trees 12516 #21 "restricted diet*" 1133 #22 "low calor*" 920 #23 #18 or #19 or #20 or #21 or #22 15508 #24 #5 and #16 and #23 556 Central only 481		
Summary	NA	NA	

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