

Question 13F: What is the evidence that combined interventions (diet and exercise) in obese adults effect a change in weight?

Reference	Design/Demographics	Group description	Length weeks	Diet/ Behavioral	Activity frequency with provider	Min./week	Max % HR	VO ₂ Max % change from baseline	Drop-out Total	Weight baseline	Mean weight change	Follow-up	Comments
											1. (23) 2.5 (0.86, 4.14) 2. (17) -1.6 (-4.22, 1.02) <u>Weight in kg, age >50</u> 1. (41) 0.3 (-0.93, 1.53) 2. (52) -4.5 (-6.11, -2.89) <u>Weight in kg, BDI 0-13</u> 1. (46) 0.9 (-0.29, 2.09) 2. (52) -4.2 (-5.87, -2.53) <u>Weight in kg, BDI >13</u> 1. (17) 1.6 (-0.51, 3.71) 2. (15) -2 (-4.49, 0.49) <u>Weight in kg, dc smoking before MI</u> 1. (24) 0.3 (-1.09, 1.69) 2. (31) -6.1 (-7.82, -4.38) <u>Weight in kg, dc smoking after MI</u> 1. (17) 3.1 (0.58, 5.62) 2. (21) -2.3 (-5.53, 0.93) <u>Weight in kg, are smoking</u> 1. (23) 0.5 (-1.06, 2.06) 2. (17) -1.6 (-3.81, 0.61)		
Simkin-Silverman 373	Randomized: yes Self-selected: no Included: BMI 20-34 includes non-overweight Mean Age: 46.9 Mean Weight: ng Female/Total: 535/535	1. Control (no intervention) 2. Intervention group (low fat, exercise and behavioral therapy)	ongoing	Diet: 1300-1550 kcal/d Behavioral: yes group qwx10,q2w	1. n/a 2. unclear	not stated	not stated	not given	overall 15/535 (3%)	<u>Weight in kg</u> 1. (267) 67.1 (65.9, 68.3) 2. (253) 67.3 (66.1, 68.5) no p value stated		<u>Weight in kg</u> 6 months 1. (267) -0.22 (-0.59, -.15) 2. (253) -4.8 (-5.4, -4.3) <u>2vs1</u> -4.58 (-5.1, -4.1)	Weight: Of the 56 mildly overweight participants with a 10 lb goal, the mean weight loss was 4.9 kg (10.8,a,9.1lb) with 55% meeting their weight loss goal, and of the 75 overweight participants with a 15 lb goal the mean weight loss was 6.4 kg (14,a,13.1 lb) with 45% meeting their goal. The ANCOVA for physical activity (i.e., movement) as measured by the Caltrac was significant after adjusting for baseline differences (p<0.001). The intervention group

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													showed an increase of 3.2 motion counts per hour compared to a change of 0.08 in the control group. Compliance: The number of treatment sessions attended was significantly correlated with change in risk factors such as weight (r=-0.48, p<0.001), WHR (r=-0.13, p<0.001), LDL (r=-0.19, p<0.001),TG (r=-0.1, p<0.05) and glucose (r=-0.18, p<0.005).
Andersen 469	Randomized: unclear Self-selected: yes Included: ng Mean age: 44 Mean weight: 95 Female/Total: 66/66	1. Diet alone 2. Diet and aerobic training 3. Diet and resistance training 4. Diet and combined training	24 (8)	Diet: yes 925 x16w then 1200 kcal x7w then 1500 Behavioral: yes group, qwx26 then q2w	1. n/a 2. 3x/w 3. 3x/w 4. 3x/w	1. n/a 2. 40/3 3. 40/3 4. 40/3	1. n/a 2. ng 3. ng 4. ng	not given	not given	<u>Weight in kg</u> 1. (16) 94.3 (86.3, 102.3) 2. (16) 96.7 (90.3, 103.1) 3. (18) 97 (87.1, 106.9) 4. (16) 88.7 (81.8, 95.6)	1. (16) -12.9 2. (16) -13.4 3. (18) -17.9 4. (16) -15.3 kg <u>3vs1</u> -5.00 (-13.54, 3.54) <u>4vs1</u> -2.40 (-9.95, 5.15) <u>2vs1</u> -0.50 (-7.93, 6.93)	<u>Weight at 104 weeks</u> 1. (16) -13.1 2. (16) -14.8 3. (18) -15.3 4. (16) -15.4 kg <u>2vs1</u> -1.70 (-8.92, 5.52) <u>3vs1</u> -2.20 (-10.74, 6.34) <u>4vs1</u> -2.30 (9.85, 5.25)	There were no significant differences among the 4 groups at any time during the treatment on changes in weight, anthropometry or lipids. In the absence of differences, the data were collapsed across groups to examine the relation among changes in outcome. An 11% weight reduction was achieved in only 8 weeks of dieting, a 22.7% reduction in TG and a 15.7% in TC. Group 2: exercise intensity of 11-15 (moderate exertion range) according to Borg's rating scale.
Leighton 475	Randomized: yes Self-selected: unclear Included: ng Mean age: 42.5 Mean weight: 72.5 Female/Total: 49/66	1. Low-fat diet alone 2. Low-fat diet and exercise	26	Diet: yes NCEP I Behavioral: No	1. n/a 2. 3x/w	1. n/a 2. 45/3	1. n/a 2. 80	1. 3% 2. 16%	1. 6/33 (18%) 2. 9/33 (27%)	<u>Weight in kg</u> 1. (26) 70 (63.9, 76.1) 2. (24) 75 (69.5, 80.5)	<u>Weight in kg</u> 1. (26) 0 2. (24) -2 <u>2vs1</u> -2 (-8.1,4.1)		
Katzel 369	Randomized: unclear Self-selected: unclear Included: 120-160% IBW	1. Control (no intervention) 2. Weight loss 3. AHA diet + exercise	36	Diet: yes 2. 300-500 kcal/d less to lose 10% in 9	1. n/a 2. n/a 3. 3x/w	1. n/a 2. n/a 3. 45/3	1. n/a 2. n/a 3. 70-80	not given	1. 8/26 (31%) 2. 25/73 (34%) 3. 19/71	2. (73) 94.3 (91.7, 96.9)	2. (44) -9.5 (-8.1,-10.9)	none	

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	Mean age: 61 Mean weight: 91 Female/Total: 0/170			mo 3. AHA step I					(27%)				
Hammer 434	Randomized: unclear Self-selected: yes Included: >130% IBW premenopausal women Mean age: not given Mean weight: 88.7 Female/Total: 36/36	1. Low-fat, ad libitum carbohydrate diet with no exercise 2. Low-fat, ad libitum carbohydrate diet with exercise 3. Calorie restricted, low-fat, high CHO diet with no exercise 4. Calorie restricted, low-fat, high CHO diet with exercise	16	Diet: group 1,2: low-fat, ad libitum CHO group 3,4: 800 kcal Behavioral: yes frequency: qw	1,3 n/a 2,4 3-4x/w	1,3 n/a 2,4 4.8km/5	1,3 n/a 2,4 70-85%	1. -3.0% 2. 5% 3. -8% 4. 10%	overall 10/36 (28%)	<u>Weight in kg</u> 1. (4) 98.8 (71.1, 126.5) 2. (8) 84.1 (70.0, 98.2) 3. (8) 89.1 (80.0, 98.2) 4. (6) 87.7 (64.0, 111.4) 1,2. (12) 89 (77.7, 100.3) 3,4. (14) 88.5 (79.1, 97.9) 1,3. (12) 92.3 (83.7, 100.9) 2,4. (14) 95.6 (84.7, 106.5)	1. (4) -5.8 2. (8) -6.7 3. (8) -9.5 4. (6) -12.9 1,2 (12) -6.4 3,4 (14) -11.0 1,3 (12) -8.2 2,4 (14) -19.3 2vs1: -0.9 (-14, 12) 3vs1: -3.7 (-14, 7.4) 4vs3: -3.4 (-16, 10) 4vs2: -6.2 (-21, 8.7) Low fat vs ↓ Calorie 1,2 vs 3,4 -4.6 (-17.3, 8.9) Exercise vs no exercise 2,4 vs 1,3 -11.1 (-21.5,-0.7)	none	
Kanaley 681	Randomized: unclear Self-selected: unclear Included: BMI >29 Mean age: n/a Mean weight: 88.3 Female/Total: 24/24	1. Diet with informal exercise 2. Diet with formal exercise	16	Diet: 2.1MJ less Behavioral: no	1. none 2. 3-5x/wk	1. ng 2. 30/3	1. ng 2. 60-80	1. 1.5% 2. 16%	overall 5/24 (21%)	<u>Weight in kg, lower obesity</u> 1,2. (9) 87.1 (81.6, 92.6) <u>Weight in kg, upper obesity</u> 1,2. (10) 89.5 (83.6, 95.4)	<u>Weight in kg, lower obesity</u> 1,2 (9) -7.7 (-13.39, -2.01) <u>Weight in kg, upper obesity</u> 1,2 (10) -9.2 (-15.3, -3.1)	none	Within the upper obesity and lower obesity groups there was no effect of formal vs informal exercise instruction on weight loss, lean body mass or basal metabolic rate.
Stevens 376	Randomized: unclear Self-selected: unclear	1. Control (no intervention)	72 (24,52 w)	Diet: yes to lose max	1. n/a 2. unclear	1. n/a 2. 30-40	1. n/a 2. 40-55	not given	not given	not given	<u>Weight in kg, women</u> 2. (ns) -1.6 (n/a, n/a)		At the end of 18 months, 45% men and 26% women in intervention group had met their 4.5

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	Included: 115-165% IBW Hypertension Mean age: 42.5 Mean weight: 89.7 Female/Total: 179/564	2. Diet, behavioral and exercise		0.9kg/2w Behavioral: yes Frequency: unclear		4-5x/w					Weight in kg, men 2. (ns) -4.7 (n/a, n/a)		kg loss goal compared to 12 and 18% in the placebo group.
Gordon 70030	Randomized: unclear Self-selected: yes Included: hypertensive and moderately obese Mean age: 48 Mean weight: 98 Female/Total: 38/55	1. Diet 2. Exercise training 3. Exercise and diet	12	Diet: yes to lose 10% of baseline body weight Behavioral: no	None	1. n/a 2. 3-5 x/wk 3. 3-5 x/wk	1. n/a 2. 60-85% 3. 60-85%	Not given	1. 0/14 2. 2/17 3. 5/24	Weight (kg) 1. (14) 101.9 (88.6, 115.2) 2. (15) 100.5 (86.5, 114.5) 3. (19) 92.7 (85.9, 99.4)	Weight (kg) 1. (14) -1 (2.0,0.4) 2. (15) -5.8 (-7.9, -3.6) 3. (19) -7.1 (-8.5, -5.7)	None	
Neumark-Sztainer 471	Randomized: unclear Self-selected: yes Included: BMI >27 Mean age: ng Mean weight: ng Female/Total: 42/42	1. Diet and behavioral therapy, no exercise 2. Diet, behavioral therapy and exercise	12 (8)	Diet: yes 1000 kcal/d Behavioral: yes weekly	1. n/a 2. 3-5x/w	1. n/a 2. 10/11	1. n/a 2. ng	not given	overall 2/42 (5%)	Not given	Weight in kg 1. (19) -3.8 (-2.8, -4.8) 2. (21) -3.6 (-2.4, -4.8) 2vs1 0.2 (-0.87, 1.27)	Weight in kg at 20 weeks 1. (11) -3.9 (-0.5, -7.3) 2. (13) -4.6 (-2.9, -6.3) 2vs1 -0.70 (-3.15, 1.75)	
	Exercise >60min 3x/wk												
Blonk 470	Randomized: unclear Self-selected: no Included: BMI >27 Diabetes Mean age: ng Mean weight: ng Female/Total: ng/53	1. Conventional diet program (diet counseling alone) 2. Comprehensive diet, behavioral and exercise program	2 years (24w)	Diet: 500 kcal less than usual intake Behavioral: yes q4mo	1. n/a 2. qd for 3-6mo	1. n/a 2. 60/7	1. n/a 2. 60-80	not given	1. 4/26 (15%) 2. 3/27 (11%)	not given	*Median difference between groups (comprehensive vs conventional) Weight in kg 2vs1 -1.3 (-3.3, 0.7)		Three variates were independently associated with 2 year body percent weight loss: HbA1c (beta=1.5; p<0.001) the energy % CHO intake (beta=-15.2; p=.04) and the % of obese subjects within the family (beta=-3.9, p=0.03). These three variates together explained 43.7% of the observed variance of body weight changes. A reduction in HgbA1c of more than 1% after 2 years of treatment was observed in only 6 patients in the comprehensive program (22.2%) and 4 in the conventional program (15.3%).

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Anderssen 346	Randomized: unclear Self-selected: no Included: BMI >24 kg/m ² Mean age: 44.9 Mean weight: 28.8 kg/m ² Female/Total: 21/212	1. Control (no diet or exercise) 2. Diet alone 3. Exercise alone 4. Diet and exercise	52	Diet: yes to lose 0.5-1.0 kg/month	3,4: 3/wk	60/3	60-80%	unable to estimate	1. 0/43 2. 3/55 (5%) 3. 5/54 (9%) 4. 2/67 (3%)	<u>BMI</u> 1a. (12) 30 (27.14, 32.86) 2a. (16) 29.9 (28.41, 31.39) 3a. (20) 29.5 (27.83, 31.17) 4a. (24) 29.6 (27.74, 31.46) <u>BMI</u> 1b. (16) 27.9 (26.62, 29.18) 2b. (17) 30.9 (28.36, 33.44) 3b. (16) 28.4 (26.91, 29.89) 4b. (20) 27.9 (26.64, 29.16) <u>BMI</u> 1c. (15) 27.4 (26.33, 28.47) 2c. (19) 28 (26.53, 29.47) 3c. (13) 27.4 (25.87, 28.93) 4c. (21) 28 (26.75, 29.25) Groups were divided for results presentation into tertiles for blood pressure Group a: with DBP >91 Group b: with DBP 84-9 mm Hg Group c: with DBP <84	<u>BMI</u> 1a. (12) 0.2 (-0.46, 0.86) 2a. (16) -1.7 (-2.55, -0.85) 3a. (20) -0.4 (-1.03, 0.23) 4a. (24) -2.2 (-2.61, -1.79) <u>BMI</u> 1b. (16) 0.4 (-0.03, 0.83) 2b. (17) -1.4 (-2.46, -0.34) 3b. (16) 0 (-0.64, 0.64) 4b. (20) -2 (-2.84, -1.16) <u>BMI</u> 1c. (15) 0.4 (0.19, 0.61) 2c. (19) -0.7 (-1.12, -0.28) 3c. (13) -0.5 (-1.37, 0.37) 4c. (21) -1.2 (-2.03, -0.37)		
Bertram 445	Randomized: unclear Self-selected: unclear Included: BMI >30 Mean age: 37 Mean weight: 94 Female/Total: 45/45	1. Diet alone 2. Diet + behavioral 3. Diet plus exercise	16	Diet: yes kcal/d: ng Behavioral: yes Format: group Frequency: qw	1. n/a 2. n/a 3. 3-5x/w	1. n/a 2. n/a 3. 60/3	1. n/a 2. n/a 3. 70%	1. 2% 2. 4% 3. 26%	1. (47%) 2. (0%) 3. (13%)	<u>Weight in kg</u> 1. (8) 96.6 (86.2, 107.0) 2. (15) 94.5 (85.9, 103.1) 3. (13) 91.5 (95%CI 81.7, 101.3)	<u>Weight in kg</u> 1. (8) -9.3 2. (15) -8.1 3. (13) -7.0 <u>3vs2</u> 1.1 (-7.8,10) <u>3vs1</u> 2.3 (-6.6,11.2) <u>2vs1</u> 1.2 (-7.1, 9.5)	none	

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Wood 380	Randomized: unclear Self-selected: yes Included: BMI 28-34 for premenopausal women and 24-30 for men Mean age: 39.7 Mean weight: 86.7 Female/Total: 132/264	1. No intervention 2. Diet alone 3. Diet and exercise	52	Diet: NCEP I Behavioral: no	1. n/a 2. n/a 3. 3-5x/wk	1. n/a 2. n/a 3. 45/3	1. n/a 2. n/a 3. 60-80	Men 1. -0.2 2. 1.6 3. 8.6 Women 1. 0 2. 1.4 3. 6.4 mean Δ from baseline	overall 27/264 (10%)	Not given by groups	<u>Weight in kg, men</u> 1. (40) 1.7 (0.2, 3.2) 2. (40) -5.1 (-7.0, -3.2) 3. (39) -8.7 (-10.5, -6.9) <u>2vs1</u> -6.8 (-8.48, -5.12) <u>3vs1</u> -10.40 (-12, -8.7) <u>3vs2</u> -3.6 (-5.4, -1.8) <u>Weight in kg, women</u> 1. (39) 1.3 (-0.4, 3.0) 2. (31) -4.1 (-6.1, -2.1) 3. (42) -5.1 (-6.8, -3.4) <u>2vs1</u> -5.4 (-7.2, -3.6) <u>3vs1</u> -6.8 (-29, 16) <u>3vs2</u> -1 (-25, 23)	none	
Svendsen 384	Randomized: unclear Self-selected: unclear Included: BMI >25 Mean age: ng Mean weight: 77.8 Female/Total: 121/121	1. Control (no diet, exercise) 2. Diet alone 3. Diet + exercise	12	Diet: yes MJ/d: 4.2 Behavioral: no	1. n/a 2. n/a 3. 3-5x/w	1. n/a 2. n/a 3. 90/3	1. n/a 2. n/a 3. ng	1. 8.5% 2. 12% 3. 33%	none	<u>Weight in kg</u> 1. (21) 76.6 (72.6, 80.6) 2. (51) 78.1 (75.9, 80.3) 3. (49) 78.1 (75.1, 81.1)	<u>Weight in kg</u> 1. (20) 0.5 (-0.3, 1.3) 2. (50) -9.5 (-10.3, -8.7) 3. (48) -10.3 (-11.2, -9.4) <u>3vs2</u> -0.8 (-1.64, 0.04) <u>2vs1</u> -10 (-10.79, -9.21) <u>3vs1</u> -10.8 (-11.6, -9.9)	<u>Weight in kg_9 month</u> 1. (16) -0.5 2. (47) -7.5 3. (47) -9 p=ng	There was still a significant and similar weight loss of about 8 kg in the 2 intervention groups. The lean tissue mass was still decreased in the diet only but not in the diet plus exercise group as compared to control (p<0.05). The women from the diet plus exercise group who were current exercisers at the follow-up had a significantly greater reduction in weight (10.9 vs 6.6 kg), fat tissue mass (10.0 vs 5.4 kg) and a significantly greater increase in the RMR (11.1 vs 1.1 kJ/kg/d).
Wing 473	Randomized: unclear Self-selected: unclear Included: >120% IBW Diabetes Mean age: 55 Mean weight: 103 Female/Total: 42/55	1. Diet plus placebo exercise 2. Diet plus moderate exercise Duration: 10 week intensive then up to 24 weeks of maintenance	24	Diet: yes ADA to lose 1 kg/w Behavioral: yes q2wx10, qmo	1. n/a 2. 2/wk 3. n/a 4. 3-5/w	1. n/a 2. 60/3 3. n/a 4. 60/3	1. n/a 2. ng 3. n/a 4. ng	not given	1. 1/13 (7%) 2. 2/12 (17%) 3. 0/15 (0%) 4. 2/15 (13%)	<u>Weight in kg</u> 1. (12) 97.4 (89.0, 105.8) 2. (10) 106.9 (94.9, 118.9) 3. (15) 102 (91.3, 112.7) 4. (13) 104.1 (91.0, 117.2)	<u>Weight in kg (10 weeks)</u> 1. (12) -7.3 2. (10) -8.5 3. (15) -5.6 4. (13) -9.3	<u>Weight in kg 12 months</u> 1. (11) -4 (-8.2, 0.2) 2. (8) -7.8 (-16.5, 0.9) 3. (15) 98.2 (87.7, 108.7) 4. (13) 96.2 (82.0, 110.4)	Activity level at 1 year was also related to weight change (p<0.001) with weight losses of 0.45 kg, 2.7 kg and 14.1 kg for the low, medium and high exercise tertiles. Low: 168-700 kcal/w middle: 700-1178 kcal/w high: 1180-2212 kcal/w

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		<p><u>Study 2</u> 3. Diet alone (study 2) 4. Diet and more intensive exercise (study 2)</p> <p>Duration: 10 weeks intensive then up to 52 weeks maintenance</p>	52									<u>2vs1</u> -3.2 (-9.0, 2.6)	<p>Study 2</p> <p>Exercise at one year correlated with weight loss (r=-0.57, p<0.001).</p>
Sweeney 472	<p>Randomized: unclear Self-selected: yes Included: 135-185% IBW premenopausal women Mean age: 34 Mean weight: 96 Female/Total: 37/37</p>	<p>1. Moderate energy restriction, sedentary 2. Moderate energy restriction, aerobic exercise 3. Moderate energy restriction, circuit weight training 4. Severe energy restriction, sedentary 5. Severe energy restriction, aerobic exercise 6. Severe energy restriction, circuit weight training</p>	24	<p>Diet: yes 1,2,3: 70% EER 1369 kcal 4,5,6: 40% of EER 782 kcal Behavioral: no</p>	<p>1. n/a 2. 3-5x/w 3. 3-5x/w 4. n/a 5. 3-5x/w 6. 3-5x/w</p>	<p>1. n/a 2. 200/3 3. ng/3 4. n/a 5. 200/3 6. ng/3</p>	<p>1. n/a 2. 70-80 3. 70-80 4. n/a 5. 70-80 6. 70-80</p>	not given	not reported	<p><u>Weight in kg</u> 1. (5) 94.6 (85.7, 103.5) 2. (5) 93.2 (82.4, 104.0) 3. (4) 101.8 (84.9, 118.7) 4. (5) 93 (74.1, 111.9) 5. (5) 95.7 (84.6, 106.8) 6. (6) 100.1 (87.8,112.4)</p>	<p><u>Weight in kg</u> 1,2,3 (14) -10.8 (-11.4, -10.2) 4,5,6 (16) -15.1 (-15.8, -14.4)</p>		
Verity 446	<p>Randomized: unclear Self-selected: unclear Included: >120% IBW postmenopausal women with NIDDM Mean age: 59.2 Mean weight: 79.2 Female/Total: 10/10</p>	<p>1. Control (diet) 2. Exercise</p>	16	<p>Diet: yes Encouraged Behavioral: no</p>	<p>1. n/a 2. 3-5x/wk</p>	<p>1. n/s 2. 60-90/3</p>	<p>1. n/a 2. 65-80</p>	<p>1. -1.6% 2. 32%</p>	not reported	<p><u>Weight in kg</u> 1. (5) 83.8 (54.9, 112.7) 2. (5) 74.7 (54.2, 95.2)</p>	<p><u>Weight in kg</u> 1. (5) -2.9 2. (5) -2.1</p> <p><u>2vs1</u> 0.8 (-17, 18.68)</p>		

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	Includes Non-overweight												
Page 684	Randomized: unclear Self-selected: unclear Included: non-overweight, subjects with impaired glucose tolerance excluded if BMI <20 kg/m ² Mean age: 39 Mean weight: not given Female/Total: ng/31	1. No intervention 2. Diet and exercise	24	Diet: ADA w ↑ fiber, kcal to lose 0.5-1.0 kg/w Behavioral: No	1. n/a 2. 3-5 x/wk	1. n/a 2. 20/3	1. n/a 2. ng	1. 4% 2. 12.5%	1. 1/18 (12%) 2. 5/23 (22%)	<u>BMI</u> 1. (7) 28 (24.3, 31.7) 2. (18) 26 (24.0, 28.0)	1. (7) -1.0 mg/kg ² 2. (18) -1.0 mg/kg ² <u>2vs1</u> : 0	at 2 years 1. (6) 0 2. (17) 0 <u>2vs1</u> : 0	
Hellenius 365	Randomized: unclear Self selected: no Included: includes non-overweight Mean age: 46.2 Mean weight: 25.3 mg/kg ² Female/Total: 0/158	1. Control (no intervention) 2. Diet alone 3. Exercise alone 4. Diet and exercise	24	Diet: Yes NCEP step 1 Behavioral: no	1. n/a 2. n/a 3. 2x/wk 4. 2x/wk	1. n/a 2. n/a 3. and 4. 30-45/3	1. n/a 2. n/a 3. and 4. 60-80	not given	1. 1/40 (2%) 2. 0/40 3. 0/39 4. 0/39	<u>BMI</u> 1. (39) 24.5 (23.5, 25.5) 2. (40) 25.2 (24.3, 26.1) 3. (39) 25.3 (24.4, 26.3) 4. (39) 26.1 (24.9, 27.3)	<u>BMI</u> 1. (39) 0.3 (0.1, 0.5) 2. (40) -0.3 (-0.6, 0.03) 3. (39) -0.3 (-0.5, -0.01) 4. (39) -0.6 (-0.9, -0.3) <u>4vs3</u> -0.3 (-0.57, -0.03) <u>4vs2</u> -0.30 (-0.60, 0.0) <u>4vs1</u> -0.90 (-1.15, -0.65) <u>3vs1</u> -0.60 (-0.82, -0.38) <u>3vs2</u> -0.0 (-0.28, 0.28) <u>2vs1</u> -0.60 (-0.86, -0.34)	none	
Kaplan 474	Randomized: unclear Self-selected: yes Included: diabetes, non-overweight Mean age: ng Mean weight: ng Female/Total: 44/76	1. No intervention 2. Diet alone (kcal:ng) 3. Exercise alone 4. Diet and exercise	10	Diet: yes kcal approx 1200 Behavioral: yes	1. n/a 2. n/a 3. 1/w 4. 1/w	1. n/a 2. n/a 3. 60/3 4. 60/3	1. n/a 2. n/a 3. 60-70 4. 60-70	not given	not given	not given	<u>Weight in kg</u> 6 months 1. (ns) 1.0 2. (ns) -3.49 3. (ns) -1.42 4. (ns) -0.24 p=not given for exercise		By the 18 month follow-up the diet group regained an average of 1.81 kg. There was very poor maintenance of weight loss in the exercise group and weight was essentially constant across the experiment for the diet plus exercise group.
Pan XR 80225	Randomized: unclear Self-selected: unclear Included: glucose intolerant,	1. Control 2. Diet 3. Exercise 4. Diet and exercise	6 yrs	Diet: yes If > 25 kg/m ² encouraged to reduce calorie	1. n/a 2. n/a 3. ng 4. ng	1. n/a 2. n/a 3. 10-30/7 4. 10-30/7	1. n/a 2. n/a 3. ng 4. ng	Not given	47/577	<u>BMI</u> 1.(83) 28.5 (27.9, 29.1) 2.(75) 28.3 (27.8, 28.8) 3.(84) 27.9 (27.4, 28.4)	<u>BMI</u> (overweight subgroup) 1. -1 (-1.63, -0.37) 2. -1.2 (-1.8, -0.6) 3. -0.9 (-1.44, -0.36)		Patient encouraged to increase amount of exercise by at least 30 min of mild exercise or 20 min moderate exercise or 10 min of strenuous exercise daily.

Reference numbers refer to the Reference List in the Clinical Guidelines Report.

Question 13F: What is the evidence that combined interventions (diet and exercise) in obese adults effect a change in weight?

Reference	Design/Demographics	Group description	Length weeks	Diet/ Behavioral	Activity frequency with provider	Min./week	Max % HR	VO ₂ Max % change from baseline	Drop-out Total	Weight baseline	Mean weight change	Follow-up	Comments
	nonoverweight Mean age: 45 Mean weight: 25.8 kg/m ² Female/Total: 283/577			intake to lose 0.5-1.0 kg/mo until BMI of 23 kg/m ²						4.(80) 28.6 (27.9, 29.2)	4. -1.60 (-2.28, -0.92)		
Schuler 405	Randomized: yes Self-selected: no Included: non-overweight Mean age: 53.5 Mean weight: 26.5 Female/Total: 0/113	1. No intervention 2. Low fat diet and exercise	52	Diet: <20% fat kcal not given Behavioral: no	1. n/a 2. 2x/wk + daily at home	1. n/a 2. 60/2w .30/7* *ergometer at home	1. n/a 2. 70%	1. 0 2. 11%	1. 4/57 (7%) 2. 5/56 (9%)	<u>BMI</u> 1. (52) 26.4 (25.8, 27.0) 2. (40) 26.7 (25.9, 27.5)	1. (52) -0.2 mg/kg ² (-0.91, 0.51) 2. (40) -1.6 mg/kg ² (-2.52, -0.68) <u>2vs1</u> -1.4 (-2.2, -0.6)	none	
Liao 729	Randomized: unclear Self-selected: unclear Included: non-overweight Hypertension Mean age: 38.1 Mean weight: 85.2 Female/Total: 7/85	1. Control (no intervention) 2. Low salt, low calorie diet with moderate physical activity	156	Diet: calorie controlled fat modified, <75 mmol/d Na Behavioral: no	1. n/a 2. ng	1. n/a 2. ng	1. n/a 2. ng	not given	overall 25/85	<u>Weight in kg</u> 1. (37) 85.9 (95%CI 82.6, 89.2) 2. (45) 86.2 (95%CI 83.3, 89.1)	<u>Weight in kg</u> 1. (37) 0.9 (-0.5, 2.3) 2. (45) -1.6 (95%CI -3.0, -0.2) <u>2vs1</u> -2.50 (-3.88, -1.12)	none	

Reference numbers refer to the Reference List in the Clinical Guidelines Report.