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<https://orcid.org/0000-0002-4525-6419> (2021) Group versus onetoone multicomponent lifestyle
interventions for weight management: a systematic review and meta-analysis of randomised
controlled trials. *Journal of Human Nutrition and Dietetics*, 34 (3) . pp. 485-493. ISSN
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Supplementary material

This version is available at: <https://eprints.mdx.ac.uk/33369/>

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	Inclusion	Exclusion
Population	<ul style="list-style-type: none"> • Inclusion BMI $\geq 25\text{kg/m}^2$ • ≥ 18 years old 	<ul style="list-style-type: none"> • Inclusion BMI $< 25\text{kg/m}^2$ • < 18 years old • Pregnancy
Intervention	<ul style="list-style-type: none"> • Group • Weight loss • Multi-component • Non-specific disease management • Lifestyle intervention only 	<ul style="list-style-type: none"> • One-to-one • Weight maintenance • Not multi-component • Disease-specific management • Surgical, pharmacotherapy, meal replacements
Comparator	<ul style="list-style-type: none"> • One-to-one 	<ul style="list-style-type: none"> • Group • Minimal intervention/control
Outcome	<ul style="list-style-type: none"> • Weight change (kg) at 12 months reported 	<ul style="list-style-type: none"> • Weight change (kg) not reported at 12 months • Weight change (kg) data is reported, but it is untransformed and non-parametric
Study Design	<ul style="list-style-type: none"> • Randomised controlled trial 	<ul style="list-style-type: none"> • Any other study design

Database	Search
CENTRAL	<p>#1 MeSH descriptor: [Obesity] this term only</p> <p>#2 MeSH descriptor: [Obesity, Abdominal] explode all trees</p> <p>#3 MeSH descriptor: [Obesity, Metabolically Benign] explode all trees</p> <p>#4 MeSH descriptor: [Obesity, Morbid] explode all trees</p> <p>#5 #1 or #2 or #3 or #4</p> <p>#6 MeSH descriptor: [Life Style] explode all trees</p> <p>#7 MeSH descriptor: [Diet] explode all trees</p> <p>#8 MeSH descriptor: [Physical Fitness] explode all trees</p> <p>#9 MeSH descriptor: [Exercise] explode all trees</p> <p>#10 MeSH descriptor: [Cognitive Therapy] explode all trees</p> <p>#11 #6 or #7 or #8 or #9 or #10</p> <p>#12 MeSH descriptor: [Body Weight Changes] explode all trees</p> <p>#13 MeSH descriptor: [Body Weight Maintenance] explode all trees</p> <p>#14 MeSH descriptor: [Body Mass Index] explode all trees</p> <p>#15 #12 or #13 or #14</p> <p>#16 #5 and #11 and #15</p> <p>#17 adult not child</p> <p>#18 humans not animals</p> <p>#19 #17 and #18</p> <p>#20 #16 and #19</p> <p>#21 #20 in Trials</p>
EMBSCO CINAHL	<p>#1 exp OBESITY/</p> <p>#2 (overweight).ti,ab</p> <p>#3 (1 OR 2)</p> <p>#4 exp LIFE STYLE/</p> <p>#5 exp DIET/</p> <p>#6 exp PHYSICAL FITNESS/</p> <p>#7 exp EXERCISE/</p> <p>#8 exp COGNITIVE THERAPY/</p> <p>#9 (4 OR 5 OR 6 OR 7 OR 8)</p> <p>#10 exp BODY WEIGHT CHANGES/</p> <p>#11 exp BODY MASS INDEX/</p> <p>#12 ("weight maintenance").ti,ab</p> <p>#13 (10 OR 11 OR 12)</p> <p>#14 "RANDOMIZED CONTROLLED TRIALS"/</p> <p>#15 "CLINICAL TRIALS"/</p> <p>#16 (random*).ab</p> <p>#17 (trial).ti</p> <p>#18 (14 OR 15 OR 16 OR 17)</p> <p>#19 exp HUMAN/ NOT ANIMAL/</p> <p>#20 exp ADULT/ NOT CHILD/</p> <p>#21 (19 AND 20)</p> <p>#22 (3 AND 9 AND 13 AND 18 AND 21)</p>

EMBSO EMBASE	<p>#1 OBESITY/ OR "ABDOMINAL OBESITY"/ OR "METABOLICALLY BENIGN OBESITY"/ OR "MORBID OBESITY"/</p> <p>#2 (overweight).ti,ab</p> <p>#3 (1 OR 2)</p> <p>#4 exp "LIFESTYLE MODIFICATION"/</p> <p>#5 exp DIET/</p> <p>#6 "FITNESS,PHYSICAL"/</p> <p>#7 exp EXERCISE/</p> <p>#8 exp "COGNITIVE THERAPY"/</p> <p>#9 (4 OR 5 OR 6 OR 7 OR 8)</p> <p>#10 exp "WEIGHT CHANGE"/</p> <p>#11 exp "BODY MASS"/</p> <p>#12 ("weight maintenance").ti,ab</p> <p>#13 (10 OR 11 OR 12)</p> <p>#14 'crossover procedure' OR 'double-blind procedure' OR 'randomized controlled trial' OR 'single-blind procedure' OR (random* OR factorial* OR crossover* OR "cross over*" OR "doubl* blind*" OR "singl* blind*" OR assign* OR allocat* OR volunteer*).ab,ti</p> <p>#15 exp HUMAN/ NOT ANIMAL/</p> <p>#16 exp ADULT/ NOT CHILD/</p> <p>#17 (17 AND 18)</p> <p>#18 (3 AND 9 AND 13 AND 14 AND 17)</p> <p>#19 18</p>
EMBSO MEDLINE	<p>#1 OBESITY, ABDOMINAL/ OR OBESITY, METABOLICALLY BENIGN/ OR OBESITY, MORBID/</p> <p>#2 OVERWEIGHT/</p> <p>#3 (1 OR 2)</p> <p>#4 exp LIFE STYLE/</p> <p>#5 exp DIET/</p> <p>#6 exp PHYSICAL FITNESS/</p> <p>#7 exp EXERCISE/</p> <p>#8 exp COGNITIVE THERAPY/</p> <p>#9 (4 OR 5 OR 6 OR 7 OR 8)</p>

	<p>#10 exp "BODY WEIGHT CHANGES"/</p> <p>#11 exp "BODY WEIGHT MAINTENANCE"/</p> <p>#12 exp "BODY MASS INDEX"/</p> <p>#13 (10 OR 11 OR 12)</p> <p>#14 (randomized controlled trial).pt</p> <p>#15 (controlled clinical trial).pt</p> <p>#16 (randomi?ed).ab</p> <p>#17 (randomly).ab</p> <p>#18 (trial).ti</p> <p>#19 "CLINICAL TRIALS AS TOPIC"/</p> <p>#20 (14 OR 15 OR 16 OR 17 OR 18 OR 19)</p> <p>#21 exp HUMANS/ NOT ANIMALS/</p> <p>#22 exp ADULT/ NOT CHILDREN/</p> <p>#23 (21 AND 22)</p> <p>#24 (3 AND 9 AND 13 AND 20 AND 23)</p>	
ISRCTN register	#1 (obesity OR overweight OR weight loss)	9

Study or Subgroup	Group Intervention		One-to-One Intervention		Weight	Risk Ratio	
	Events	Total	Events	Total		M-H, Random, 95% CI	M-H, Random, 95% CI
Appel 2011	55	133	50	131	22.2%	1.08 [0.80, 1.46]	
Heshka 2003	66	172	34	170	19.3%	1.92 [1.34, 2.74]	
Jebb 2011	135	230	70	214	26.4%	1.79 [1.44, 2.24]	
Jolly 2011	113	400	20	140	15.9%	1.98 [1.28, 3.05]	
McRobbie 2016	61	221	22	109	16.1%	1.37 [0.89, 2.10]	
Total (95% CI)		1156		764	100.0%	1.58 [1.25, 2.00]	
Total events	430		196				
Heterogeneity: $\tau^2 = 0.04$; $\chi^2 = 10.11$, $df = 4$ ($P = 0.04$); $I^2 = 60\%$							
Test for overall effect: $Z = 3.78$ ($P = 0.0002$)							

