

Author	Purpose	Design/Level of Evidence	Intervention	Theoretical Framework	Sample/Location	Physical Activity Measure	Physical Activity Outcomes	Strengths/Limitations
Adams et al ⁴⁵ (2015)	Community-based walking intervention implemented to promote physical activity among African American women	Pre-post 3	5 Weekly group sessions to encourage support, walking groups	None identified	25 of 29 African American women completed intervention; setting: church (southeastern state)	International Physical Activity Questionnaire (IPAQ) (baseline and 1 wk after intervention)	Time spent in moderate physical activity significantly increased; time spent sitting on a weekday decreased; time spent walking decreased	Low attendance at some of the group sessions (reported causes of attrition were inclement weather and family obligations)
Anderson and Pullen ¹⁴ (2013)	To determine whether cognitive-behavioral physical activity spiritual strategies (PASS) intervention would increase physical activity behavior in African American women aged ≥60 y	Cluster, randomized study 2	PASS intervention—90-min sessions each week for 10 wk -administered by an African American RN with certification as a faith community nurse; goal setting: weekly walking and muscle strength activity goal -prayer and Bible passages	Health Promotion Model	27 African American women Four faith communities in the southern United States Aged ≥60 y old; mean age, 70 y (intervention) and 66 y (control)	Total daily energy expenditure, self-reported moderate-intensity physical activity, walking minutes per week, muscle-strengthening activity days/week and minutes/week	Healthy People 2020 target for moderate-intensity physical activity reached by 73% (intervention) and 69% (control) Healthy People 2020 target for muscle-strengthening activity reached by 73% (intervention) and 12.5% (control); significant difference between groups for muscle-strengthening activity (days and minutes/wk); no significant difference for amount of moderate-intensity physical activity or total daily expenditure	Strengths: faith community setting, churches were randomized, theory-based intervention, and control group received intervention in their church after follow-up measures were taken; limitations: self-report physical activity and small sample
Backman et al ³⁰ (2011)	Evaluate effectiveness of Fruit, Vegetable, and Physical Activity Toolbox for Community Educators in changing knowledge, attitudes, and behavior among low-income African American women	Quasi-experimental prospective design 2	Intervention group received six 1-h toolbox classes (1 session/wk) Control group did not receive intervention	Social Cognitive Theory (SCT) concepts	African American women—156 (intervention group) and 171 (control group) aged 18–54 y; 75% low-income, 16% drop rate (intervention), 14% (control); region: West	Physical activity; behavior change measured by self-report	Increased proportion of women who had been physically active for ≥5 d in previous week and in usual week (significant difference for intervention group) Significant difference for intervention group in using Physical Activity Scoreboard to create weekly physical activity routine	Strength: random assignment to group; limitations: physical activity self-reported and possibility that participants in control group changed their behaviors due to their knowledge of nutrition and physical activity study

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Banks-Wallace and Conn ³⁸ (2005)	Examine changes in steps per day over the course of a pilot study focusing on promoting walking	Pre-post, single arm 3	12-mo Group intervention included 3-h monthly meeting (education and discussion about physical activity), group walks (started at 5 min and increased to 40 min) and at-home walking component. Participants were asked to identify a walking partner within group (walk twice/wk)	None identified	21 Sedentary, hypertensive African American women aged 25–68 y Mid-Missouri (Midwest)	Steps per day—Accusplit Eagle pedometers	Total group experienced a slight increase in mean steps/day at 12 mo (5%) Subgroup of 10 women had a decrease of 13% 6-mo Follow-up (mean steps increased by 37% for total group and 51% for subgroup)	Strengths: group-based intervention and objective measure (pedometer) for step count; limitations: no control group, convenience sample (may have had a desire to increase physical activity), sample size, and variable participation in individual data collection sessions Strengths: randomized sample, culturally targeted program
Befort et al ¹⁵ (2008)	Examine whether the addition of motivational interviewing to a culturally targeted behavioral weight loss program for African American women improved adherence to the program, diet and physical activity behaviors, and weight loss outcomes	Randomized controlled trial (RCT) 2	4 Individual motivational interviewing sessions in addition to 16-wk culturally targeted behavioral weight loss program. 90-min weekly sessions	None identified	44 African American women ≥ 18 y old body mass index (BMI) (30–50 kg/m ²) Kansas City, Missouri (Midwest)	CHAMPS—physical activity questionnaire	Nonsignificant changes in physical activity	Strengths: randomized sample, culturally targeted program
Christie et al ⁴³ (2010)	Examine efficacy of church-based community intervention in reducing obesity related outcomes in US African American females	Single group, pretest-posttest 3	24-wk Intervention (12 wk per phase); sessions included 1 h of physical activity and 1½-h nutrition education, cooking demonstrations, and social support	None identified	383 African American women >18 y old wishing to lose weight	Physical activity self-reported (self-recorded daily minutes of exercise)	Exercise in minutes significantly higher from baseline to 12 wk and baseline to 24 wk (nonsignificant between 12 and 24 wk)	Strengths: church-based, cultural components; limitations: single-group design (no control group); eligible participants were wishing to lose weight (results not generalizable) self-report physical activity
Duru et al ¹⁶ (2010)	Evaluate faith-based intervention (Sisters in Motion) to increase walking in older, sedentary African American women	RCT, randomized by participant 2	90-min Weekly meetings for 8 wk followed by monthly meetings for 6 mo; 2 groups: intervention group received faith-based curriculum (evidence-based practice for physical activity programs targeting older adults), and 45 min of weekly physical activity, whereas control group received only 45 min of weekly physical activity	SCT concepts	62 Sedentary, African American women aged ≥ 60 y; mean age, 73.3 y (intervention), 72.2 y (control); 3 Los Angeles churches (region: West) Intervention group had <10% dropout rate and control group <20% dropout rate	Weekly steps—pedometer (Digitalker Yamax SW-200); physical activity—C-HAMPS Physical Activity Questionnaire modified version for African Americans	6-mo Follow-up—significant difference in steps (intervention group increase mean walking 7457 [average] steps more than the control group) Overall, physical activity in hours/week: not statistically significant	

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Fitzgibbon et al ¹⁷ (2005)	Determine if a combined breast health/weight loss intervention could decrease weight and increase physical activity and breast self-examination proficiency	Randomized pilot 3	Small groups met twice weekly; first 90-min meeting included 45-min didactic component and 45-min exercise component; second weekly meeting consisted of 45-min exercise session	SCT	27 African American women in cohort 1; 37 African American women in cohort 2 (region: Midwest)	Researcher-developed physical activity questions	Cohort 1: nonsignificant results; cohort 2: significant changes in frequency of regular physical activity, duration of physical activity, and intensity of physical activity for the intervention group	Strengths: randomization; women in the 2 cohorts were randomized to the intervention or control group, culturally tailored intervention
Fitzgibbon et al ²⁷ (2005)	Estimate the effects of a 12-wk culturally tailored, faith-based, weight loss intervention	RCT 2	12 wk Intervention (faith-based weight loss intervention vs weight loss intervention); small groups met twice weekly for exercise sessions and didactic session; faith-based intervention also included faith/spirituality components	SCT	59 Overweight, African American women ≥ 21 (region: Midwest)	Stanford Seven-Day Physical Activity Questionnaire (7D-PAR)	Significant increase in total energy expenditure and energy expended in moderate and vigorous activity for the weight loss group. Nonsignificant changes for the faith-based weight loss group	Strengths: randomization, culturally tailored
Gaston et al ¹¹ (2007)	To evaluate effectiveness of Prime Time Sister Circles, a curriculum-based, culture-and gender-specific health intervention	Multisite, quasi-experimental 3	Groups met for 90 min weekly for 10 wk; facilitators led small group; goals were set related to nutrition, physical activity, and stress management; participants received a textbook and curriculum workbook Comparison group received a textbook	SCT, Transtheoretical Model (TTM), and Peison, Extended Family, Neighborhood	134 African American women (106 in the intervention group and 28 in the comparison group) 11 Sites across US including Illinois, Washington D C, Florida, and Maryland; aged ≥ 35 y (mean, 54.4 y); 4 of 11 sites were churches; <20% dropout rate	Physical activity—survey	Significant changes in physical activity from pretest to posttest Increased engagement in strength building (1.53, 2.53, and 2.45 d/wk at baseline, posttest, and 12 mo follow-up) This increase did not remain for the 6-mo follow-up No significant pretest and posttest change for the comparison group	Strengths: small, group-based program; culture- and gender-specific, theory-based intervention; limitations: self-reported physical activity, no randomization, and results may not be generalizable (primarily college-educated, middle-income participants)

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Gerber et al ¹⁸ (2013)	Evaluate effect of home telehealth on weight maintenance after group-based weight loss program	RCT 2	Telephone counseling; home internet-enabled digital video recorders with 3 channels for video content including exercise videos Maintenance phase lasted 9 mo—included 60-min weekly sessions didactic session		88 Obese or overweight African American women; aged 35–65 y; mean, 50 y (intervention), 49 y (control); recruited from community churches; <20% dropout rate (region: Midwest)	Physical activity—IPAQ—short version	Moderate to vigorous activity change was similar for both groups ($P = .49$); Moderate activity levels were better maintained in intervention group ($P = .01$)	Strength: participants were randomized; limitations: sample size, self-report physical activity, and 47% did not engage in DVR viewing
Joseph et al ³⁷ (2014)	Evaluate a culturally relevant, SCT-based, internet physical activity pilot intervention developed for overweight/obese African American female college students	Single group, pretest-posttest 3	3-mo Intervention consisting of four 30- to 60-min moderate-intensity walking/exercise sessions each week; Internet-based application for physical activity monitoring	SCT	25 African American women aged 19–30 y; BMI >25 kg/m ² ; undergraduate or graduate student	7-Day Physical Activity Recall (7-Day PAR) Actigraph accelerometer	Nonsignificant changes in moderate to vigorous physical activity from baseline to postintervention; participants overreported physical activity on the 7-Day PAR when compared with accelerometer data	Strengths: majority of participants identified the internet site as “somewhat” to “very helpful” for promoting physical activity, culturally tailored; limitations: convenience sample, and lack of a control group
Joseph et al ⁴¹ (2015)	Evaluate a theory-based multicomponent intervention using Facebook and text messages to promote physical activity among African American women	Randomized pilot 2	8-wk Facebook and text-messaging intervention (weekly promotion materials posted on Facebook wall, discussion topics and participant engagement on Facebook wall, motivational text messages, and pedometer-based self-monitoring and goal setting)	SCT	29 African American women aged 24–49 y who were insufficiently active (<150 min moderate-intensity activity per week) (region: West)	Actigraph accelerometer; self-report physical activity	Nonsignificant changes from baseline to 8 wk (accelerometer measured physical activity outcomes); Significant changes in light- and moderate-intensity physical activity between groups; Significant change in moderate to vigorous physical activity for Facebook intervention group	Strengths: theory based, culturally tailored; participants randomized Comparison group received print-based materials every 2 wk for 8 wk
Karanja et al ⁴⁴ (2002)	Test the effects of a culturally adapted weight loss program in weight loss in African American women	Pilot, single arm, pre-post 3	6-mo Weight loss program; weekly group meetings and supervised exercise sessions at a local community center; group participants shared low-fat meals prepared by participants	None identified	66 African American women (3 dropped out after 3 group sessions)	Exercise (hours per week)—self-reported	Significant increase in exercise; 6-mo average hours of exercise per week doubled from baseline	Strength: cultural adaptations (social support, African American instructors/leaders, and involved family/community); limitation: no control or comparison group

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Keyserling et al ¹⁹ (2002)	To determine if culturally appropriate clinic and community-based intervention for African American women with type 2 diabetes will increase moderate-intensity physical activity	RCT (3 intervention groups)	Group A—clinic and community-based; group B—clinic intervention only; group C—minimal intervention (were mailed pamphlets published by the American Diabetes Association)	Behavior change theory (TTM and SCT)	200 African American women aged ≥ 40 y with type 2 diabetes; mean age: 59 y (region: South)	Physical activity—Caltrac accelerometer	Overall significant change in physical activity at 6- and 12-mo follow-up for all groups; significant difference in change in physical activity between groups A and C at 6 and 12 mo; significant difference in change in physical activity between groups B and C at 6 mo	Strengths: participants were randomized, increased participation rates for follow-up, objective physical activity measure, and intervention was acceptable to participants; limitations: intervention had different actual Caltrac wearing times (potential for bias)
Liu et al ²² (2015)	Test feasibility and participant satisfaction of theory-based nutrition and physical activity intervention designed to prevent excessive gestational weight gain and promote postpartum weight loss in overweight and obese African American women	Mixed methods Phase 1: qualitative (in-depth interviews) Phase 2—intervention utilizing findings from phase 1 Phase 3	Behavior intervention program included individual counseling session followed by eight 90-min group sessions; group sessions led by African American research staff member Telephone counseling through 36-wk gestation Postpartum: participants received home visit and up to 3 counseling calls	SCT	16 Overweight and obese, pregnant, African American women Mean age, 25.1 y (intervention), 27.4 y (control) Contemporary controls (n = 38) were selected from medical records—pregnant women who met same criteria as study participants Columbia, South Carolina	Physical activity—SenseWear Armband	Steps/day were similar at baseline and 32-wk gestation Steps/day significantly increased from baseline to postpartum Significant increase in total energy expenditure at 32-wk gestation and 12 wk postpartum Significant increase in total minutes spent in moderate to vigorous physical activity (baseline vs 12 wk postpartum)	Strengths: theory-based intervention, intervention tailored to study population, and objective physical activity measure; limitation: sample size and contemporary controls (outcome measures based on baseline, 32-wk gestation, and 12 wk postpartum for intervention group only)
Montgomery ³¹ (2009)	To determine use of pedometers to increase walking (physical activity) in African American women who were between 6 wk to 6 mo postpartum	Correlational study Phase 3	Women wore pedometers daily for 12 wk (except for bedtime and bathing) Structured physical activity program	Not clearly stated	31 Sedentary, African American women aged 18–40 y (mean, 29.58 y); south central region of Alabama; 31 out of 32 completed the study	Step count—Yamax Digiwalker SW-200	Significant difference in average steps/day pre-post study 63.6% increase in average number of steps taken/day over 12-wk period	Limitation: homogenous group of women (limits generalizability)

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Parra-Medina et al. ²⁰ (2011)	Evaluate theory-based lifestyle intervention targeting physical activity and dietary fat intake in African American women at high risk of cardiovascular disease	RCT 2	Culturally appropriate, theory-based intervention included telephone calls and printed materials 12 motivational, stage-matched ethnically tailored newsletters and up to 14 calls over 1 y Comprehensive intervention group and standard care group	SCT and TTM	266 Low-income African American women aged ≥ 35 y South Carolina community health centers 43% Attrition rate at 12 mo	Self-reported minutes/week of moderate to vigorous physical activity CHAMPS (Community Health Activities Model Program for Seniors)—41-item questionnaire	Comprehensive intervention participants were more likely than standard care participants to decline in total physical activity at 6 mo Comprehensive intervention group significantly more likely to improve in leisure-time physical activity at 6 mo	Strengths: theory-based intervention, participants were randomized, and culturally tailored intervention; limitations: no true nontreatment control, attrition rate (43% at 12 mo), and self-report; physical activity data
Pekmezci et al. ⁴² (2013)	Determine feasibility and acceptability of home-based physical activity intervention	Mixed methods (qualitative focus groups) and single-arm pretest-posttest demonstration trial 3	One-mo trial—participants received motivation-matched physical activity manuals and individually tailored computer expert system feedback reports through mail; pedometers were given to encourage self-monitoring	SCT and TTM	11 Focus groups in Alabama and Mississippi; 6 African American women per group) Trial—10 overweight, African American women aged 19–65 y from Alabama (mean, 39.1 y); 90% retention	Physical activity—7-d PAR (primary outcome measure) 6-min Walk test	Participants reported increase in moderate intensity or greater physical activity from 89 min/wk (baseline) to 155 min/wk 70% Of participants reported increased motivational readiness for physical activity at 1 mo Small, nonsignificant improvements in fitness (6-min walk test)	Strengths: intervention grounded in theory and intervention modified based on focus group data; limitations: no control group, sample size, and results may not be generalizable (all participants had some college education)
Peterson and Cheng ³⁹ (2011)	Test feasibility of church-based Heart and Soul Physical Activity Program (HSPAP) in promoting physical activity in group of urban midlife African American women	Pilot study 3	HSPAP booklet revised for African American women 2-h weekly session for 6 wk included 30 min of physical activity Sessions were held at their church and facilitated by an African American nurse practitioner	Social comparison theory	18 Midlife, sedentary, African American women Aged 35–65 y Large, Midwestern city	Physical activity (time and intensity) measured by self-report (7-DAR) Triaxial Research Tracker (RT3) accelerometer for 1 wk at baseline and 5 wk	Total minutes of physical activity/wk increase significantly (7-DAR data) Mean increased from 412 min/wk to 552 min/wk Nonsignificant increase in physical activity although physical activity intensity increased from 3.33 METS to 4.33 METS	Strengths: high correlation between 7-DAR and accelerometer, church-based program, and study based on qualitative focus group analysis; limitations: sample size, 6-wk timeframe, no control group, and did not evaluate long-term changes

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Rimmer et al ³⁶ (2010)	Examined effectiveness of telephone-based intervention to increase physical activity in obese African American women with disabilities	Pilot study 3	Weekly calls for 6 mo (discussion of current health issues and new/persistent barriers to physical activity, motivational interviewing utilized)	33 Sedentary, obese, African American women with mobility disabilities; aged >18 y (mean, 60.1 y); Midwestern United States; 33 out of 53 retained	Physical activity measured by Physical Activity and Disability Survey Barriers to Physical Activity and Disability Survey	Significant increase in total minutes/day of structured exercise, general indoor household physical activity, and total physical activity	Limitations: participants were volunteers (may have already been motivated to increase physical activity), no control group, and no theory stated for intervention Strengths: RCT, community-based participatory research; limitations: 2 interventions (lifestyle and screening), difference in retention rates between 2 arms, and self-reported physical activity	
Scarinci et al ²¹ (2014)	Examine efficacy of community-based, culturally relevant intervention to promote healthy eating and physical activity among 45- to 65-y-old African American women	Cluster RCT 2	2 Arms—healthy lifestyle (5-wk healthy lifestyle—4 group and 1 individual sessions); screening (educational and behavioral strategies to promote breast and cervical cancer screening—4 group and 1 individual sessions)	SCT and TTM Community-based participatory research	565 African American women aged 45–65 y (mean, 53.9 y); 6 counties in Alabama at 12 mo 54.7% Retention at 24 mo	Engagement in physical activity at least 5 times/wk measured by a questionnaire 12-mo Follow-up—24% increase in physical activity (healthy lifestyle group) and 3% increase for screening group	Strengths: RCT, community-based participatory research; limitations: 2 interventions (lifestyle and screening), difference in retention rates between 2 arms, and self-reported physical activity	
Spector et al ³³ (2014)	Determine if 16-wk home-based motivational exercise study increases physical activity levels	Prospective, single-arm, pretest-posttest 3	Home-based exercise intervention initially low-intensity walking and resistance training that progressed to 150 min/wk low- to moderate-intensity exercise; weekly telephone motivational interviewing sessions Therabands were provided for resistance exercises; pedometers provided to help motivate participants to walk	None identified	13 Sedentary, African American women breast cancer survivors aged ≥18 y (mean, 51.6 y)	Physical activity—accelerometer and IPAQ—short version	Significant increase in total minutes/week of physical activity (questionnaire data) Significant increase in mean activity counts and moderate to vigorous activity (accelerometer data) Questionnaire total activity was positively correlated with accelerometer counts at 3 time points ($P < .001$)	Strength: objective physical activity measure; limitations: no control group, sample size, and recruitment (self-selection)—participants may have already been motivated to increase physical activity; may not be able to generalize—all participants had some level of college education
Staffileno et al ²² (2007)	Examine blood pressure effects of integrating lifestyle physical activity into daily routine of hypertension prone, sedentary African American women aged 18–45 y	Randomized, parallel-group, single-blind clinical trial 2	8-wk individualized home-based physical activity program; exercise group instructed to engage in lifestyle physical activity for 10 min, 3 times/d, 5 d/wk at a prescribed intensity of 50%–60% heart rate reserve; 60-min education session; physical activity log (mode, frequency, duration, and heart rate)	24 African American women with high-normal (130–139 mm Hg/85–89 mm Hg) or untreated, stage 1 hypertension (140–159 mm Hg/90–99 mm Hg) Aged 18–45 y (mean, 39 y) 96% Postrandomization retention Region: Midwest	Physical activity—Yale Physical Activity Survey (YPAS) Physical activity and physical activity adherence—physical activity logs (reviewed weeks 2, 4, 6, and 8)	High lifestyle physical activity adherence (range, 65%–98%) Self-reported frequency (72%) and duration (87%) Significant increase in self-reported energy expenditure in exercise group	Strengths: randomization, blinded clinical outcome measures, individually tailored intervention; limitations: 8-wk timeframe, self-report, physical activity, and sample size	

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Stolley et al ^{3,4} (2009)	Examine feasibility and impact of Moving Forward, culturally tailored weight loss program for African American breast cancer survivors	Pretest-posttest design 3	6-mo Comprehensive weight loss intervention designed for urban African American breast cancer survivors Intervention included 2 weekly sessions including an exercise class Participants received exercise DVDs for at-home use	SCT and Health Belief Model	23 African American women who were breast cancer survivors aged ≥ 18 y, Chicago; 20 of 23 completed study	Physical activity measured by IPAQ—long version	Significant increase in median time spent in vigorous activity (0 min/d at baseline to 23.6 min/d) Although changes were nonsignificant, time spent in moderate activity and in all physical activity increased	Strengths: theory-based, culturally appropriate, and qualitative data utilized to develop intervention; limitations: physical activity self-reported, sample size, no control group, and self-selection for participation (potential for bias)
Stolley et al ^{2,3} (2009)	Assess efficacy of a culturally proficient 6-mo weight loss intervention	RCT 2	Twice-weekly nutrition and PA sessions included didactic and physical activity	SCT	213 Obese, black women aged 30–65 y; BMI 30–50 kg/m ² ; retention (93.5% intervention group; 92.5% control group); Chicago	IPAQ	Intervention group reported significantly more vigorous and moderate-to-vigorous physical activity than the control group Self-reported walking differences (intervention and control group) nonsignificant	Strengths: small group format for sessions, designed for black women (culture), randomized, high retention; limitation: self-report data
Wilbur et al ⁴⁰ (2008)	Determine effectiveness of home-based walking intervention, compared with minimal treatment, on adherence, physical activity, fitness, and body composition at 24 and 48 wk	Quasi-experimental 2	12-mo intervention trial with 24-wk intensive adoption phase and 48-wk maintenance phase; enhanced treatment (intervention)—4 weekly, 60-min targeted workshops and tailored weekly phone calls for weeks 5–7, every other week phone calls for weeks 10–22 and monthly calls for weeks 25–48	Interaction Model of Client Health Behavior	156 (Enhanced treatment) and 125 (minimal treatment) sedentary, midlife African American women aged 40–65 y	Adherence to walking—heart rate monitors and logbook (for both groups) Physical activity—BRFSS	Including only women who had adherence data at 24 and 48 mo, significant group difference in walking adherence for 24 and 48 wk No significant difference in walking intensity between groups Both groups had significant improvements in meeting physical activity recommendations at 24 and 48 wk	Strengths: randomization, culturally appropriate (feedback from African American in focus groups from previous study), and low- and moderate-income women were included; limitations: self-report physical activity,

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Wilbur et al ²⁹ (2003)	Identify determinants of physical activity among African American and white women that predict adherence to 24-wk home-based walking program	Preintervention-postintervention 3	Moderate-intensity 24-wk home-based walking program Personal exercise prescription, instructional, and support from nurse research team member who met with each woman every 2 wk for reinforcement and feedback on progress 96 walks expected (4/wk)	Adapted Cox Interaction Model of Client Health Behavior	153 Women (33 African American, 67 white) aged 45–65 y (mean, 49.8 y) Location not specifically stated	Previous exercise experience measured by leisure dimension of Lifelong Physical Activity measure (activity measured in 10-y increments starting at age 20 y)	Average adherence was 66.5% of expected walks (range, 6%–104%); adherence was higher for white women than for African American women (mean, 71.5% and 56%, respectively); greater than 90% adherence to both duration and intensity	most of sample had higher socioeconomic status
Wilson et al ³⁵ (2005)	Test feasibility and impact on steps/day and BMI for theory-based, cognitive behavioral walking program	Pilot study 3	8-wk Community-based walking program (75-min sessions at community center in evening and church around noon); sessions included didactic, interactive, and small group processes	Health Belief Model	24 African American women who were breast cancer survivors aged <70 y; urban inner-city setting (region: West) 22 Of 24 completed intervention	Step count—pedometers	Statistically significant difference in steps/day (baseline, immediate post-intervention, and 3-mo follow-up) Significant increase in mean steps (4791–8297) Changes in steps/day from postintervention to 3-mo follow-up were nonsignificant	Strengths: theory-based, cognitive-behavioral intervention and study's goal was for participants to integrate walking into their routine on their own; limitation: no control group
Yancey et al ²⁴ (2006)	Test efficacy of 8-wk culturally targeted nutrition and physical activity intervention on body composition	RCT with attention control 2	Both groups received 8 weekly 2-h sessions with ethnically matched community role models as guest instructors	Social Ecological Model	389 African American women within 10-mile radius of health club Mean age, 46.52 y (control), 44.56 y (intervention); ethnically diverse, black-owned community center; 70% retained at 12-mo follow-up (region: West)	Physical activity measured by 4-item scale cardiorespiratory fitness	Significant increase in physical activity levels from baseline for intervention participants ($P < .0001$ at 2 mo, $P = .04$ at 6 mo) Significant main effect of the intervention on physical activity ($P = .0148$ at 2 mo and $P = .058$ at 12 mo) Significant main effect on fitness at 2 mo (nonsignificant at 6 or 12 mo)	Strengths: RCT with attention control condition, free gym membership provided

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SDC 1 Summary of Studies Reviewed, Continued

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Yanek et al ²⁵ (2001)	Determine impact of active nutrition and physical activity intervention on 1-y measures relating to lifestyle risk factors and cardiovascular disease risk profiles	Randomized clinical trial 2	3 Intervention strategies: behavioral model-based standard group methods (weekly sessions) Intervention supplemented with spiritual and church component (pastors offered regular information on healthy eating and physical activity, group prayers, health messages enriched with scripture, and physical activity with gospel music or praise and worship dance)—control group 1 h Weekly aerobic exercise class for 6 mo Other group received stretching and health lecture intervention	Social learning theory Based on community action and social marketing model	16 African American churches (529 women) Aged ≥40 y; mean, 53.6 y (spiritual), 51.9 y (standard), 53.9 y (self-help group) 56% Completed 1-y follow-up biological measures (67.7% of them completed all measures including physical activity) (region: South)	Physical activity measured by YPAS	Based on self-report, energy expenditure increased for intervention groups (near significant change) No differences between standard and spiritual groups	Strength: church based; limitation: self-report physical activity
Young and Stewart ²⁶ (2006)	Determine whether aerobic exercise intervention would increase daily levels of energy expenditure and decrease prevalence of physical inactivity compared with stretching and health lecture intervention	Prospective, randomized trial 2	SCT 1 h Weekly aerobic exercise class for 6 mo Other group received stretching and health lecture intervention		11 Churches were randomized Aged 25–70 y Intervention group: 123 African American women (5 churches); mean age, 48.2 y Control (intervention group 2)—73 African American women (6 churches); mean age, 48.4 y (region: South)	Level of physical activity—Stanford 7D-PAR, YPAS Cardiorespiratory fitness—peak oxygen uptake	No significant difference between groups for physical activity Sample size too small at follow-up to analyze cardiorespiratory fitness level	Strengths: both intervention groups were grounded in theory, group-based/ church-based program (1 church continued classes after study ended); limitations: low program attendance, low return for follow-up measures, 2 intervention groups (control group was not utilized due to feedback from pastors)