Summary Evidence Table

Author, Year Objective Design, Suitability of design, Quality limitations (quality of execution)	Location Base sample size (n) (% attrition) Age (mean, unless stated) in years; % female; % race, ethnicity (R/E)	Intervention focus/Theory Length: Core intervention/Maintenance Intervention description Treatment of comparison	Outcome (Variance measure) Baseline and Difference Notes
Abrams DB, 1983 Weight loss maintenance Randomized trial, greatest, 3 (fair)	US: Providence, RI n = 133 (81.95%) Age range: 20–60 yr; 91.7% F; R/E: NR	Nutrition & physical activity/Social learning 2.5 mo/2 mo Behavioral wt-loss program for hospital nurses. By % overwt, placed in 1 of 3 groups. Met 30 mn, 10X/wk: nutrition homework; goal setting; cognitive restructuring; contingency management; exercise incentives; reinforcement; feedback used Maintenance: self-monitoring, problem solving, prevent relapse, buddy system; 2/3 groups with therapist, 1/3 without therapist Comparison: met biweekly, no new therapy	Mean wt, lb <u>6 mo*</u> Intervention with maintenance -4.1 Intervention only -1.5 *BL: NR
Aldana SG, 2005 Cardiovascular disease (CVD) risk reduction Randomized trial, greatest, 0 (good)	US: Rockford, IL n = 145 (5.52%) (Intervention) age: 46.1 (SD: 10.8); 85.9% F; 96.9% White (Comparison) age: 45.9 (SD: 9.3); 86.1% F; 96.1% White	Nutrition & physical activity/NR 1.5 mo/NR Employee wellness program: Coronary Health Improvement Project targeted to care provider employees Goal: reduce chronic disease, improve health Program: 4 wk, 40-hr lecture health education using pedometer, books, shop tours, cooking demonstrations. Completed pedometer log, dietary questionnaire, health knowledge test Comparison: No contact	Mean wt, kg <u>BL 6 mo</u> Intervention 89.3 -4.4 Comparison 85.9 -1.0 Between group sig: p <0.0001
Anderson JV, 1993 Weight loss Non-randomized, greatest, 3 (fair)	US: MI n = 173 (9.25%) Intervention: age: 43.0±10; 94.0% F R/E: NR Comparison: age: 44.0±12; 65.0% F R/E: NR	Nutrition & physical activity/NR 6 mo/NR Behavioral reinforcement study for staff at 4 university sites had 2 programs (intervention and comparison) Intervention: Behavioral contingency (BCP): recorded eating behaviors, analyzed problem areas re: calorie intake, 6-mo behavior contracts on diet change (reduce snacks/fat; increase fruit/vegetable intake) Comparison: Wt Loss Contingency (WLCP): weekly wt loss contracts	Mean wt, lb (standard deviation) BL 6 mo BCP 174.3 (35.6) -3.9 WLCP 181.0 (33.0) -12.9 Between groups: p ≤0.001
Anderson J, 1999 CVD risk reduction Group randomized trial, greatest, 4 (fair)	US: Denver, CO n = 234 (47.86%) Age range: 18–64; Healthy: 56.25% F; Self: 48.08% F; Usual: 34.75% F R/E: NR	Nutrition/NR 3 mo/NR Study to lower CVD risk factors at 8 sites compared group/self-help programs for employees with cholesterol ≥200mg/dL. Placed in comparison group or chose between intervention groups: Group nutrition class (guide to risk factors & food info) Self-paced nutrition education program (risk factor info, intake advice, self assessment) Comparison: Counseling, info (risk factors, lifestyle)	BL 12 mo Healthy Heart 156.6 3.8 Self care 169.8 -5.2 Usual care 163.4 0.2

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Baer JT, 1993 CVD risk reduction Non-randomized, greatest, 1 (good)	US: Cincinnati, OH n = 70 (8.57%) Age: NR; 0% F; R/E: NR	Nutrition/NR 12 mo/NR Management employees with elevated cholesterol targeted for program: assessment, diet recommendations, 1X/mo encouraged diet compliance, concerns. Every 3 mo: group education about eating out, fiber, motivation. Reported on 24 hr consumption, food frequency questionnaire, received info on food labels. Given target heart rate and instructed how to monitor Comparison: physical, feedback, label info, target heart rate	Mean wt, kg (standard error) <u>BL</u> <u>12 mo</u> Comparison 85.0 (2.8) 1.0 Intervention 86.0 (2.3) -5.0* *p <0.05 compared to baseline, comparison
Barratt A, 1994 CVD risk reduction Randomized trial, greatest, 3 (fair)	Australia: Sydney n = 683 (61.79%) Age: 36.80 (SD: 11.5); 73.0% F; R/E: NR	Nutrition/NR 3 mo/NR Staff at 6 hospitals with ≥5.2 mmol/L cholesterol placed in: comparison, self-help, or nutrition course groups Self-help: workbook, video, recipes, guidelines for nutrition with less cholesterol Nutrition: met 5X for 1-hr about education in self-help + health discussions and sample higher fiber/lower fat meals Comparison: cholesterol screening	Mean wt loss, kg BL: NR; at 6 mo, nutrition group continued to show a 0.35 kg mean wt. loss (p <0.04) compared with screening group (comparison)
Briley ME, 1992 Weight loss Time series, moderate, 2 (fair)	US: Austin, TX n = 40 (30.0%) Age: NR; 42.9% F; 25% Hispanic, 7.1% Black, 67.9% White	Nutrition/NR 4 mo/NR Nutrition education program offered to police employees (nutritional, eating behavior seminars; individualized dietician counseling; encouraged to journal intake, record weight and exercise; and set goals)	Mean wt, kg (standard deviation) <u>BL</u> <u>12 mo</u> Subjects 95.9 (21.6) –2.3* *Within group: p <0.05
Brownell KD, 1985 Weight loss Randomized trial, greatest, 3 (fair)	US: New York City, NY n = 172 (42.44%) Studies 1–2: NR Study 3: age: 53.0 (SD 8.7); 100.0% F; R/E: NR	Nutrition/NR 4 mo/NR Behavioral wt loss program (record keeping, stimulus control, slow eating, nutrition education, exercise, social support, cognitive restructure) for department store employees. 3 studies compared professional/lay leaders, worksite/medical settings, meeting frequency components.	Mean wt, lb (standard deviation) <u>BL</u> 12 mo Study 3 (Lay) NA -5.5 Study 3 (Professional) NA -5.9
Bruno R, 1983 CVD risk reduction Randomized trial, greatest, 4 (fair)	US: New York, NY n = 145 (33.10%) Age, female, R/E NR	Nutrition/NR 2 mo/6 mo Telephone company employees placed in 1 of 2 intervention groups (differing by presentation of education materials) or comparison Intervention: education on good nutrition with environment & self- management technician, 1hr/wk; maintenance: 1/mo Comparison: met periodically for data collection	BL 8 mo* Treatment 117.1 (11.0) -2.4 (4.1) Comparison 113.9 (10.0) 1.1 (3.0) * Between groups: p = 0.01

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Cockcroft A, 1994 Healthy lifestyle Randomized trial, greatest, 4 (fair)	England: London n = 297 (72.0%) Age: 40.1; 71.2% F; R/E NR	Nutrition & physical activity/NR 1 mo/NR Pilot health promotion initiative for hospital staff (health screening, advice) Group 1: only screening results group 1 is comparison? Group 2: results, lifestyle change advice, goal setting Comparison: received screening results only	Mean BMI, kg/m ² <u>BL 6 mo</u> Advice group 24.90 -0.54 Results-only group 24.48 0.01
Cook C, 2001 Healthy lifestyle Group randomized trial, greatest, 1 (good)	New Zealand: S Auckland n = 253 (5.93%) Age: Intervention 35.0 ± 11.2 Comparison: 42.9 ± 11.7 (both groups): 0% F; 12.1% Maori, 25.7% European, 56.1% Pacific Islander	Nutrition & physical activity/Stages of Change 6 mo/NR Health promotion program targeted employees at 2 (comparison/intervention) plants Intervention: 30-minute workshops, 1/mo for 6 mo (nutrition, disease risk, alcohol use), PA benefits, 6 cafeteria nutrition displays, improved food Comparison: lower-fat food, healthy eating leaflet	BL 12 mo Intervention 92.1 (20.9) 0.0 (3.8) Comparison 92.4 (17.0) 0.0 (3.3)
Crouch M, 1986 CVD risk reduction Randomized trial, greatest, 2 (fair)	US: Palo Alto, CA n = 109 (11.93%) Age range: 26–55; %F: NR; R/E: NR	Nutrition & physical activity/Social learning 3.5 mo/NR Behavior change program for university employees, groups received info about atherosclerosis, risk factors Group 1: face-to-face (5 individual sessions 15–20 mn with diet, exercise, wt loss info) Group 2: mail & phone counseling (same info, received 1st by mail, then by phone) Group 3: no education Comparison: no contact after initial info provided	BL 12 mo Face-to-face 71.6 (12.3) -2.4 Mail & phone 75.8 (11.0) -0.1 No education 76.2 (11.9) -0.6 Comparison 74.4 (11.4) -0.2
DeLucia JL, 1989 Weight loss Randomized trial, greatest, 3 (fair)	US n = 29 (10.0%) Age: 40.6; 90.0% F; R/E: NR	Nutrition/NR 2.5 mo/NR 2 nutrition/obesity behavior therapy software programs compared University faculty placed in 3 groups & with 1 of 2 counselors All met 75 mn/meeting, for 10 wk, received Ferguson's program (behavior change, with stimulus comparison, environment support, homework). 4 groups got EATS/Eating Machine software Comparison: Ferguson alone	Mean wt, lb (standard deviation) BL 6 mo Ferguson + EATS 176.72 (40.52) -6.50 Ferguson + Eating Machine 173.30 (43.36) -4.21 Ferguson 172.32 (36.92) -5.49
Drummond S, 1998 Weight loss Randomized trial, greatest, 2 (fair)	Scotland: Strathclyde n = 93 (20.0%) Age: 46.3; 0% F: R/E: NR	Nutrition/NR 1.5 mo/NR Used 1-on-1 meetings with overwt police officers to give advice on dietary intake: Group 1: reducing fat & sugar Group 2: reducing fat only Comparison: no advice	BL 6 mo Group 189.7 -0.5 Group 2 90.7 -1.2* Comparison 88.9 0.0 *within group: p <0.005

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Elberson KL, 2001 CVD risk reduction Retrospective cohort, moderate, 2 (fair)	US n = 374 (NA) (Nonstructured) age range: 23– 67; 82.5% F; R/E: Black 16.9%, White 77.8% (Structured) age range: 23–67; 90.7% F; 27.8% Black, 68.5% White	Physical activity/Pender's Health Promotion Model 12 mo/NR Wellness program for corporate employees Structured group: planned exercise classes Nonstructured group: access to gym, no class Both: wellness education sessions & materials, social support & annual assessments	Mean BMI, kg/m ² $\frac{BL}{25.01} = 0.57^{*}$ Nonstructured 27.97 0.30** * within group p = 0.185 ** within group p = 0.001
Elliot DL, 2004 Healthy lifestyle Group randomized trial, greatest, 2 (fair)	US n = 33 (0%) Age: (Model 1) 48.3 (Model 2) 40.5 (Comparison) 44.0 %F: NR; R/E: NR	Nutrition & physical activity/Social learning 6 mo/NR Counseling (team/1-on-1) using motivational interviews for fire fighters Model 1(team) 60 mn training, taught to team in 10 45-mn meetings/wk, used script + social disclosure of behavior activities Model 2 (1-on-1) individual meetings with motivational counselor, 4 X 60 mn, with optional 4.5 hr more. Comparison: usual care	Mean BMI, kg/m² (standard deviation) BL 6 mo Model 1 (team) 29.9 (3.4) -0.6 Model 2 (1-on-1) 26.3 (3.5) 0.0 Comparison 28.0 (3.5) -0.3
Erfurt JC, 1991 Health promotion Group randomized trial, greatest, 3 (fair)	US: Detroit, MI n = 4 sites, 500–600/site, NA Sites: (1) Age: 43.7; 13.0% F; 66.0% White (2) Age: 46.3; 13.0% F; 72.0% White (3) Age: 45.0; 10.0% F; 68.0% White (4) Age: 45.9; 5.0% F; 78.0% White	Diet & physical activity/NR 36 mo/NR Intervention for employees with elevated CVD risk factors at 4 sites: Site 1: screening, referral; staffed gym available Site 2: Site 1 benefits + health education Site 3: Site 2 benefits + follow-up 1-on-1 counseling every 6 mo Site 4: Site 3 benefits + activities (promotional groups, buddy system, plant-wide)	Mean wt change, lb Change at 36 mo: <u>Sites: 1 2 3 4</u> Overwt group 3.1* 0.6* -1.2 -4.7** < Wt Well group 4.2 -2.4 -5.0** -6.4* *p <0.01 **p <0.001& over all sites for overwt
Forster JL, 1985 Weight loss Randomized trial, greatest, 3 (fair)	US: Minneapolis/St. Paul, MN n = 131 (21.4%) Groups: 1) Age: 40.5; 78.1% F 2) Age: 37.8; 86.2% F 3) Age: 38.3; 71.9% F 4) Age: 36.7; 92.1% F R/E: NR	Nutrition/NR 6 mo/NR An incentive-based wt control program focused on self-motivation (Incentive plan: paycheck deduction, \$ back with wt loss. All given wt-loss manual & recorded intake) 4 groups: 1) Group education, optional attendance at weigh-ins & meetings 2) Group education, required attendance at weigh-ins & meetings 3) Self-instruction, optional attendance at weigh-ins & meetings 4) Self-instruction, required attendance at weigh-ins & meetings 5) Self-instruction, required attendance at weigh-ins & meetings 6) Self-instruction, required attendance at weigh-ins & meetings 7) Self-instruction, required	Mean wt, lb (standard deviation) Female Male Group BL 6 mo 6 mo 1 (group, optional) NA -10.7 (8.6) -7.3 (13.7) 2 (group, required) NA -11.3 (14.4) -19.4 (15.2) 3 (self, optional) NA -12.0 (13.7) -18.8 (9.6) 4 (self, required) NA -10.9 (9.0) -24.5 (6.4)

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Fukahori M, 1999 Physical activity benefits Randomized trial, greatest, 1 (good)	Japan: Oita n = 108 (7.41%) Intervention: age: 49.9 <u>+</u> 5.3; 0% F Comparison: age: 48 <u>+</u> 5.4; 0% F R/E: NR	Physical activity/NR 3 mo//NR Physical activity intervention for plant employees with ≥2 circulatory disorder risk factors in exam Intervention: instruction about treadmill: 20 mn, walk (1 hr/wk), with heart rate at 70–75% of max. Monthly tests evaluating fitness and adjusting activity Comparison: usual care	Mean BMI, kg/m² (standard deviation)BL6 moTreadmill23.6 (2.1)-0.3Comparison23.5 (1.8)0.2
Furuki K, 1999 Health promotion Nonrandomized, greatest, 2 (fair)	Japan: Kyoto Prefecture n = 1014 (50.0%) Age: Intervention (M) 40.20 ± 8.9 (F) 41.40 ± 7.9 Comparison (M) 40.20 ± 8.9 (F) 41.40 ± 7.9 %F: NR; R/E: NR	Nutrition & physical activity/NR 48 mo/NR Health promotion program targeted manufacturing company employees Intervention: Total Health Promotion (THP) Plan (health check-ups, lifestyle surveys, health guidance, exercise club) and "act five years younger" program Comparison: usual care	Mean BMI, kg/m² (standard deviation) Overwt BL 12 mo BL 12 mo THP (M) 22.0 (2.6) 0.5 26.3 (1.4) 0.4 THP (F) 20.8 (2.4) 0.2 26.3 (1.0) 0.0 Comp (M) 22.4 (2.8) 0.1 26.8 (1.9) -0.1 Comp (F) 21.5 (2.7) 0.2 26.2 (1.2) 0.1
Gerdle B, 1995 Physical activity benefits Randomized trial, greatest, 3 (fair)	Sweden: Umea n = 97 (20.0%) Intervention: age: 41.7 ± 12.9; 100.0% F; R/E: NR Comparison: age: 40.3 ± 12.6; 100.0% F; R/E: NR	Physical activity/NR 12 mo/NR Fitness program targeted home care services district employees Intervention: standardized exercise training program 1 hr, 2X/wk Comparison: usual care	Mean wt, kg (standard deviation) BL 12 mo Exercise 67.0 (11.6) -1.0 Comparison 65.0 (12.0) 0.0
Gomel M, 1993 CVD risk reduction Group randomized trial, greatest, 3 (fair)	Australia: Sydney n = 431(14.39%) Age: 32 (SD: 8.64); 17.0% F; R/E: NR	Nutrition & physical activity/4-stage model of behavior change 6 mo/NR 4 cardiovascular disease risk factor interventions targeted ambulance employees. Stations received 1 of 4 interventions: 1) Health Risk Assessment (HRA) for cardiovascular risk factors 2) Risk Factor Education (RFE): HRA + advice on lifestyle changes 3) Behavior Counseling (BC): HRA + self-instruction manual, 6 lifestyle counseling sessions 4) Behavior Counseling + Incentives (BCI): BC+ Incentives (vouchers for reaching goals) Comparison: HRA (Group 1)	Mean BMI, kg/m² (standard deviation) BL 12 mo BCI 25.7 -0.20 BC 25.5 -0.30 RFE 25.5 -0.10 HRA 25.2 0.15

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Grandjean PW, 1996 CVD risk reduction Randomized trial, greatest, 2 (fair)	US: College Station, TX n = 37 (NA) Age: NR; 100.0% F; R/E: NR	Physical activity/NR 6 mo/NR Fitness program targeted sedentary blue-collar workers 2 groups: Both received physiological testing, blood work, & diet/exercise logs Intervention: received aerobic training, \geq 3 days/wk, 20–60 mn, for 24 wk. Regimen changed at 3 mo based on VO ₂ max Comparison: daily routine, no physical activity	Mean wt, kg (standard deviation) <u>BL</u> 6 mo Exercise 66.2 (13.5) -2.0* Comparison 65.5 (12.2) 0.7 * within group: p <0.05; between group: p <0.05
Harvey HL, 1998 Healthy lifestyle Nonrandomized, greatest, 4 (fair)	US: SC n = 136 (0%) (Active) age: 41.7 (SD: 10.88); 93.9% F (Enrolled) age: 42.67 (SD: 7.4); 83.6% F R/E: NR	Physical activity/NR 12 mo/NR Wellness program targeted hospital employees Intervention: diabetes management, Dean Ornish meals in cafeteria, runs/walks, aerobics, stop smoking, health education/screenings, & wt management Incentives to turn in quarterly logs: indicated participation.	BL 12 mo Active 25.87 -0.46 Enrolled 27.47 0.41 Between group: p = 0.0494
Hedberg GE, 1998 CVD risk reduction Nonrandomized, greatest, 2 (fair)	Sweden n = 102 (13.73%) Intervention: age: 42.9; 0% F Comparison: age; 43.4; 0% F R/E: NR	Nutrition & physical activity/NR 18 mo/NR 2 programs to reduce levels of CVD risk targeted professional drivers Intervention: health profile assessment & group activities Comparison: health exam & education literature	Mean BMI, kg/m² (F-statistic)BL6 moIntervention24.50.2Comparison25.50.1
Jeffery RW, 1993 Weight loss Group randomized trial, greatest, 2 (fair)	US: Minneapolis-St. Paul, MN n = 32 sites (NA) Age: 38.0; 54.0% F; R/E: NR	Nutrition & physical activity/NR 24 mo/NR Behavior modification intervention targeted employees by sites Intervention: 200 employees/site got 4 rounds of 11 bi-weekly classes about wt loss and stopping smoking using modification principles. Incentive deducted from pay & returned to participant after each session based on progress Comparison: usual care	Mean BMI, kg/m² (standard deviation)BL24 moIntervention25.88 (0.45)-0.02Comparison26.03 (0.57)0.08
Juneau M, 1987 Physical activities benefits Randomized trial, greatest, 1 (good)	US: Sunnyvale, CA n = 120 (0.0%) Age: NR; 47±5% F; R/E: NR	Physical activity/NR 6 mo/NR Home-based, moderate exercise program targeted to healthy, sedentary corporate employees less than 25% overwt Intervention: 15 mn training video + exercise 5 times/wk for ≤1hr/session + 24 wk of daily physical activity logs Comparison: physical activity log	BL 6 mo Exercise *(M) 79.4 (11.0) -1.5 (F) 63.8 (8.0) -0.4 Comparison *(M) 81.5 (11.0) -0.4 (F) 60.6 (7.0) 0.1 *Between male groups: p<0.05

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Karlehagen S, 2003 CVD prevention Non-randomized, greatest, 4 (fair)	Sweden n = 169 (10.65%) Intervention: age: 46.0; 68.0% F Comparison: age: 49.0; 65.0% F R/E: NR	Nutrition & physical activity/NR 7–8 mo/NR Counseling program targeted to employees with serum cholesterol ≥5.2 mmol/L. All received advice & goal setting Intervention: counseling encouraging exercise 30 mn, 3X/wk (BL & 6 mo); counseling on healthy food habits (BL & 7–8 mo); food habits survey: diet history method & testing (12–13 mo post-program) Comparison: info about diet and physical activity	Mean BMI, kg/m ² <u>BL 19–20 mo</u> Intervention 25.32 –0.12 Comparison 24.80 0.46
Krishnan N, 2004 Diabetes management Randomized trial, greatest, 4 (fair)	India: Chennai n = 100 (17.0%) Intervention: age: 47.9; 8.3% F Comparison: age: 46.6; 0% F R/E: NR	Nutrition & physical activity/NR 1 mo/NR Health education program for type 2 diabetics at a newspaper company health center. 1st measured knowledge about diabetes, complications, diet and exercise, attitudes Intervention: diabetic education program: 3 modules (3 hr each) about signs, symptoms, significance & management of diabetes miletus elements, diet, exercise, oral medication & insulin Comparison: usual care	Group % change in BMI BL 12 moBMI <25:
Linenger JM, 1991 Increase physical activity Non-randomized, greatest, 4 (fair)	US: San Diego, CA n = 3728 (50.66%) Age: NR; % F NR; R/E: NR	Nutrition and physical activity/NR 12 mo/NR Environment & social change intervention targeted to Navy base personnel Intervention: bike/run paths & clubs; more hours & new equipment at exercise facilities; athletic events; new womens fitness center; healthy foods/labeling; nutrition pamphlets in food outlets; no smoking rule in aircraft & buildings Comparison: usual care	BL 12 mo Intervention 15.7 (15.4–16.0) 0.0 Comparison 15.7 (15.4–16.0) 1.0* * Within group: p <0.05
Lovibond SH, 1986 CVD risk reduction Randomized trial, greatest, 0 (good)	Australia: Sydney n = 75 (12.0%) Age: 46.3; 24.0% F; R/E: NR	Nutrition & physical activity/NR 2 mo/4 mo Behavior change program for coronary heart disease (CHD) risk factor status (RFS) for government staff with elevated CHD risk. 3 prevention programs: Maximal (with therapist): assessment/feedback on RFS & CHD risk/ projected risk, education program, goal setting, self-management training Extended: same elements as Maximal program, no therapist Basic: CHD risk score, records of target behavior, goal setting, no feedback on RFS	Mean wt, kg >10% ideal body wt $\begin{array}{r} \underline{BL} & 12 \text{ mo} \\ \hline \\ Maximal & 86.4 & -9.6 \\ \hline \\ Extended & 84.7 & -8.3 \\ \hline \\ Basic & 86.1 & -5.5 \\ \hline \\ Between all groups: p = 0.000 \\ \hline \end{array}$

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Muto T, 2001 CVD risk reduction Randomized trial, greatest, 2 (fair)	Japan n = 326 (7.36%) Intervention: age: 42.30; 0.0% F; 100.0% Asian Comparison: age: 42.70; 100.0% F; 100.0% Asian	Nutrition & physical activity/Social Ecology 1 mo/12 mo Health promotion program targeted to building maintenance company staff with ≤1 physiological abnormality at exam Aim: reduce wt, blood pressure, cholesterol, triglycerides, glucose Topics: nutrition, physical activity, reducing consumption of fat & salt Program: 4 days, multi-component (lectures, training, individual counseling, group discussion & self-education) Goal setting: diet, physical activity, mental health, tobacco/alcohol Comparison: annual exam	Mean wt, kg (standard deviation) <u>BL 6 mo</u> Intervention 70.2 (9.1) -1.6 Comparison 71.7 (9.9) 0.1 Between groups: p <0.001
Nilsson PM, 2001 CVD risk reduction Randomized trial, greatest, 3 (fair)	Sweden: Helsingborg n = 128 (30.5%) Age: 49.7; 61.0% F (measured at 12 mo); R/E: NR	Physical activity & Nutrition/NR 18 mo/NR Life-style intervention for public sector employees with elevated CVD risk scores. Screened & assigned cardiovascular risk scores. High-risk people placed in 2 groups: Intervention: 16 group info sessions/yr (lectures, discussions, video, outdoor activities) & individual counseling Comparison: standard advice about cardiovascular risk factors	Mean BMI, kg/m ² (standard deviation) <u>BL 12 mo</u> Intervention 28.8 (5.9) –0.7 Comparison 26.7 (5.2) 0.1
Nisbeth O, 2000 Reduce CVD risk factors Randomized trial, greatest, 2 (fair)	Denmark: Copenhagen n = 85 (29.41%) Intervention: age: 33.9 ± 6.0 ; 0.0% F Comparison: age: 32.0 ± 6.0 ; 0.0% F R/E: NR	Nutrition & physical activity/NR 5 mo/NR Intervention to change lifestyle & heart disease risk factors targeted to computer company employees. At-risk people placed in intervention group, counseled & defined goals for lifestyle change. Based on goals, placed in 3 counseling subgroups (exercise, diet, smoking). After 5 mo: 15 mn follow-up conversation, counseling Comparison: no contact	Mean wt, kg (standard deviation, standard error) BL (SD) 12 mo (SE) Intervention 80.9 (10.6) -0.2 (2.3) Comparison 81.3 (9.9) 1.4 (3.5)* * Within group: p <0.05
Oden G, 1989 Physical activity benefits Randomized trial, greatest, 3 (fair)	US: College Station, TX n = 45 (NA) Intervention: age: 29.30 Comparison: age: 29.22 80.0% F: R/E: NR	Physical activity/NR 6 mo/NR Employee fitness program targeted to sedentary corporate employees, aimed to influence job satisfaction and work-stress & to measure productivity Exercise program: aerobic training ≥3 days/wk for 6 mo Comparison: periodic contact	Mean % body fat, skin calipers (standard deviation) <u>BL (SD) 6 mo</u> Exercise 26.78 (6.87) -3.84 Comparison 27.01 (8.76) -1.28
Okayama A, 2004 CVD risk reduction Randomized trial, greatest, 2 (fair)	Japan n = 191 (1.57%) Intervention: age: 45.2; 4.0% F Comparison: age: 43.9; 9.0% F R/E: NR	Nutrition & physical activity/NR 6 mo/NR Health education program at 7 factories targeted to workers with total serum cholesterol >220 mg/dl at checkups. Aimed to reduce total cholesterol & CVD risk factors Program: diet and exercise advice & educational materials. Reinforce every 2 mo Comparison: no contact	Mean wt, kg (standard deviation) <u>BL 6 mo</u> Intervention 68.0 (8.1) –0.8 Comparison 66.8 (9.0) –0.3

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Peterson G, 1985 Weight loss Randomized trial, greatest, 3 (fair)	US: Attleboro, MA n = 63 (30.16%) Age: 46.2; 76.0% F R/E: NR	Nutrition & physical activity/Principles of behavior therapy 2 mo/2 mo Behavior skills intervention targeted to 63 corporate employees. Aimed for wt loss & analysis of impact: volunteer vs professional leaders. Grouping: random block design, 1 of 6 groups within each block. Blocks: by % over ideal weight (10–29%, 30–49%, >50%).	Mean wt, kg <u>BL 6 mo</u> Professional 82.9 –5.8 Volunteer 81.6 –6.3
Pohjonen T, 2001 Physical activity effects Non-randomized, greatest, 3 (fair)	Finland: Helsinki n = 87 (19.54%) Intervention: age: 41.8; 100.0% F Comparison: age: 43.3; 100.0% F R/E: NR	Physical activity/NR 9 mo/NR Exercise intervention targeted to municipal home health aides with elevated sick days, work load Intervention: physiotherapy counseling, 3 2-hr talks on motivation, leisure, physical activity, nutrition. Exercise at gym 1 hr, 2X/wk (aerobic/muscular) Comparison: test feedback only	Mean wt, kg (standard deviation)BL12 moIntervention66.7 (12.3)-2.2Comparison69.5 (11.9)0.5
Pritchard JE, 2002 Weight loss Randomized trial, greatest, 1 (good)	Australia: Melbourne n = 66 (12.12%) Age: 43.4 <u>+</u> 5.7; 0.0% F; R/E: NR	Nutrition & physical activity/NR 12 mo/NR Wt loss program targeted to overwt corporate employees Diet group: low-fat, individualized to usual patterns Exercise group: own regimen, 30 mn, <u><</u> 3X/wk achieving 65–75% max heart rate Comparison: pre-study diet and activity	BL 12 mo Diet 87.8 (10.5) -6.4 (3.3)* Exercise 88.1 (10.1) -2.6 (3.0)* Comparison 87.8 (10.9) 0.3 (2.4) * Between group difference (intervention/comparison) p <0.01
Proper KI, 2003 Increase physical activity Randomized trial, greatest, 3 (fair)	Netherlands: Enschede n = 299 (36.45%) Intervention: age: 43.8; 25.6% F Comparison: 44.0; 38.5% F R/E: NR	Nutrition & physical activity/Stages of Change 9 mo/NR Counseling intervention targeted to civil service office employees Intervention: 7 20-mn individualized counseling meetings. Both groups received written info about lifestyle factors Comparison: written info only	Mean BMI, kg/m ² (standard deviation) No Intervention 25.3 (3.3) -0.1 Comparison 25.5 (3.3) 0.1
Robison JI, 1992 Physical activity benefits Non-randomized, greatest, 4 (fair)	US: MI n = 137 (31.39%) Intervention: age; 39.8; 30.0% F Comparison: age: 35.4; 71.0% F R/E: NR	Physical activity/Behavior modification template (Stoffelmayr) 6 mo/NR Exercise program with behavior management components targeted to university staff at 6 sites (5 intervention, 1 comparison) (4–6 staff at each site) All received exercise prescription & goal of ≥30 mn exercise/day, 4 days/wk Experimental group had behavior management intervention: 8 wk, 1-hr bi- weekly meetings until end. 3rd party exercise contract with 3rd party verification confirmed that exercise was Comparison: screening, goal setting, no behavior management	Mean wt, kg (standard error) <u>BL 6 mo</u> Experimental 75.1 (1.2) -1.6 Comparison 73.0 (5.4) -1.6

Author, Year Objective Design, Suitability of design, Quality limitations (quality of execution)	Location Base sample size (n) (% attrition) Age (mean, unless stated) in years; % female; % race, ethnicity (R/E)	Intervention focus/Theory Length: Core intervention/Maintenance Intervention description Treatment of comparison	Outcome (Variance measure) Baseline and Difference Notes
Shimizu T, 2004 CVD risk reduction Retrospective cohort, moderate, 2 (fair)	Japan: Kyushu n = 629 (NA) Intervention (older): age: 46.0; 19.5% F Intervention (younger): age: 25.9; 20.0% F Comparison (older): age: 42.4; 24.5% F Comparison (younger): age: 26.6; 13.7% F R/E: NR	Nutrition & physical activity/NR 48 mo/NR Interview-based health promotion program targeted to employees of 2 manufacturing companies over 4 yr Intervention: health interview & measuring, group education for behavior change Comparison: check up, referral if needed	BL (SD) 48 mo (SE) Intervention (older) 22.6 (2.6) -0.07 (0.08) Comparison (older) 23.6 (3.2) -0.03 (0.09) Intervention (younger) 22.3 (2.9) 0.30 (0.10)* Comparison (younger) 21.7 (2.9) 0.80 (0.10) * Within arm: p <0.01
Talvi AI, 1999 Healthy lifestyle Non-randomized, greatest, 2 (fair)	Finland: Naantali & Porvoo n = 885 (9.80%) (By sex & group): Intervention (Group A): age: 42.6 (male), 42.1(female), Comparison (Group B): age: 40.4 (male), 41.1 (female); 100% White	Nutrition & physical activity/NR 5 mo/NR 3 yr health promotion intervention targeted to employees at 2 refineries Intervention (Group A): health promotion counseling based on pre- intervention screening; exercise (aerobic and muscle building, 15–30 mn, 3X/wk for 10 wk, then test. After testing, increase exercise [same type] to 20–30 mn, 3–4X/wk for 10 wk, then test. Lectures given in study target areas. Comparison (Group B): screening results, info	BL 36 mo Group A (male) 25.90 (3.16) 0.30 (1.32) (female) 25.90 (4.21) 0.12 (1.61) Group B (male) 25.60 (3.35) 0.46 (1.27) (female) 25.00 (4.36) 0.87 (1.85)
Thorsteinsson R, 1994 CVD risk reduction Prospective cohort, greatest, 3 (fair)	Iceland: Grundartangi & Akranes n = 155 (NA) (Grouped by cholesterol range): Group A: age: 38.3 (SD: 10.2) Group B: age: 43.4 (SD: 10.4) Group C: age: 44.5 (SD: 11.0) Group D: age: 45.5 (SD: 9.9) 13% F; R/E: NR	Nutrition/NR 24 mo/NR Dietary intervention targeted factory workers on cardiovascular risk factors 4 groups split by base mean serum cholesterol (higher cholesterol: increased attention with consultations, written instructions, more lipid measures. Also, factory kitchen food analyzed/changed by dietician, informational meetings) Group A (≤5.9 mmol/I); Group B (6.0–6.9 mmol/I); Group C (7.0–7.9 mmol/I); Group D (≥8.0 mmol/I)	Mean BMI, kg/m² (standard deviation) BL 24 mo Group A 26.9 (4.24) 0.1 Group B 26.1 (3.14) 0.3 Group C 26.0 (2.72) 0.1 Group D 26.0 (2.32) -0.4
Trent LK, 1995 Weight loss Non-randomized, greatest, 4 (fair)	US: Naval bases n = 624 (41.0%) Age: 30.0; 20.0% F; R/E: NR Comments: 96% enlisted	Nutrition and physical activity/NR 9 mo/NR A 1–3 yr wt-loss program targeted to Navy staff 1–5% over Navy Body Fat Standards (BFS) Intervention: Tier I (AII): fitness class 3–4X/wk, 45–60 mn/session, 6 mo Tier II (after Tier I, if still over BFS): 80 hr of wt management counseling & education for 2–6 wk Tier III (Obese, not discharged because of it): 6 wk program based on Overeaters Anonymous	Mean % body fat <u>BL 12 mo</u> Tier I 28.7 -2.1 Tier II 31.4 -3.4 Tier III is clinical data

Author, Year Objective Design, Suitability of design, Quality limitations (quality of execution)	Location Base sample size (n) (% attrition) Age (mean, unless stated) in years; % female; % race, ethnicity (R/E)	Intervention focus/Theory Length: Core intervention/Maintenance Intervention description Treatment of comparison	Outcome (Variance measure) Baseline and Difference Notes
Wier LT, 1989 Physical activity benefits Non-randomized, greatest, 3 (fair)	US: Houston, TX n = 258 (35.6%) Age: (male) 44.5 (SD:7.9), (female) 40.8 (SD: 9.6); 24.0% F; R/E: NR	Physical activity/NR 3 mo/NR 5 yr NASA/Johnson Space Center Health Related Fitness Program (HRFP) aimed to increase physical activity & alter body composition of staff and dependents. 12 wk, 3 days/wk education program, quarterly retests. Analysis based on compliance with program. Compliant: education + ≥75% of tests Noncompliant: education + 25% of tests Comparison: no contact	BL 30 mo Compliant (male) 180.9 (20.0) -3.4 (female) 140.8 (26.1) 1.6 Noncompliant (male) 181.3 (31.7) 2.7 (female) 154.0 (36.4) 1.6 Comparison (male) 177.9 (23.0) 3.8 (female) 129.5 (19.1) 4.2
WHO (Regional Office for Europe), 1989 CVD risk reduction Group randomized trial, greatest, 2 (fair)	Belgium, Spain, Italy, Poland, UK n = 63,732 in 88 factories (NA) Intervention: age: 48.5 ± 5.4; 0.0% F Comparison: age: 48.5; 0.0% F R/E: NR	Nutrition & physical activity/NR 72 mo (intensity varied by site)/NR Intervention for prevention of heart disease by decreasing risk factors. Randomly split 88 factories into 2 groups (intervention/ comparison) Intervention: cardiovascular screening, risk factor modification (posters, brochures, personal letters, progress charts, group discussions on diet, wt loss, lowering cholesterol, increasing physical activity, stopping smoking) High-risk employees received individual sessions with physician. Employees with high blood pressure given diuretic/drugs, some referred. Random sample screened annually. High risk employees screened at least annually. At 5–6 yr all received final exam. Comparison: usual care	Difference in change in wt, kg between intervention and comparison groups (standard deviation) At BL: 0 At 24 mo: –0.7

BL baseline; BMI body mass index; BP blood pressure; CHD coronary heart disease; comp comparison; CVD cardiovascular disease; F female; hr hour(s); info information; int intervention; kg kilogram(s); lb pound(s); M male; max maximum; min minimum; mn minute(s); mo month(s); n sample size; NA not available; NR not reported; overwt overweight; PA physical activity; R/E race/ethnicity; RFS risk factor status; SD standard deviation; SE standard error; sig significant; THP Total Health Promotion; vs versus; wt weight; X times; X/wk times per week; yr year(s)