

**Question 14B. What is the evidence that physical activity in obese adults effects a change in fitness?**

Reference	Design	Overweight defined as:	Adjuvant therapy	Intervention	Drop-out Total	Mean weight change	VO <sub>2</sub> Max baseline (n) mean (95%CI)	VO <sub>2</sub> Max change (n) mean (95%CI)	Side effects/comments
<b>Exercise</b>									
Wood 406	Randomization: yes Self-selected: yes Included: 120-160% IBW Mean age: 44.5 Mean weight: 94.1 Female/Total: 0/155	120-160% IBW	Diet: for group 2 Behavioral: no	1. No intervention 2. Diet alone 3. Exercise alone  Duration: 52 weeks	1. 3/52 (6%) 2. 2/51 (4%) 3. 1/52 (2%)	1. 0.6 2. -7.2 3. -4.0 <u>2vs1</u> -7.8 (-8.9, -6.6) <u>3vs2</u> 3.2 (1.96, 4.44) <u>3vs1</u> -4.6 (-5.7, -3.5)	<u>VO<sub>2</sub>Max</u> 1. (42) 33.6 (32.2, 35.0) 2. (41) 33.9 (32.7, 35.1) 3. (46) 35.4 (34.0, 36.8)	<u>VO<sub>2</sub>Max</u> 12months 1. (40) -2.4 (-3.4, -1.4) 2. (41) 0 (-1.0, 1.0) 3. (46) 4.1 (2.3, 5.9) <u>2vs1</u> p<0.001 <u>3vs1</u> p<0.001 <u>3vs2</u> p<0.001	
Anderssen 346	Randomized: unclear Self-selected: no Included: BMI >24 kg/m <sup>2</sup> Mean age: 44.9 Mean Weight: 28.8 kg/m <sup>2</sup> Female/Total: 21/212	BMI >24	Diet: yes low-calorie to lose 0.5-1.0 kg/month Behavioral: no	1. Control (no diet or exercise) 2. Diet alone 3. Exercise alone 4. Diet and exercise	1. 0/43 2. 3/55 3. 5/54 4. 2/67	<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)	Not given	<u>VO<sub>2</sub>Max, ml/kg/min</u> 1a. (12) -2.3 (-4.50, -0.10) 2a. (16) -0.5 (-2.42, 1.42) 3a. (20) 1.6 (-0.91, 4.11) 4a. (24) 4.4 (2.95, 5.85)  <u>VO<sub>2</sub>Max, ml/kg/min</u> 1b. (16) -2.5 (-4.21, -0.79) 2b. (17) -0.3 (-2.42, 1.82) 3b. (16) 2.5 (0.37, 4.63) 4b. (20) 4.9 (2.60, 7.20)  <u>VO<sub>2</sub>Max, ml/kg/min</u> 1c. (15) -1.3 (-2.37, -0.23) 2c. (19) -0.1 (-1.78, 1.58) 3c. (13) 2 (-1.27, 5.27) 4c. (21) 4.9 (3.23, 6.57)	
Ronnemaa 404	Randomization: unclear Self-selected: unclear Included: non-overweight and diabetics Mean age: 52.5 Mean weight: 84 Female/Total: 10/25	not given	Diet: no Behavioral: no	1. No intervention 2. Aerobic exercise  Duration: 16 weeks		1. 0.5 2. -2.0 <u>2vs1</u> -2.5 (-12.8, 7.8)	<u>VO<sub>2</sub>Max</u> 1. (12) 25.8 (21.8, 29.8) 2. (13) 26.7 (22.8, 30.6)	<u>VO<sub>2</sub>Max</u> 1. (12) 25.9 (21.6, 30.2) 2. (13) 29.3 (25.6, 33.0) <u>2vs1</u> no stats reported	

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King 727	Randomization: unclear Self-selected: yes Included: <125% IBW Mean age: 48 Mean weight: 71 Female/Total: 60/120	<125% IBW	Diet: no Behavioral: no	1. Control (no intervention) 2. Aerobic exercise  Duration: 24 weeks	None	<u>weight in kg. men</u> 1. -0.5 2. -1.8 <u>2vs1</u> -1.3 (-6.6, 2.05)  <u>weight in kg. women</u> 1. 0.3 2. -0.9 <u>2vs1</u> -1.2 (-4.3, 6.9)	<u>VO<sub>2</sub>Max, men</u> 1. (28) 33.1 (31.0, 35.2) 2. (29) 31.9 (30.2, 33.6)  <u>VO<sub>2</sub>Max, women</u> 1. (28) 26.5 (25.0, 28.0) 2. (28) 25.8 (24.3, 27.3)	<u>VO<sub>2</sub>Max, men</u> 1. (28) 33 (31.3, 34.7) 2. (29) 36.2 (34.8, 37.6) <u>2vs1</u> 4.4 (2.6, 6.2)  <u>VO<sub>2</sub>Max, women</u> 1. (28) 26 (24.5, 27.5) 2. (28) 28.2 (26.2, 30.2) <u>2vs1</u> 2.9 (1.2, 4.6)	
King 447	Randomization: yes Self-selected: yes Included: not given Mean age: 56 Mean weight: 27.1 kg/m <sup>2</sup> Female/Total: 120/269	not given	Diet: no Behavioral: no	1. No intervention 2. Low-intensity home-based exercise training 3. High-intensity home-based exercise training 4. High-intensity group-based exercise training  Duration: 2 years	overall 28/269 (11%)	<u>BMI, women</u> 104 weeks 2. (27) -0.4 (-1.9, 1.1) 3. (34) -0.1 (-2.1, 1.9) 4. (32) 0.2 (-1.4, 1.8) <u>3vs2</u> 0.3 (0.02, 0.58) <u>4vs3</u> 0.3 (-0.12, 0.72)  <u>BMI, men</u> 104 weeks 2. (37) -0.2 (-1.3, 0.9) 3. (40) -0.1 (-1.3, 1.1) 4. (37) 0.1 (-1.4, 1.6) <u>3vs2</u> 0.1 (-0.05, 0.25) <u>4vs3</u> 0.2 (0.1, 0.3)	<u>VO<sub>2</sub>Max, women</u> 2. 23.4 (22.1, 24.7) 3. 24.6 (22.5, 26.7) 4. 24.9 (23.9, 25.9)  <u>VO<sub>2</sub>Max, men</u> 2. 30.9 (29.0, 32.8) 3. 30.5 (28.5, 32.5) 4. 28.7 (27.2, 30.2)	<u>VO<sub>2</sub>Max, women</u> 104 weeks 2. (27) 1.9 (0.6, 3.2) 3. (34) 2.3 (-0.2, 4.8) 4. (32) 0.2 (-1.1, 1.5) <u>4vs2</u> -1.7 (-3.0, -0.4) <u>4vs3</u> -2.1 (-4.1, -0.1) <u>3vs2</u> 0.4 (-1.9, 2.7)  <u>VO<sub>2</sub>Max, men</u> 104 weeks 2. (37) 2.3 (0.2, 4.4) 3. (40) 2.5 (0.2, 4.8) 4. (37) 1.9 (0.3, 3.5) <u>4vs2</u> -0.4 (-2.2, 1.4) <u>4vs3</u> -0.6 (-2.6, 1.4) <u>3vs2</u> 0.2 (-2.0, 2.4)	
King 401	Randomization: yes Self-selected: no Included: non-overweight Mean age: not given Mean weight: 26.9 kg/m <sup>2</sup> Female/Total: 160/357	not given	Diet: no Behavioral: no	1. No intervention 2. Lower-intensity home-based exercise 3. Higher-intensity home-based exercise 4. Higher-intensity group-based exercise  Duration: 52 weeks	not given	<u>BMI</u> Men      Women 1. 0.1      0 2. -0.9      -0.6 3. -0.2      0.1 4. 0.4      0.4  men: <u>2vs1</u> -1.0 (-1.9, -0.01) <u>3vs2</u> 0.7 (-0.3, 1.7) <u>4vs3</u> 0.6 (-0.81, 2.01)  women: <u>2vs1</u> -1.0 (-1.9, -0.01) <u>3vs2</u> 0.7 (-0.3, 1.7) <u>4vs3</u> 0.6 (-0.81, 2.01)	<u>VO<sub>2</sub>Max, men</u> 1. (41) 30.2 (28.8, 31.6) 2. (45) 30.8 (29.0, 32.6) 3. (42) 30.1 (28.4, 31.8) 4. (40) 28.7 (27.3, 30.1)  <u>VO<sub>2</sub>Max, women</u> 1. (34) 23.6 (22.2, 25.0) 2. (29) 22.4 (22.4, 22.4) 3. (35) 23 (21.2, 24.8) 4. (34) 24.3 (0.9, 25.7)	<u>VO<sub>2</sub>Max, men</u> 12 months 1. (41) -0.3 (-1.1, 0.5) 2. (45) 1.4 (0.3, 2.5) 3. (42) 1.2 (0.0, 2.4) 4. (40) 1.7 (0.4, 3.0) <u>4vs1</u> 2.0 (0.9, 3.1) <u>4vs2</u> 0.3 (-0.9, 1.5) <u>4vs3</u> 0.5 (-0.7, 1.7) <u>3vs1</u> 1.5 (0.5, 2.5) <u>3vs2</u> -0.2 (-1.3, 0.9) <u>2vs1</u> 1.7 (0.7, 2.7)  <u>VO<sub>2</sub>Max, women</u> 12 months 1. (34) 23.6 (22.2, 25.0) 2. (29) 22.4 (22.4, 22.4) 3. (35) 23 (21.2, 24.8) 4. (34) 24.3 (0.9, 25.7)	

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						<u>2vs1</u> -0.6 (-2.3, 1.2) <u>3vs2</u> 0.7 (-1.2, 2.6) <u>4vs3</u> 0.3 (-1.5, 2.1)		months 1. (34) -0.9 (-1.6, -0.2) 2. (20) 0.9 (0.2, 1.6) 3. (35) 1.4 (0.4, 2.4) 4. (34) 0.6 (-0.3, 1.5) 4vs1 1.5 (0.7, 2.3) 4vs2 -0.3 (-1.1, 0.5) 4vs3 -0.8 (-1.7, 0.1) 3vs1 2.3 ( 1.5, 3.2) 3vs2 0.5 (-0.4, 1.4) 2vs1 1.8 (1.1, 2.5)	
Fortmann 363	Randomization: unclear Self-selected: yes Included: >120-150% IBW Mean age: 44.3 Mean weight: 93.6 Female/Total: 0/115	>120-150% of IBW	Diet: only for group 2 Behavioral: no	1. Control (no intervention) 2. Low-calorie diet 3. Exercise only  Duration: 52 weeks	not given	1. +0.5 2. -6.9 3. -4.6 <u>3vs2 Weight kg</u> 2.30 (1.07, 3.53) <u>3vs1 Weight kg</u> -5.10 (-6.27, -3.93) <u>2vs1 Weight kg</u> -7.40 (-8.73, -6.07)	<u>VO<sub>2</sub>Max</u> 1. (35) 34 (32.6,35.4) 2. (38) 34 (32.7,35.3) 3. (42) 35 (33.4, 36.6)	<u>VO<sub>2</sub>Max</u> 1. (35) -2.5 (-3.7, -1.3) 2. (38) -0.2 (-1.4, 1.0) 3. (42) 4.4 (2.8, 6.0) <u>3vs2 VO<sub>2</sub>Max</u> 4.60 (3.20, 6.00) <u>3vs1 VO<sub>2</sub>Max</u> 6.90 (5.49, 8.31) <u>2vs1 VO<sub>2</sub>Max</u> 2.30 (1.12, 3.48)	
Hespe1 726	Randomization: unclear Self-selected: unclear Included: non-overweight Mean age: 38 Mean weight: 79 Female/Total: 0/30	not given	Diet: no Behavioral: no	1. Training followed by no training 2. No training followed by training *Cross-over  Duration 17 weeks each period	overall 3/30 (10%)	1. -0.5 2. -2.4 *both after training	<u>VO<sub>2</sub>Max</u> 1. (1) 2904 (2487, 3320) 2. (14) 3228 (2862, 3593)	<u>VO<sub>2</sub>Max</u> 1. (13) 3299 (2845, 3752) 2. (14) 2899 (2539, 3258)  <u>Cross-over</u>  <u>VO<sub>2</sub>Max</u> 1. (13) 3165 (2873, 3456) 2. (14) 3747 (3361, 4132)  training effect p<0.01	
Williams 707  *Stanford Exercise Training Study	Randomization: yes Self-selected: no Included: <140% IBW Mean age: not given	<140% IBW	Diet: no Behavioral: no	1. Sedentary control (no intervention) 2. Supervised running  Duration: 52 weeks	1. 1/33 (3%) 2. 2/48 (4%)	1. +1.1 (0, 2.2) 2. -1.4 (-2.4, -0.4) <u>2vs1</u> -2.5 (-4.5, -0.5)		<u>VO<sub>2</sub>Max</u> 1. (32) -1.43 (-2.9, 0.0) 2. (46) 7.52 (5.1, 10.0) <u>2vs1</u> 8.95 (6.9, 11.0)	

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	Mean weight: not given Female/Total: 0/81								
Coon 700	Randomization: unclear Self-selected: yes Included: not specified Mean age: 59 Mean weight: 94 Female/Total: none/20	not given	Diet: not for group 2 Behavioral: not for group 2	1. Diet + Behavioral 2. Exercise training  Duration: 9-12 months	none	1. -11.4 2. -0.3  <u>2vs1</u> 11.1 (5.31, 16.8)	VO <sub>2</sub> Max, ml/kg/min 1. (10) 28.1 (25.6, 30.6) 2. (10) 28.1 (24.0, 32.2)	VO <sub>2</sub> Max, ml/kg/min 1. (10) 30 (28.0, 32.0) 2. (10) 37.2 (34.3, 40.1) <u>2vs1</u> 7.2 (4.3, 10.1)	
Gillett 678	Randomization: yes Self-selected: unclear Included: not specified Mean age: 41.9 Mean weight: 165.8 Female/Total: 38/38	not given	Diet: no Behavioral: no	1. Aerobic dance not individualized 2. Intensity controlled individualized aerobic  Duration: 16 weeks	1. 3/20 (15%)  2. 1/18 (6%)	1. -5.9 2. -5.5  <u>2vs1</u> 0.4 (-8.5, 9.3)	VO <sub>2</sub> Max 1. (17) 24.7 (23.1, 26.3) 2. (17) 22.5 (20.5, 24.5)	VO <sub>2</sub> Max 1. (17) 30.1 (27.4, 32.8) 2. (17) 31.4 (29.4, 33.4) <u>2vs1</u> 3.5 (1.3, 5.7)	
Hammer 432	Randomization: unclear Self-selected: yes Included: >130% IBW premenopausal women Mean age: not given Mean weight:		Diet: 1, 2. Low fat ad libitum CHO 3,4. 800 kcal  Exercise: yes 1, 3. None 2, 4. 3-5x/w at 70-85% max HR  Behavioral: yes frequency: qw	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	overall 10/36 (28%)	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  <u>2vs1</u> : -0.9 (-14, 12)	VO <sub>2</sub> Max 1. (4) 2.04 (1.9, 2.2) 2. (8) 2.29 (2.0, 2.6) 3. (8) 2.24 (2.1, 2.4) 4. (6) 2.14 (1.7, 2.6) 1,2. (12) 2.2 (2.0, 2.4) 3,4. (14) 2.19 (2.0, 2.4) 1,3. (12) 2.17 (2.0, 2.3) 2,4. (14) 2.22 (2.0, 2.4)	VO <sub>2</sub> Max 1. (4) 1.97 (1.6, 2.4) 2. (8) 2.41 (2.1, 2.8) 3. (8) 2.05 (1.9, 2.2) 4. (6) 2.36 (1.8, 2.9) 1,2. (12) 2.26 (2.0, 2.5) 3,4. (14) 2.18 (2.0, 2.4) 1,3. (12) 2.03 (1.9, 2.2) 2,4. (14) 2.39 (2.1, 2.6) 4vs3 0.4 (0.1, 0.7) <u>2vs1</u> 0.2 (-0.1, 0.5)	

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	88.7 Female/Total: 36/36			exercise		<u>3vs1</u> : -3.7 (-14, 7.4) <u>4vs3</u> : -3.4 (-16, 10) <u>4vs2</u> : -6.2 (-21, 8.7)  Low fat vs ↓ Calorie <u>1,2 vs 3,4</u> -4.6 (-17.3, 8.9)  Exercise vs no exercise <u>2,4 vs 1,3</u> -11.1 (-21.5, -0.7)		<u>3,4vs1,2</u> -0.04 (-0.3, 0.2)	
Frey-Hewitt 432	Randomization: unclear Self-selected: unclear Included: 120-160% IBW Mean age: ng Mean weight: ng Female/Total: 0/121	120-160% IBW	Diet: yes 300-500 kcal less than usual diet  Exercise: yes 50 min/3wk Behavioral: no	1. No intervention 2. Diet (no exercise) 3. Exercise (no diet)	5%	<u>3vs1 Weight kg</u> -4.48 (-5.59, -3.37) <u>3vs2 Weight kg</u> 2.58 (1.38, 3.78) <u>2vs1 Weight kg</u> -7.06 (-8.29, -5.83)	<u>VO<sub>2</sub>Max</u> 1. (41) 33.72 (95% CI 32.3, 35.1) 2. (36) 33.81 (95%CI 32.4, 35.2) 3. (44) 35.33 (95%CI 33.8, 36.8)	<u>VO<sub>2</sub>Max 12 months</u> 1. (41) -2.41 (95%CI -3.4, -1.4) 2. (36) -0.27 (95%CI -1.3, 0.7) 3. (44) 4.16 (95%CI 2.3, 6.0) <u>3vs1 VO<sub>2</sub>Max</u> 6.57 (5.09, 8.05) <u>3vs2 VO<sub>2</sub>Max</u> 4.43 (2.92, 5.94) <u>2vs1 VO<sub>2</sub>Max</u> 2.14 (1.16, 3.12)	
Verity 446	Randomization: unclear Self-selected: unclear Included: >120% IBW postmenopausal women with NIDDM Mean age: 59.2 Mean weight: 79.2 Female/Total: 10/10	>120% IBW	Diet: yes Encouraged  Exercise: yes group 2: 60-90/3 Max HR: 65-80%  Behavioral: no	1. Control (diet) 2. Exercise	not reported	Weight in kg 1. (5) -2.9 2. (5) -2.1  <u>2vs1</u> 0.80 (-17.08, 18.68)	<u>VO<sub>2</sub>Max, ml/kg/min</u> 1. (5) 17.8 (8.9, 26.7) 2. (5) 17.3 (7.6, 27.0)	<u>VO<sub>2</sub>Max, ml/kg/min</u> 1. (5) 17.5 (8.3, 26.7) 2. (5) 22.8 (11.4, 34.2) <u>VO<sub>2</sub>Max 2vs1</u> 5.80 (-1.66, 13.26)	
Suter 705	Randomization: unclear Self-selected: unclear Included: non-overweight	not given	Diet: no Exercise: no	1. No intervention 2. Walking 3. Jogging	none	1. -0.09 2. -0.07 3. -0.28 *mean diff in BMI <u>3vs1</u> -0.2 (-0.5, 0.1) <u>3vs2</u> -0.2 (-0.5, 0.1)	<u>VO<sub>2</sub>Max, ml/kg/min</u> 1. (19) 36.3 (34.0, 38.6) 2. (28) 35.3 (33.0, 37.6) 3. (28) 38.1 (35.9, 40.3)	<u>VO<sub>2</sub>Max, ml/kg/min</u> 1. (19) -1.2 (-2.8, 0.4) 2. (28) 2.5 (0.3, 4.7) 3. (28) 2.9 (1.3, 4.5) <u>3vs1</u> 4.1 (2.5, 5.7) <u>3vs2</u> 0.4 (-1.5, 2.3)	Joggers Walkers Change in BMI 0.07 -0.26 Change in skinfolds -0.10 -0.48 Change in WHR

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	Mean age: 41.2 Mean weight: 24.9 kg/m <sup>2</sup> Female/Total: 0/47					<u>2vs1</u> 0.02 (-0.34, 0.38)		<u>2vs1</u> 3.7 (1.8, 5.6)	0.05    -0.45 Change in VO <sub>2</sub> Max 0.26    0.38
Ready 685	Randomization: unclear Self-selected: yes Included: postmenopausal women, included non-overweight Mean age: not given Mean weight: 79.7 Female/Total: 40/40	post-menopausal women	Diet: no Behavioral: no	1. Control (no exercise) 2. Exercise	1. 6/16 (37%) 2. 9/24 (37%)	Weight in kg 1. 0.6 2. -1.9  <u>2vs1</u> -2.5 (-11.0, 6.0)	VO <sub>2</sub> Max 1. (10) 1975 (1791, 2158) 2. (15) 2138 (2010, 2265)	VO <sub>2</sub> Max 1. (10) 2029 (1814.4, 2243.6) 2. (15) 2308 (2144.1, 2471.9) <u>2vs1</u> 116 (-49, 281)	
Bertram 445	Randomization: unclear Self-selected: unclear Included: BMI >30 Mean age: 37 Mean weight: 94 Female/Total: 45/45	BMI > 30	Diet: yes Low-calorie, kcal: ng  Exercise: yes 60 min x3  Behavioral: yes Format: group Frequency: qw	1. Diet alone 2. Diet + behavioral 3. Diet + exercise	1. 7/15 (47%) 2. 0/15 3. 2/15 (13%)	Weight in kg 1. (8) -9.3 2. (15) -8.1 3. (13) -7.0 <u>3vs2</u> 1.1 (-7.8, 10.0) <u>3vs1</u> 2.3 (-6.6, 11.2) <u>2vs1</u> 1.2 (-7.1, 9.5)	VO <sub>2</sub> Max 1. (8) 1.95 (1.6, 2.3) 2. (15) 1.96 (1.7, 2.2) 3. (13) 1.89 (1.7, 2.1)	VO <sub>2</sub> Max 1. (8) 1.99 (1.8, 2.2) 2. (15) 2.04 (1.8, 2.3) 3. (13) 2.39 (2.1, 2.7) <u>3vs2</u> 0.4 (0.2, 0.7) <u>3vs1</u> 0.5 (0.2, 0.7) <u>2vs1</u> 0.04 (-0.2, 0.3)	
Dengel 399	Randomized: unclear Self-selected: unclear Included: BMI >25 Mean age: 61 Mean weight: 90.5 Female/Total:	BMI > 25	Diet: yes AHA step I  Exercise: no  Behavioral: yes Format: unclear Frequency: qw	1. AHA diet followed by weight maintenance 2. AHA diet followed by weight loss	1. 10/24 2. 25/53	Weight in kg 1. (14) 0 2. (28) -11 <u>2vs1</u> -11.0 (-15.6, -6.4)	VO <sub>2</sub> Max 1. (14) 2.5 (2.2, 2.8) 2. (28) 2.5 (2.3, 2.7)	VO <sub>2</sub> Max 1. (14) 2.0 (2.2, 2.8) 2. (28) 2.5 (2.3, 2.7) <u>2vs1</u> 0.5 (0.3, 0.7)	

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

**Question 14B. What is the evidence that physical activity in obese adults effects a change in fitness?**

Reference	Design	Overweight defined as:	Adjuvant therapy	Intervention	Drop-out Total	Mean weight change	VO <sub>2</sub> Max baseline (n) mean (95%CI)	VO <sub>2</sub> Max change (n) mean (95%CI)	Side effects/comments
	0/77								
Leighton 475	Randomization: yes Self-selected: unclear Included: not specified Mean age: 42.5 Mean weight: 72.5 Female/Total: 49/66	not given	Diet: yes NCEP I  Exercise: yes 45 min x3  Behavioral: no	1. Diet alone 2. Diet and exercise	1. 18% 2. 27%	1. 0 2. -2 kg <u>2vs1</u> -2.0 (-8.1, 4.1)	<u>VO<sub>2</sub>Max</u> 1. (26) 30 (27.2, 32.8) 2. (24) 31 (28.9, 33.1)	<u>VO<sub>2</sub>Max</u> 1. (26) 31 (28.2, 33.8) 2. (24) 36 (33.0, 39.0) <u>2vs1</u> 4.0 (1.2, 6.8)	

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