## Campaigns and Informational Approaches to Increase Physical Activity: Classroom-Based Health Education Focused on Providing Information

## Summary Evidence Table

Study	Intervention and comparison	Population	Effect measure	Value used in summary	FU time
Author (Year): Holcomb et al. (1998)  Design Suitability: Moderate  Study Design: time series  Quality of Execution: Fair  Setting: Elementary school	Location: 5 <sup>th</sup> grade classrooms, Webb County, TX  Components: Student workbook integrating health ed (NIDDM) with other subjects; interactive, hands-on activities, exercise section emphasizing obesity prevention. Recommended personal fitness goals  Comparison: Pre vs. Post	Teachers C N=30 from 13 campuses (Grp A); N=9 from six campuses who used JIA, but did not attend training (Grp B); Students C N=835 at FU	Δ1 B Ipost-Ipre/ Ipre  Δ2 B IFU - Ipost/ Ipost  Δ1 and Δ2 measurements made on different sets of people	Outcome Δ1 Δ2 Knowl exer regimens (0-5) 11.4% Exercise self-efficacy (5-20) 8.5% Freq. Ex-related behrs (5-15) 10.4%	$\Delta 1 = 3$ mos $\Delta 2 = 1$ mo
Author (Year): Killen et al. (1989)  Design Suitability: Greatest  Study Design: randomized group trial  Quality of Execution: Fair  Setting: High schools	Location: 4 high schools in 2 N. Calif school districts  Components: 20 classroom sessions of 50 mins, 3x/wk for 7 weeks. Modules focused on PA, nutrition, smoking and delivered special, trained teachers as part of regular PE. Included self-change project, personal change workbook, videos, homework. Student teams competed for prizes.  Comparison: not discussed. Assume standard health ed, PE	Schools C N = 4; I: 2; C: 2; Students C n = 1130 (I = 622, C = 508)	net % Δ from baseline, intervention group - control	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Author (Year): Davis et al. (1995)  Design Suitability: Greatest  Study Design:	Location: Fifth grade classrooms in 11 rural elementary schools in central and NW NM.  Components: Multi-factorial comprehensive, culturally sensitive CVD curriculum - CV system, nutrition,	Schools C N = 11 (9 BIA, 2 public), I: 8, C: 3; Students C n = 1766 (I = 1352, C = 508)	net % Δ from baseline, intervention group - control  Exercise: (Ipost- Cpost)/Cpost	Pop Subgroup Outcome Δ p Navajo girls Gen Knowledge 27.7% 0.0001 Navajo boys Gen Knowledge 31.9% Pueblo girls Gen Knowledge 23.4% 0.0001	

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randomized group trial  Quality of Execution: Fair  Setting: Elementary Schools	exercise, tobacco, obesity, habit change, and social influences. Taught 2 hrs/week for 13 weeks; divided into 5 teaching units by project staff, classroom teachers and tribal elders  Comparison: Comparison group received assessments only during years 1-3; received intervention in last two years at schools request			Pueblo boys Gen Knowledge 25.1%  Navajo % $\Delta$ exercise 31.4%  Pueblo % $\Delta$ exercise 24.1%  All % $\Delta$ exercise 27.3%  H $\chi^2[2] = 35.8$ , p < 0.001	
Author (Year): Walter et al. (1985)  Design Suitability: Greatest  Study Design: randomized group trial  Quality of Execution: Fair  Setting: Elementary schools	Location: 4th grade classrooms in 22 elementary schools in the Bronx, NY  Components: curriculum with units on nutrition, physical fitness and cigarette smoking prevention. PA component encouraged adoption of regular program of endurance exercise. Behavioral skills training. Intervention delivered by trained classroom teachers for 2 hrs/wk over entire school year.  Comparison: Control group did not receive Know Your Body	Schools C N = 22; I: 14; C: 8; Students - N = 2283 eligible; 1563 (68.5%) participated in BL; 1115 (71.3%) completed FU.	net % Δ from baseline, intervention group - control	Outcome         Δ         p           Ponderosity index         0.0%         0.368           Tricep SF         -1.3%         0.787           Recovery indx score (step test)         1.4%         0.744	1 year
Author (Year): Walter et al. (1986)  Design Suitability: Greatest  Study Design: randomized group trial  Quality of Execution: Fair  Setting: Elementary schools	Location: 4th grade classrooms in 22 elementary schools in Westchester County (6 districts)  Components: curriculum with units on nutrition, physical fitness and cigarette smoking prevention. PA component encouraged adoption of regular program of endurance exercise. Behavioral skills training. Intervention delivered by trained classroom teachers for 2 hrs/wk over entire school year.  Comparison: Control group did not receive Know Your Body	Schools C N = 22; I: 11; C: 11; Students - N=1822 eligible; 1525 completed BL measurements; FU observed N=1215, I: 590; C: 625	net % Δ from baseline, intervention group - control	Outcome Δ p Ponderosity index 0.9% 0.115 Tricep SF 6.3% 0.000 Recovery indx score (step test) 0.5% 0.546	1 year

Study	Intervention and comparison	Population	Effect measure	Value used in summary	FU time
Author (Year): Perry et al. (1987)  Design Suitability: Greatest  Quality of Execution: Good  Setting: High School	Location: 10 suburban high schools in the Twin cities Metropolitan area, MN  Components: 10 sessions (Slice of Life) high school curriculum. Included information on tracking and analyzing eating and activity patterns, goal setting, and identification of consequences  Comparison: Usual health science curriculum	9 <sup>th</sup> graders; ages 14-15; largely white, 51.8% female I: n=173, C: n=97	net % $\Delta$ from baseline, intervention group - control outcomes measured by 16 page questionnaire	Outcome         Δ         p           Males         knowledge         -3.4%         NS           reg ex program         -0.7%         NS           intensity of ex         -0.1%         NS           intention to ex         -1.4%         NS           time in ex         -2.2%         NS           healthy ex choices         -1.4%         NS           Females         knowledge         4.0%         p<0.05	3 mo (10 sessions)
Author (Year): Bush et al. (1989)  Design Suitability: Greatest suitability	Location: Elementary and middle school classrooms in Washington, DC.  Components: Know Your Body curriculum taught 45 min twice weekly through the school year. Parents received copies of baseline screening. Teacher training in curriculum was done.  Comparison: Received none of the curriculum or screening results	4th-6th graders. Mean age 10.5, 54% F, 36.4 low SES, 28.6 middle SES, 35% upper SES N=431 I=283 C=148	net% change from baseline, intervention group-control.  Adjusted net change from baseline.  Outcome measured by exam and Harvard Step Test	Outcome         Δ         p           Ponderosity index (kg/m2)         2.12%         0.000           Triceps skinfold (mm)         4.03%         NS           Fitness score         -10.00%         NS           (1=high, 6=low)           Adjusted net change:           PI         0.23 p=.070           TS         0.24 p=.636           FS         -0.38 p=.011	Measurem ent after 2 years of 5 year interventi on.
Author (Year): Petchers et al. (1988)  Design Suitability: Greatest  Quality of Execution: Fair	Location: 3 regions (residential urban, suburban, rural) in Northeast Ohio  Components: Chicago Heart Health Program taught at least three 45 min sessions during school year. Modules for CV system, anatomy/physiology, smoking, nutrition, exercise, risk factors. Teacher training involved.  Comparison: Usual curriculum	6 <sup>th</sup> graders. Mean age 11.1, 47.7% M, 97.3% White N=325 I=178 (54.8%) C=147 (45.2%)	net% change from baseline, intervention- control group	Outcome       Δ       p         Knowledge scale (end school year)       18.21% <.01	1 year F/U
Author (Year): Marcus et al. (1987)	<b>Location:</b> two CA school districts (Los Angeles and Santa Monica-Malibu, CA)	4 <sup>th</sup> and 5 <sup>th</sup> grade 1508 elementary			

Study	Intervention and comparison	Population	Effect measure	Value used in summary	FU time
Design Suitability: Greatest  Study Design: non- randomized group trial  Quality of Execution: Fair  Setting: Elementary school	Components: Know Your Body curriculum, 10 modules (1 addressed physical fitness and exercise). Taught by public health nurse  Comparison: Control group did not receive any intervention	school children, 2 CA school districts, 18 schools			
Author (Year): Dale et al. (2000)	Location: AZ high school  Components: 2 successive classes were enrolled in program. Conceptual PE 1 day/wk (concepts of PA, and fitness, behavioral skills, goal setting, program planning) and CPE gym 1 day/wk (personal program-building skills, methods of performing lifetime PA). 3 days in traditional sports-based PE.  Comparison: students who transferred to Project Active Teens after completing 9th grade PE requirement at another school	Ninth grade  1995 (144 returned): I = 99, C = 39 1996 (208 returned): I = 151, C = 44	net % change from baseline, interv - control strength, net % change baseline and post grad	Outcome         Interv         F/U           mod act 95 men         106.40%         13.13%           mod act 96 men         7.14%         18.33%           vig act 95 men         -20.62%         -13.92%           vig act 96 men         -16.53%         46.41%           str 95 men         26.70%           str 96 men         -7.39%           sed behav 95 men         7.64%         -5.56%           sed behav 96 men         7.39%         9.09%           mod act 95 women         -55.76%         -6.76%           mod act 96 women         60.29%         7.35%           vig act 95 women         -33.41%         -7.74%           vig act 96 women         -35.54%         -9.03%           str 95 women         -16.27%           str 96 women         -22.86%         -6.74%           sed bahav 95 women         53.57%         -55.52%	