

Table 1 – Summary Table of included research papers

Title & Author	Sample & Intervention	What this study adds
<p>Screening and Brief Intervention for Obesity in Primary Care Aveyard et al 2016 (UK)</p>	<p>Sample: Obese patients with BMI >30kg or increased body fat percentage</p> <p>Methodology: RCT (Randomised controlled trial) following an opportunistic visit with their GP. Patients were randomised to either;</p> <ul style="list-style-type: none"> • Intervention : a structured weight management programme (referred following brief discussion with GP) OR • Control : a brief intervention with their GP (discussion that their health would benefit from weight loss) <p>Only 379 of the agreed 940 attended the intervention group, and 82 of 942 recruited into the control attended.</p>	<ul style="list-style-type: none"> • The majority of patients’ responded positively to an opportunistic brief discussion from the GP about weight loss. • Those on the intervention lost more weight than those in the control group but with only a small difference between groups. • The difference in weight loss arose mainly due to increased uptake of behavioural support in the intervention group. • Health care practitioners should not be concerned about engaging in opportunistic conversations about weight loss with their patients.
<p>Effect of nutritional counselling and nutritional plus exercise counselling in overweight adults: randomized trial in multidisciplinary primary care practice Molenaar et al 2009 (Netherlands)</p>	<p>Sample: 134 overweight adults with a BMI 28–35, Control group = 70 recruited as above to usual care</p> <p>Methodology: RCT</p> <p>Patients were randomly assigned to either;</p> <ul style="list-style-type: none"> • Individual counselling sessions by a dietician (D) or • dietician plus physiotherapist (D + E), for additional exercise counselling 	<ul style="list-style-type: none"> • Outcomes were assessed at baseline, 6 and 12 months. • Individual counselling sessions by a dietician (D) had a modest reduction in weight loss • The addition of exercise did not significantly enhance the effect on weight, while a small additional beneficial effect on waist circumference (secondary outcome) was
<p>Effects of a Mindfulness-Based Weight Loss Intervention in Adults with Obesity: A Randomized Clinical Trial Daubenmier et al 2016</p>	<p>Sample: 194 adults with (BMI) 30 - 45.9</p> <p>Methodology: RCT</p> <p>Patients were randomly assigned to either;</p> <ul style="list-style-type: none"> • Intervention with diet and exercise with mindfulness components. • Control with diet and exercise without mindfulness 	<ul style="list-style-type: none"> • Patients in the intervention with mindfulness lost more weight at 12 and 18months though not significantly significant. • Fasting glucose was significantly improved at 18 months (Estimates for other metabolic risks factors were not statistically significant)

USA		Mindfulness with diet and exercise may promote long a term improvement
Efficacy of Water Preloading Before Main Meals as a Strategy for Weight Loss in Primary Care Patients with Obesity: RCT 2015 Parretti et al 2015 UK	Sample: 84 obese adults from general practice Methodology: RCT Patients were randomly assigned to either; <ul style="list-style-type: none"> • Intervention: drinking 500 ml of water 30 minutes before their main meals OR • The control group were asked to imagine their stomach was full before meals. 	<ul style="list-style-type: none"> • The water-preloading group lost 1.3 kg more than comparators at follow up. (P=0.028) • Water pre-loading before main meals may lead to a moderate weight loss and is free and easy to implement for patients.
Evaluation of the Counterweight Programme for obesity management in primary care: a starting point for continuous improvement Counterweight Project Team Reckless et al 2008 UK	Sample: 1906 patients with body mass index (BMI) ≥ 30 kg/m ² or ≥ 28 kg/m ² with obesity-related comorbidities. Methodology: Prospective evaluation of a model of weight management in Primary Care (PC) Nurses from 65 UK practices of different sizes & regions, delivered intervention's over 3 years after 8 hrs of training in behaviour change & weight management education for patients with co-morbidities.	<ul style="list-style-type: none"> • 1419 patients were in the programme for ≥ 12 months, 825 for ≥ 24 months. • Average weight change for attendees at 12 months (642) was -3.0 kg and at 24 months (357) was -2.3 kg • For attendees 30.7% maintained weight loss $\geq 5\%$ at 12months and 31.9% at 24months. • The number of visits to the practice, being aged 35–44 years, having a higher baseline BMI, and an absence of diabetes or arthritis were also associated with increased average weight loss. • PC staff trained according to a structured programme can support obese patients to achieve a clinically beneficial weight loss.
A brief intervention for weight control based on habit-formation theory delivered through primary care: results from a randomised controlled trial RJ Beeken et al 2017	Sample : 537 adults with obesity from 14 PC providers Methodology: RCT Patients were randomly assigned to either; <ul style="list-style-type: none"> • 10TT (n=267), a self-guided leaflet-based intervention focused on recommendations of habit-formation theory; or • to 'usual care' (n=270) (community referral or lifestyle advice.) 	<ul style="list-style-type: none"> • The 10TT group lost significantly more weight over 3 months than the Usual Care group. • At 24 months, they had maintained their weight loss, but the 'usual care' group had lost a similar amount, demonstrating no long- term difference. • 10TT offers a short term, low cost option.

UK		
<p>An internet-based intervention with brief nurse support to manage obesity in primary care (POWeR+): a pragmatic, parallel-group, randomised controlled trial</p> <p>Little et al 2016 UK</p>	<p>Sample: Adults with a BMI of 30 kg/m² or more (or ≥28 kg/m² with hypertension, hypercholesterolaemia, or diabetes.)</p> <p>Methodology: A pragmatic, parallel-group, RTC at 56 PC practices in central and South England. Patients were randomly assigned to either;</p> <ul style="list-style-type: none"> • Control group : receive Evidence Based (EB) diet advice + 6 monthly nurse follow-up • POWeR+ Face-to-face [POWeR +F]; a web based Intervention which included up to 7 nurse contacts over 6 months • [POWeR + R]; web-based intervention and remote up to 5 emails or brief phone calls over 6 months. 	<p>Compared to the control group, patients in POWeR+F achieved an additional weight reduction of 1.5 kg over 12 months, & POWeR +R an additional 1.3 kg</p> <p>21% control group, 29% POWeR+F , 31% POWeR +R had a 5% weight reduction after 12 months.</p> <ul style="list-style-type: none"> • Weight loss can be maintained by some individuals by use of EB advice with brief nurse follow up. • More people can maintain a clinically important weight reduction with a web based behavioural programme and brief remote follow up with no increase in costs
<p>Primary care referral to a commercial provider for weight loss treatment versus standard care: a randomised controlled trial</p> <p>Jebb et al 2011 Australia, Germany, and UK.</p>	<p>Sample: 772 overweight and obese adults were recruited by PC practices in Australia, Germany, and UK.</p> <p>Methodology: parallel group RCT</p> <p>Participants were randomly assigned to either;</p> <ul style="list-style-type: none"> • 12 months of Standard Care as defined by national treatment guidelines • 12 months membership to a Weight Watchers (WW) programme and followed up for 12 months 	<ul style="list-style-type: none"> • 377 participants (61%) assigned to WW, 230 (61%) completed the 12-month assessment. • 395 (54%) were assigned to Standard Care,(SC) of whom 214 completed the 12-months. • Participants in the WW group lost twice as much as those in the SC group. Average weight change at 12 months was -5.06 kg for those at WW versus 's -2.25 kg receiving SC. • Referral to a commercial weight loss programme that provides regular weighing, advice on diet and physical activity, motivation techniques and group support, can offer a clinically useful early intervention for weight management, that can be delivered at large scale with less expense than Standard Care.

Diagram 1 - PRISMA

