| **First Author, Year****Design** **Trial Name** | **G1 (N)****G2 (N)** | **Source of Patients** | **Screen Detected?** | **Country** | **Duration, Wks** | **Mean (Range) Age** | **% F** | **% Non-White** | **Mean BMI** | **Mean AHI** | **Mean ESS** | **OSA Severity** | **% HTN;****% HF** | **Quality** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Desplan, 2013204Parallel | Inpatient individualized exercise training (13)Standard health education (13) | NR | No | France | 4 | NR (35-70) | NR | NR | 30-31 | 40-41 | 11 | Mod to severe | NR;NR | Fair |
| Foster, 2009205Kuna, 2013206Sleep AHEAD Parallel  | Intensive lifestyle intervention\* (125)Diabetes support and education (139) | Multiple, inc ads, open screenings, and prover referrals | Partially† | United States | 208 | 61 (NR) | 59 | 27 | 37 | 23 | NR | Mild to severe | NR | Good |
| Johannson, 2009207Parallel | Very low energy diet (30)Usual diet (33) | Sleep clinic database | No | Sweden | 9 | 49 (33-61) | 0 | NR | 35 | 37 | 8 | Mod to severe | NR | Good for AHI; Fair for ESS |
| Kline, 2012208;Kline, 2013209Parallel | Exercise Trainingǂ (27) Stretching control (16) | Sleep clinics and ads | No | United States | 12 | 47 (NR) | 40 | 26 | 35 | 24-32 | 7-11 | Mod to severe | NRNR | Fair |
| Moss, 2014210Parallel | Lifestyle intervention§ (30)Advice-only control (30) | Sleep clinics | No | United Kingdom | 12 active; 26 total inc followup | NR | NR | NR | 39-40 | 2‖ | 5 | Controlled mod to severe | NR;0 | Fair |
| Tuomilehto, 2009211Tuomilehto, 2010212Tuomilehto, 2013213Parallel | VLCD (12 wks) + supervised lifestyle (52 wks) (40)Usual care (routine lifestyle guidance) (41) | Primary care referrals to respiratory clinic | No | Finland | 52 active; 260 total inc followup | 51-52 (NR) | 23 | NR | 31-33 | 9-10 | 10 | Mild  | 41NR | Fair |

\* Consisted of portion-controlled diet, physical activity, and group behavioral weight loss intervention

† Efforts were made to enroll individuals with undiagnosed OSA using a symptom questionnaire. Because almost all of the first 80 participants had OSA upon polysomnography, the symptom screen was dropped as an eligibility criterion.

ǂ Moderate intensity exercise training program meeting 4x/week for 12 weeks; 150 min/wk of mod-intensity aerobic activity, followed by resistance training twice/week

§ Supervised individualized exercise sessions, cognitive-behavioral psychoeducation, dietary education and diet diary

‖ All patients were using CPAP for at least 6 months prior to study start.

**Abbreviations:** AHEAD=Action for Health in Diabetes; AHI=apnea-hypopnea index; BMI=body mass index; CPAP=continuous positive airway pressure; dur=duration; ESS=Epworth Sleepiness Scale; F=female; G=group; HF=heart failure; HTN=hypertension; inc=including; min=minutes; mod=moderate; N=sample size; NR=not reported; OSA=obstructive sleep apnea; pbo=placebo; pts=patients; RF=radiofrequency; tx=treatment; VLCD=very low calorie diet; wks=weeks.