

Increasing Physical Activity: Stand-alone Mass Media Campaigns

Summary Evidence Table - Evidence from Updated Review

Study Characteristics	Location, Components/Comparison, Costs (where available)	Study Population Description, Sample Size	Effect Measure	Value Used in Summary	Study Duration														
<p>Author (Year): Bauman (2001)</p> <p>Design Suitability; Design: Greatest; Prospective cohort study</p> <p>Quality of Execution: Fair; 1 limitation</p> <p>Evaluation Setting: Mass media = Community-wide</p>	<p><u>Location:</u> New South Wales (NSW), Australia</p> <p><u>Components:</u> Intervention consisted of TV and print media ads, physician mail-outs, and community-level support programs and strategies.</p> <p><u>Comparison:</u> NSW (pre x post cohort)</p> <p><u>Campaign costs:</u> Campaign conducted in NSW during February and March, 1998; total budget \$700,000</p>	<p>Sampling method: Probability sample</p> <p>Sample size: 1359</p> <p>Analytical sample: 1185</p> <p>Arm: ALL-cohort study</p> <p>Mean Age: 40-60 yrs 58.6% 25-39 yrs 41.4%</p> <p>Female: 57.20%</p> <p>Race/Ethnicity: NR</p> <p>SES: NR</p>	<p>Net % change from pre to post campaign (Intervention)</p>	<table border="0"> <tr> <td><u>Outcome</u></td> <td><u>Net % change</u></td> </tr> <tr> <td colspan="2">All – Cohort Study (n=1185)</td> </tr> <tr> <td colspan="2">5 sessions /150 min over past week -8.01%</td> </tr> <tr> <td colspan="2">Pre = 46.2% Post = 42.5%</td> </tr> <tr> <td colspan="2">One arm (NSW cohort):</td> </tr> <tr> <td colspan="2">Absolute change -3.7 percentage points</td> </tr> <tr> <td>Total hours of PA/wk Baseline vs. Post-campaign</td> <td>-12.81% p≤0.01</td> </tr> </table>	<u>Outcome</u>	<u>Net % change</u>	All – Cohort Study (n=1185)		5 sessions /150 min over past week -8.01%		Pre = 46.2% Post = 42.5%		One arm (NSW cohort):		Absolute change -3.7 percentage points		Total hours of PA/wk Baseline vs. Post-campaign	-12.81% p≤0.01	<p>2 months</p>
<u>Outcome</u>	<u>Net % change</u>																		
All – Cohort Study (n=1185)																			
5 sessions /150 min over past week -8.01%																			
Pre = 46.2% Post = 42.5%																			
One arm (NSW cohort):																			
Absolute change -3.7 percentage points																			
Total hours of PA/wk Baseline vs. Post-campaign	-12.81% p≤0.01																		

Study Characteristics	Location, Components/Comparison, Costs (where available)	Study Population Description, Sample Size	Effect Measure	Value Used in Summary	Study Duration																					
<p>Author (Year): Bauman (2003)</p> <p>Design Suitability; Design: Least; Cross-sectional</p> <p>Quality of Execution: Fair; 2 limitations</p> <p>Evaluation Setting: Mass media = Nationwide</p>	<p><u>Location:</u> New Zealand</p> <p><u>Components:</u> The “Push Play” campaign, a media-led intervention campaign, recommended 30 minutes of daily, moderate-intensity physical activity as fun and easy to achieve for New Zealand adults (18+ yrs).</p> <p><u>Comparison:</u> First year of campaign, 1999, data were compared to final year, 2002, dataassessments only</p> <p><u>Campaign costs:</u> \$3 million over 4 yrs</p>	<p>Sampling method: Probability sample</p> <p>Sample Size: 2182 1999 n = 665 2000 n = 506 2001 n = 504 2002 n = 507</p> <p>Mean Age: 31.2% of participants were aged 34 years and younger in 1999 survey</p> <p>Female: 54.10%</p> <p>Race/Ethnicity(in 1999 survey): European 76.8% Maori/ Pacific Islander (native) 19.5% Other 3.6%</p> <p>SES: NR</p>	<p>Net % change from pre (1999) to post campaign (2002)</p> <p>OR = pre (reference)</p>	<table border="0"> <thead> <tr> <th><u>Outcome</u></th> <th colspan="2"><u>Net % change</u></th> </tr> </thead> <tbody> <tr> <td>Impact of push and play campaign:</td> <td></td> <td></td> </tr> <tr> <td>Active 5 + days per week (%)</td> <td>0.0569</td> <td>5.7%</td> </tr> <tr> <td>Active 5 + days per week (OR)</td> <td>0.03</td> <td>3%</td> </tr> <tr> <td>Adjusted OR</td> <td></td> <td></td> </tr> <tr> <td>1999 1.0 =</td> <td></td> <td></td> </tr> <tr> <td>2002 1.03 (0.81-1.31)</td> <td></td> <td></td> </tr> </tbody> </table>	<u>Outcome</u>	<u>Net % change</u>		Impact of push and play campaign:			Active 5 + days per week (%)	0.0569	5.7%	Active 5 + days per week (OR)	0.03	3%	Adjusted OR			1999 1.0 =			2002 1.03 (0.81-1.31)			4 years
<u>Outcome</u>	<u>Net % change</u>																									
Impact of push and play campaign:																										
Active 5 + days per week (%)	0.0569	5.7%																								
Active 5 + days per week (OR)	0.03	3%																								
Adjusted OR																										
1999 1.0 =																										
2002 1.03 (0.81-1.31)																										

Study Characteristics	Location, Components/Comparison, Costs (where available)	Study Population Description, Sample Size	Effect Measure	Value Used in Summary	Study Duration												
<p>Author (Year): Beaudoin, 2007</p> <p>Design Suitability; Design: Least; Before-After</p> <p>Quality of Execution: Fair; 2 limitations</p> <p>Evaluation Setting: Mass media = Communities</p>	<p><u>Location:</u> New Orleans, LA, USA</p> <p><u>Components:</u> TV and radio messages disseminated during first 3 weeks and first 2 weeks of each month, respectively. Two TV ads produced, 4 radio ads, 26 tail light bus signs, 20 large side panel bus signs, 2 tail light street car signs, and 2 large side panel street car signs. Weekly Gross Rating Points (GRP's) for TV for target group: 293 - 588 (mean 367); weekly GRPs for radio: 0-171 (mean 70). Core intervention exposure (GRP): TV 367, radio 70</p> <p><u>Comparison:</u> Assessment only (2004 and 2005)</p>	<p>Sampling method: Probability sample/random-digit telephone dialing</p> <p>2 cross-sectional surveys</p> <p>Sample size: 3137/in the 2004 survey</p> <p>Analytical sample: 1500/in the 2005 survey</p> <p>Mean Age: approximattly 50 yrs for both surveys</p> <p>Female: approximately 67% for both surveys</p> <p>Race/Ethnicity: approximately White 35.% African-American 59% for both surveys</p> <p>SES: Mixed</p>	<p>Net % change from pre (2004) to post (2005)</p>	<table border="0"> <tr> <td><u>Outcome</u></td> <td><u>Net % change</u></td> </tr> <tr> <td>PA Behavior</td> <td></td> </tr> <tr> <td>Leisure time walking in usual week (% active)</td> <td>4.69%</td> </tr> <tr> <td>(2004) Pre = 64% (2005) Post = 67%</td> <td></td> </tr> <tr> <td>Utilitarian walking (% active)</td> <td>-1.96%</td> </tr> <tr> <td>(2004) Pre = 51% (2005) Post = 50%</td> <td></td> </tr> </table>	<u>Outcome</u>	<u>Net % change</u>	PA Behavior		Leisure time walking in usual week (% active)	4.69%	(2004) Pre = 64% (2005) Post = 67%		Utilitarian walking (% active)	-1.96%	(2004) Pre = 51% (2005) Post = 50%		<p>5 months</p>
<u>Outcome</u>	<u>Net % change</u>																
PA Behavior																	
Leisure time walking in usual week (% active)	4.69%																
(2004) Pre = 64% (2005) Post = 67%																	
Utilitarian walking (% active)	-1.96%																
(2004) Pre = 51% (2005) Post = 50%																	

Study Characteristics	Location, Components/Comparison, Costs (where available)	Study Population Description, Sample Size	Effect Measure	Value Used in Summary	Study Duration										
<p>Author (Year): Berkowitz (2008)</p> <p>Design Suitability; Design: Greatest; Non-randomized trial</p> <p>Quality of Execution: Good; 1 limitation</p> <p>Evaluation Setting: Mass media = Communities</p>	<p><u>Location:</u> Los Angeles, CA; Houston, TX; Miami, FL; Columbus, OH; Greenville, SC; Green Bay, WI, USA</p> <p><u>Components:</u> VERB Campaign - Tweens (aged 9-13 yrs) living in selected communities received additional advertising and marketing activities compared to a group of tweens in communities that received standard VERB advertising. During first year of VERB, augmented dose in six high-dose communities delivered between October 2002 and June 2003, with three components: (1) additional paid advertising, (2) events and promotional activities, and (3) partnerships with local groups and organizations.</p> <p><u>Comparison:</u> High-dose campaign exposure vs. national campaign exposure (VERB standard) – 1-year campaign measurement (2003-2004)</p>	<p>Sampling method: Probability sample</p> <p>Sample size = 2771</p> <p>Year 1 - Six High-Dose Communities, n= 2771 Year 2 - Four High-Dose Communities, n=1344</p> <p>Age Range: 9-13 yrs</p> <p>Female: 49.00%</p> <p>Race/Ethnicity: White 56% African-American 12% Hispanic 26% Other 6%</p> <p>SES: Mixed</p>	<p>Net % change from post campaign</p> <p>2004 cross-sectional data with comparison group</p>	<table border="0"> <tr> <td><u>Outcome</u></td> <td><u>Net % change</u></td> </tr> <tr> <td>Physically Active Yesterday</td> <td>10.31% p<0.05</td> </tr> <tr> <td>High-dose communities - (2004)</td> <td>Year 2 = 61.0%</td> </tr> <tr> <td>Nat'l comparison group – (2004)</td> <td>Year 2 = 55.3%</td> </tr> <tr> <td colspan="2">Absolute difference = 5.7 percentage points</td> </tr> </table>	<u>Outcome</u>	<u>Net % change</u>	Physically Active Yesterday	10.31% p<0.05	High-dose communities - (2004)	Year 2 = 61.0%	Nat'l comparison group – (2004)	Year 2 = 55.3%	Absolute difference = 5.7 percentage points		<p>24 months</p>
<u>Outcome</u>	<u>Net % change</u>														
Physically Active Yesterday	10.31% p<0.05														
High-dose communities - (2004)	Year 2 = 61.0%														
Nat'l comparison group – (2004)	Year 2 = 55.3%														
Absolute difference = 5.7 percentage points															

Study Characteristics	Location, Components/Comparison, Costs (where available)	Study Population Description, Sample Size	Effect Measure	Value Used in Summary	Study Duration								
<p>Author (Year): Booth (1992)</p> <p>Design Suitability; Design: Least; Before-After</p> <p>Quality of Execution: Fair; 2 limitations</p> <p>Evaluation Setting: Mass media = Nationwide</p>	<p><u>Location:</u> Australia</p> <p><u>Components:</u> National Heart Foundation of Australia promoted "Heart Week 1990." Provided public education on role of physical activity, particularly walking, in prevention of cardiovascular disease, using paid TV advertisements, pre-recorded public service announcements for radio, distribution of professional papers on relationship between exercise and heart disease, posters, leaflets, stickers, T-shirts, sweat shirts, publicity tours by experts in physical activity, and special scripting of 2 nationally televised soap operas. Each state capital city organized a media launch with local personalities and local events.</p> <p><u>Comparison:</u> Assessment only (pre-campaign and post-campaign survey)</p>	<p>Sampling method: Probability sample</p> <p>Sample size = 4900</p> <p>Independent samples from Australian adolescents and adults</p> <p>Pre Campaign n= 2426</p> <p>Post Campaign n= 2474</p>	<p>Net % change from baseline to post campaign</p>	<table border="0"> <tr> <td><u>Outcome</u></td> <td><u>Net % change</u></td> </tr> <tr> <td>ALL</td> <td></td> </tr> <tr> <td>Any walking in previous 2 wks</td> <td>5.42 % p<0.01</td> </tr> <tr> <td>Pre = 70.1% Post = 73.9%</td> <td></td> </tr> </table>	<u>Outcome</u>	<u>Net % change</u>	ALL		Any walking in previous 2 wks	5.42 % p<0.01	Pre = 70.1% Post = 73.9%		<p>1 week</p>
<u>Outcome</u>	<u>Net % change</u>												
ALL													
Any walking in previous 2 wks	5.42 % p<0.01												
Pre = 70.1% Post = 73.9%													

Study Characteristics	Location, Components/Comparison, Costs (where available)	Study Population Description, Sample Size	Effect Measure	Value Used in Summary	Study Duration														
<p>Author (Year): Craig (2007)</p> <p>Design Suitability; Design: Least; Cross-sectional</p> <p>Quality of Execution: Good; 1 limitation</p> <p>Evaluation Setting: Mass media = Nationwide</p>	<p><u>Location:</u> Canada</p> <p><u>Components:</u> Canada On the Move (COTM) - a cooperative campaign, promoting pedometers and walking, between Canadian Institutes of Health Research (CIHR) and Kellogg Canada. Press releases and mass media advertisements promoted walking and pedometer use. Kellogg distributed pedometers in cereal boxes, with educational message on cereal boxes directing consumers to CIHR website. COTM linked people to CIHR website to collect info on pedometer steps.</p> <p><u>Comparison:</u> Assessment only (post-campaign survey)</p>	<p>Sampling method: Probability sample</p> <p>Sample size = 9755</p> <p>Arm: COTM (Aware) N = 3045 Age range: 18-65+ yrs</p> <p>SES: NR Arm: COTM (Not Aware) N = 6710 Age range: 18-65+ yrs SES: NR</p>	<p>Net % change from post campaign</p>	<table border="0"> <thead> <tr> <th data-bbox="1430 313 1619 337"><u>Outcome</u></th> <th data-bbox="1724 313 1898 337"><u>Net % change</u></th> </tr> </thead> <tbody> <tr> <td data-bbox="1430 345 1478 370">ALL</td> <td></td> </tr> <tr> <td data-bbox="1430 402 1780 459">Walking for at least 1 hr/day in previous week</td> <td data-bbox="1822 427 1898 451">8.0%</td> </tr> <tr> <td data-bbox="1430 459 1619 483">Aware = 32.4 %</td> <td data-bbox="1675 459 1898 483">Not aware = 30%</td> </tr> <tr> <td data-bbox="1430 516 1843 605">Walking for at least 1 hr/day in previous week "add 2000 steps" message</td> <td data-bbox="1843 573 1898 597">12%</td> </tr> <tr> <td data-bbox="1430 638 1801 719">Walking for at least 1 hr/day in previous week "donate your steps to health" message</td> <td data-bbox="1843 686 1898 711">23%</td> </tr> <tr> <td data-bbox="1430 751 1808 833">Walking for at least 1 hr/day in previous week - pedometers user</td> <td data-bbox="1843 800 1898 824">14%</td> </tr> </tbody> </table>	<u>Outcome</u>	<u>Net % change</u>	ALL		Walking for at least 1 hr/day in previous week	8.0%	Aware = 32.4 %	Not aware = 30%	Walking for at least 1 hr/day in previous week "add 2000 steps" message	12%	Walking for at least 1 hr/day in previous week "donate your steps to health" message	23%	Walking for at least 1 hr/day in previous week - pedometers user	14%	<p>Core intervention: 6 months</p> <p>Total time: 12 months between pre- and final assessments</p>
<u>Outcome</u>	<u>Net % change</u>																		
ALL																			
Walking for at least 1 hr/day in previous week	8.0%																		
Aware = 32.4 %	Not aware = 30%																		
Walking for at least 1 hr/day in previous week "add 2000 steps" message	12%																		
Walking for at least 1 hr/day in previous week "donate your steps to health" message	23%																		
Walking for at least 1 hr/day in previous week - pedometers user	14%																		

Study Characteristics	Location, Components/Comparison, Costs (where available)	Study Population Description, Sample Size	Effect Measure	Value Used in Summary	Study Duration																				
<p>Author (Year): Hillsdon (2001)</p> <p>Design Suitability; Design: Greatest; Prospective cohort study</p> <p>Quality of Execution: Fair; 3 limitations</p> <p>Evaluation Setting: Mass media = Nationwide</p>	<p><u>Location:</u> England</p> <p><u>Components:</u> The ACTIVE for LIFE campaign specifically aimed to increase knowledge and acceptability of new recommendation that “adults should aim to take part in at least 5 sessions of 30 minutes of moderate intensity physical activity per week,” and to contribute to increased participation at this level. Campaign used social marketing tools (including advertising, public relations, and publicity) and resources (including posters, leaflets, postcards, two websites, and other promotional items) developed to promote main campaign message to specific priority groups.</p> <p><u>Comparison:</u> Post campaign measurement only</p>	<p>Sampling method: Probability sample</p> <p>Sample size: 6711</p> <p>Analytic sample: 3189</p> <p>Arm: Mass media</p> <p>Age range: 16-24yrs; 17.8% 25-34yrs; 19.6% 35-44yrs; 19.4% 45-54yrs; 17.1% 55-64yrs; 18.6% 65+ yrs: 7.5%</p> <p>Female: 57.50%</p> <p>Race/Ethnicity: White 96.60% Other 3.40%</p> <p>SES: Mixed</p>	<p>Net % change from baseline to post campaign</p>	<table border="0"> <thead> <tr> <th><u>Outcome</u></th> <th><u>Net % change</u></th> </tr> </thead> <tbody> <tr> <td>ALL</td> <td></td> </tr> <tr> <td>Meeting recommended guidelines for Moderate/Vigorous PA (%)</td> <td>-31.21%</td> </tr> <tr> <td>Pre = Wave 1 = 31.4%</td> <td></td> </tr> <tr> <td>Wave 2 = 31.6%</td> <td></td> </tr> <tr> <td>Post = Wave 3 = 21.6%</td> <td></td> </tr> <tr> <td>Lightly Active (%)</td> <td>6.47%</td> </tr> <tr> <td>Moderately Active (%)</td> <td>-5.21%</td> </tr> <tr> <td>Sedentary (%)</td> <td>28.45%</td> </tr> <tr> <td>Vigorously Active (%)</td> <td>-72.13%</td> </tr> </tbody> </table>	<u>Outcome</u>	<u>Net % change</u>	ALL		Meeting recommended guidelines for Moderate/Vigorous PA (%)	-31.21%	Pre = Wave 1 = 31.4%		Wave 2 = 31.6%		Post = Wave 3 = 21.6%		Lightly Active (%)	6.47%	Moderately Active (%)	-5.21%	Sedentary (%)	28.45%	Vigorously Active (%)	-72.13%	<p>2-year results reported</p> <p>(Total campaign 3 years)</p>
<u>Outcome</u>	<u>Net % change</u>																								
ALL																									
Meeting recommended guidelines for Moderate/Vigorous PA (%)	-31.21%																								
Pre = Wave 1 = 31.4%																									
Wave 2 = 31.6%																									
Post = Wave 3 = 21.6%																									
Lightly Active (%)	6.47%																								
Moderately Active (%)	-5.21%																								
Sedentary (%)	28.45%																								
Vigorously Active (%)	-72.13%																								

Study Characteristics	Location, Components/Comparison, Costs (where available)	Study Population Description, Sample Size	Effect Measure	Value Used in Summary	Study Duration
<p>Author (Year): Huhman (2010)</p> <p>Design Suitability; Design: Greatest; Prospective cohort study</p> <p>Quality of Execution: Good; 0 limitations</p> <p>Evaluation Setting: Mass media = Nationwide</p>	<p><u>Location:</u> USA</p> <p><u>Components:</u> VERB - used social marketing approach through mass media (TV, magazines, print), school, and community promotions (classroom-based activities, grants), the Internet (website), and partnerships with national organizations (e.g., Girl Scouts) and local communities between June 2002 and September 2006</p> <p><u>Comparison:</u> Post campaign measurement (no campaign exposure vs. exposed every day)</p> <p><u>Campaign costs:</u> \$339,000</p>	<p>Sampling method: Probability sample</p> <p>Sample size: 3114</p> <p>Arm: Longitudinal/Cohort 1 Adolescents aged 9-13 yrs in 2002 were 13-17 yrs in 2006</p> <p>Analytical sample= 1623</p> <p>Mean Age: NR % Female: NR</p> <p>Race/Ethnicity: NR</p> <p>SES: NR</p>	<p>Net % change from post campaign (Most exposed x not exposed)</p>	<p><u>Outcome</u> <u>Net % change</u></p> <p>Cohort 1 – No campaign exposure x exposed every day (9-13 yrs (2002)-13 –17 yrs (2006)</p> <p>Weekly mean sessions. of free-time PA (n of sessions) 142.57%</p> <p>Engaging in organized sports 31.62%</p> <p>% active in previous day activity (Most exposed x Not exposed) No campaign exposure=47.6 (95% CI=41.8, 53.5) Exposed every day = 67.8 (95% CI = 47.8, 87.8) 42.44%</p>	<p>4 years</p>

Study Characteristics	Location, Components/Comparison, Costs (where available)	Study Population Description, Sample Size	Effect Measure	Value Used in Summary	Study Duration														
<p>Author (Year): Jason (1991)</p> <p>Design Suitability; Design: Greatest; Randomized trial</p> <p>Quality of Execution: Fair; 3 limitations</p> <p>Evaluation Setting: Mass media = Community-wide</p>	<p><u>Location:</u> Chicago, IL, USA</p> <p><u>Components:</u> "Support group" members were assigned a buddy, encouraged to attend a weight-loss self-help group, given manuals, and encouraged to watch TV program. Fifteen 2- to 4-minute TV broadcasts aired during the 12 noon and 9 pm news. TV news provided step-by-step instructions on how to lose weight and improve nutrition. Those randomized to "support group" (1) were assigned a buddy who helped them to find self-help groups to join, (2) were telephoned once a week, and (3) received a manual.</p> <p><u>Comparison:</u> Social support vs. no support group</p>	<p>Sampling method: Probability sample</p> <p>Sample size: 89 Analytical sample: 74</p> <p>Arm: no support group Mean Age: NR Female: 81.00% Race/Ethnicity: Hispanic 2.70% Black or African American 10.80% White 83.80% SES: Mixed</p> <p>Arm: support group Mean Age: NR Female: 76.00% Race/Ethnicity: Black or African American 13.50% White 86.50% SES: Mixed</p>	<p>Net % change from pre to post Campaign (support x no support)</p>	<table border="0"> <thead> <tr> <th data-bbox="1430 315 1640 337"><u>Outcome</u></th> <th data-bbox="1717 315 1892 337"><u>Net % change</u></th> </tr> </thead> <tbody> <tr> <td colspan="2" data-bbox="1430 342 1892 365">Immediate post test</td> </tr> <tr> <td data-bbox="1430 402 1717 570">Aerobic activity (min in 3-day period) Support Pre = 13.63 Immediate Post = 36.60 Non Support Pre = 15.39 Immediate Post = 30.68</td> <td data-bbox="1780 428 1881 451">69.18%</td> </tr> <tr> <td data-bbox="1430 607 1717 688">Non-aerobic activity (min in 3-day period) Weight self-reported (lbs)</td> <td data-bbox="1787 633 1881 656">16.21% 1.46%</td> </tr> <tr> <td colspan="2" data-bbox="1430 725 1892 748">Follow-up</td> </tr> <tr> <td data-bbox="1430 753 1717 889">Aerobic activity (min in 3-day period) Non aerobic activity (min in 3-day period) Weight self-reported (lbs)</td> <td data-bbox="1787 779 1881 889">11.34% 43.09% -0.79%</td> </tr> <tr> <td colspan="2" data-bbox="1430 927 1892 1008">Data not plotted because physical activity was secondary outcome as part of weight-loss program.</td> </tr> </tbody> </table>	<u>Outcome</u>	<u>Net % change</u>	Immediate post test		Aerobic activity (min in 3-day period) Support Pre = 13.63 Immediate Post = 36.60 Non Support Pre = 15.39 Immediate Post = 30.68	69.18%	Non-aerobic activity (min in 3-day period) Weight self-reported (lbs)	16.21% 1.46%	Follow-up		Aerobic activity (min in 3-day period) Non aerobic activity (min in 3-day period) Weight self-reported (lbs)	11.34% 43.09% -0.79%	Data not plotted because physical activity was secondary outcome as part of weight-loss program.		<p>3 weeks</p>
<u>Outcome</u>	<u>Net % change</u>																		
Immediate post test																			
Aerobic activity (min in 3-day period) Support Pre = 13.63 Immediate Post = 36.60 Non Support Pre = 15.39 Immediate Post = 30.68	69.18%																		
Non-aerobic activity (min in 3-day period) Weight self-reported (lbs)	16.21% 1.46%																		
Follow-up																			
Aerobic activity (min in 3-day period) Non aerobic activity (min in 3-day period) Weight self-reported (lbs)	11.34% 43.09% -0.79%																		
Data not plotted because physical activity was secondary outcome as part of weight-loss program.																			

Study Characteristics	Location, Components/Comparison, Costs (where available)	Study Population Description, Sample Size	Effect Measure	Value Used in Summary	Study Duration														
<p>Author (Year): John-Leader (2008)</p> <p>Design Suitability; Design: Least; Cross-sectional</p> <p>Quality of Execution: Fair; 2 limitations</p> <p>Evaluation Setting: Mass media = Community-wide</p>	<p><u>Location:</u> Rural community in New South Wales (NSW), Australia</p> <p><u>Components:</u> Multimedia campaign to reduce falls among seniors by promoting physical activity: "To Be Young at Heart - Stay Active, Stay Independent" (SASI). Media highlighted benefits of participating in physical activity and being healthy, active, and independent members of community. Media used images of older adults engaged in physical activity (e.g., tai chi, swimming, walking, gardening). Multimedia messages included newspaper ads, posters, 'bus back' transit ads, website, and a free-call phone number. Media coverage during launch of campaign included 131 TV ads and half-page, full-color weekly ads in 5 regional newspapers. 3000 posters distributed in relevant venues.</p> <p><u>Comparison:</u> Post campaign measurement (intensive media x partial media intensity)</p> <p><u>Campaign costs:</u> \$ 191,000 (includes direct costs, staff time, sponsorship, and in-kind support). Excluding staff time, actual expenditures of \$42,000 represent 22% of total cost and generated almost double this amount in sponsorship and in-kind support from volunteer cast and crew (\$82,000).</p>	<p>Sampling method: Probability sample</p> <p>Sample size: 639</p> <p>Arm: Multimedia Mean Age: Most (91%) aged 60+ yrs and over half (57%) aged 70+ yrs. Female: 63.00% Race/Ethnicity: SES: NR</p> <p>Intensive media: n = 465</p> <p>Partial media: n = 174</p> <p>Specific age group = Seniors</p>	<p>Net % change from post campaign (intensity x partial media)</p>	<table border="0"> <tr> <td><u>Outcome</u></td> <td><u>Net % change</u></td> </tr> <tr> <td>PA Behavior and Attitudes (Intensive recall x partial recall)</td> <td></td> </tr> <tr> <td>Have become more active</td> <td>-2.25%</td> </tr> <tr> <td>Have sought PA information</td> <td>-18.00%</td> </tr> <tr> <td>Intend to become more active</td> <td>-9.97%</td> </tr> <tr> <td>Overall (Intensive and Partial)</td> <td></td> </tr> <tr> <td>22% of people aware of the campaign reported becoming more active</td> <td></td> </tr> </table>	<u>Outcome</u>	<u>Net % change</u>	PA Behavior and Attitudes (Intensive recall x partial recall)		Have become more active	-2.25%	Have sought PA information	-18.00%	Intend to become more active	-9.97%	Overall (Intensive and Partial)		22% of people aware of the campaign reported becoming more active		<p>18 months</p>
<u>Outcome</u>	<u>Net % change</u>																		
PA Behavior and Attitudes (Intensive recall x partial recall)																			
Have become more active	-2.25%																		
Have sought PA information	-18.00%																		
Intend to become more active	-9.97%																		
Overall (Intensive and Partial)																			
22% of people aware of the campaign reported becoming more active																			

Study Characteristics	Location, Components/Comparison, Costs (where available)	Study Population Description, Sample Size	Effect Measure	Value Used in Summary	Study Duration
<p>Author (Year): Merom (2005)</p> <p>Design Suitability; Design: Greatest; Prospective cohort study</p> <p>Quality of Execution: Fair; 2 limitations</p> <p>Evaluation Setting: Mass media = Community-wide</p>	<p><u>Location:</u> New South Wales (NSW) and other metropolitan areas, Australia</p> <p><u>Components:</u> Part of promotion of a "Walk to Work Day" campaign to encourage more walking, reduce car use, and increase the use of public transport. Media and public relations campaign consisted of newspaper advertisements and community service announcements through three major free-to-air TV channels and radio stations in Australia. Activities included ads featuring the Prime Minister as a role model distributing promotional goods (posters, T-shirts, hats, stickers with campaign logo) to interested councils and involving local councils in promoting community awareness and organizing local activities (e.g., kiosks on much-used routes, "Walk with the City Mayor" events or distributing campaign stickers during heavy traffic before the event). Government departments promoted event among employees via organizational intranet networks and posters displayed in workplaces.</p> <p><u>Comparison:</u> Post-campaign measurement</p>	<p>Sampling method: Probability sample</p> <p>Sample Size: 1312 Analytic sample: 1086</p> <p>Arm: mass-media Age range: ages 18-65 yrs; 40% were less than 40 yrs old Female: 60.00% Race/Ethnicity: NR SES: Mixed</p>	<p>Net % change from post campaign</p>	<p><u>Outcome</u> <u>Net % change</u></p> <p>Entire cohort All</p> <p>Walking for exercise, recreation, to get to places (minutes) 4.38% N = 1086 Pre Campaign = 160 minutes Post Campaign = 167 minutes</p>	<p>3 weeks</p>

Study Characteristics	Location, Components/Comparison, Costs (where available)	Study Population Description, Sample Size	Effect Measure	Value Used in Summary	Study Duration																														
<p>Author (Year): Meyer (1980)</p> <p>Design Suitability; Design: Greatest; Non-randomized trial</p> <p>Quality of Execution: Fair; 3 limitations</p> <p>Evaluation Setting: Mass media = Community-wide</p>	<p><u>Location:</u> Watsonville, Gilroy, and Tracy, CA, USA</p> <p><u>Components:</u> Randomly selected residents of Watsonville and Gilroy received a media-only intervention designed to reduce risk of heart disease by increasing knowledge of risk factors including dietary, smoking, and exercise behaviors and knowledge and skills necessary to accomplish behavior changes. Types of media used included radio, TV, newspaper, billboards, bus posters, and printed material sent by direct mail to people in random samples selected for the surveys. Two thirds of those selected in Watsonville were also assigned to a 3-month intensive face-to-face instruction intervention in group sessions or home visits. Treatment procedures included self-monitoring of the target behavior, modeling and guided practice of alternate behavior, charting of progress (token reward system), and fading of instructional and therapist reinforcement to insure self-maintenance of new behaviors. Tracy residents received no intervention.</p> <p><u>Comparison:</u> Watsonville and Gilroy (Intervention) x Tracy (Control). (1) Media only (no counseling; (2) assessment only (no counseling or media)</p>	<p>Sampling method: Probability sample</p> <p>Sample size: 381 Arm: Tracy control Mean Age: 47.8 yrs Female: 45.5% Race/Ethnicity: NR SES: Mixed</p> <p>Arm: Gilroy media only Mean Age: 46.4 yrs Female: 42.4% Race/Ethnicity: NR SES: Mixed</p> <p>Arm: Watsonville media only Mean Age: 48.9 yrs Female: 43.3% Race/Ethnicity: NR SES: Mixed</p> <p>Subjects for analysis: Watsonville Media (n=37) plus Gilroy media (n=85) versus Tracy control (n=90)</p>	<p>Net % change from post campaign (Intervention x control)</p>	<table border="0"> <thead> <tr> <th data-bbox="1428 308 1638 341"><u>Outcome</u></th> <th data-bbox="1722 308 1911 341"><u>Net % change</u></th> </tr> </thead> <tbody> <tr> <td colspan="2">Watsonville + Gilroy media only vs. Tracy control:</td> </tr> <tr> <td>Blood pressure (Diastolic-mmHg)</td> <td>3.59%</td> </tr> <tr> <td>Blood pressure (Systolic-mmHg)</td> <td>-6.07 % p<0.05</td> </tr> <tr> <td>Other cardiovascular risk (score)</td> <td>138.68%</td> </tr> <tr> <td>Total cholesterol (mg/dL)</td> <td>-3.36%</td> </tr> <tr> <td>Plasma triglyceride (mg/dL)</td> <td>-4.38 %</td> </tr> <tr> <td>Knowledge score % p<0.05</td> <td>25.49</td> </tr> <tr> <td>Leisure activity metabolic equiv (score)</td> <td>8.65%</td> </tr> <tr> <td colspan="2">Watsonville + Gilroy media only combined vs. Tracy control:</td> </tr> <tr> <td>Leisure activity metabolic equiv (score)</td> <td>2.69%</td> </tr> <tr> <td colspan="2">Watsonville + Gilroy media only combined:</td> </tr> <tr> <td colspan="2">Pre campaign = 24.5 Post campaign = 22.03</td> </tr> <tr> <td colspan="2">Tracy control: Pre campaign = 19.1 Post campaign = 16.66</td> </tr> <tr> <td colspan="2">Absolute difference (intervention arm) = - 2.47 percentage points</td> </tr> </tbody> </table>	<u>Outcome</u>	<u>Net % change</u>	Watsonville + Gilroy media only vs. Tracy control:		Blood pressure (Diastolic-mmHg)	3.59%	Blood pressure (Systolic-mmHg)	-6.07 % p<0.05	Other cardiovascular risk (score)	138.68%	Total cholesterol (mg/dL)	-3.36%	Plasma triglyceride (mg/dL)	-4.38 %	Knowledge score % p<0.05	25.49	Leisure activity metabolic equiv (score)	8.65%	Watsonville + Gilroy media only combined vs. Tracy control:		Leisure activity metabolic equiv (score)	2.69%	Watsonville + Gilroy media only combined:		Pre campaign = 24.5 Post campaign = 22.03		Tracy control: Pre campaign = 19.1 Post campaign = 16.66		Absolute difference (intervention arm) = - 2.47 percentage points		<p>2 years core campaign with 1 additional year for maintenance activities</p>
<u>Outcome</u>	<u>Net % change</u>																																		
Watsonville + Gilroy media only vs. Tracy control:																																			
Blood pressure (Diastolic-mmHg)	3.59%																																		
Blood pressure (Systolic-mmHg)	-6.07 % p<0.05																																		
Other cardiovascular risk (score)	138.68%																																		
Total cholesterol (mg/dL)	-3.36%																																		
Plasma triglyceride (mg/dL)	-4.38 %																																		
Knowledge score % p<0.05	25.49																																		
Leisure activity metabolic equiv (score)	8.65%																																		
Watsonville + Gilroy media only combined vs. Tracy control:																																			
Leisure activity metabolic equiv (score)	2.69%																																		
Watsonville + Gilroy media only combined:																																			
Pre campaign = 24.5 Post campaign = 22.03																																			
Tracy control: Pre campaign = 19.1 Post campaign = 16.66																																			
Absolute difference (intervention arm) = - 2.47 percentage points																																			

Study Characteristics	Location, Components/Comparison, Costs (where available)	Study Population Description, Sample Size	Effect Measure	Value Used in Summary	Study Duration																												
<p>Author (Year): Miles (2001)</p> <p>Design Suitability; Design: Greatest; Prospective cohort study</p> <p>Quality of Execution: Fair; 4 limitations</p> <p>Evaluation Setting: Mass media = Nationwide</p>	<p><u>Location:</u> England</p> <p><u>Components:</u> A mass media campaign launched in England targeting rising obesity levels by educating and encouraging people to eat healthy and become more active. The Fighting Fat, Fighting Fit campaign (FFFF) was implemented over a 7-week period during daytime programming of BBC TV and radio. The primary message was that weight problems are best tackled with small but permanent changes to diet and exercise, rather than short-term dieting to achieve rapid weight loss. Campaign message supplemented by a booklet that offered practical advice about lifestyle changes.</p> <p><u>Comparison:</u> Assessment only (pre and post intervention)</p>	<p>Sampling method: Probability sample</p> <p>Sample size: 3661 Analytic sample: 2112</p> <p>Arm: Full sample FFFF campaign</p> <p>Age as % (n): Up to 24: 6.0% (219) 25-34: 25.0% (917) 35-49: 36.3% (1328) 50-64: 25.6% (935) 65+: 7.0% (258)</p> <p>Female: 86.6% Race/Ethnicity: NR SES: NR</p>		<table border="0"> <thead> <tr> <th><u>Outcome</u></th> <th><u>Net % change</u></th> </tr> </thead> <tbody> <tr> <td>ALL</td> <td></td> </tr> <tr> <td>Classified as active</td> <td></td> </tr> <tr> <td>Baseline = 29.9%</td> <td></td> </tr> <tr> <td>Post Campaign = 46.8% p<0.001</td> <td></td> </tr> <tr> <td>Relative net change = 56.62%</td> <td></td> </tr> <tr> <td>Absolute difference = 16.9 percentage points</td> <td></td> </tr> <tr> <td>BMI Self-reported</td> <td>-2.80%</td> </tr> <tr> <td>Normal BMI category</td> <td>48.28%</td> </tr> <tr> <td>Obese BMI category</td> <td>-10.38%</td> </tr> <tr> <td>Overweight BMI category</td> <td>5.37%</td> </tr> <tr> <td>Satisfaction with weight</td> <td>20.53%</td> </tr> <tr> <td>Weight Self-reported</td> <td>-2.80%</td> </tr> <tr> <td>All changes statistically significant</td> <td>p<0.001</td> </tr> </tbody> </table>	<u>Outcome</u>	<u>Net % change</u>	ALL		Classified as active		Baseline = 29.9%		Post Campaign = 46.8% p<0.001		Relative net change = 56.62%		Absolute difference = 16.9 percentage points		BMI Self-reported	-2.80%	Normal BMI category	48.28%	Obese BMI category	-10.38%	Overweight BMI category	5.37%	Satisfaction with weight	20.53%	Weight Self-reported	-2.80%	All changes statistically significant	p<0.001	6 months
<u>Outcome</u>	<u>Net % change</u>																																
ALL																																	
Classified as active																																	
Baseline = 29.9%																																	
Post Campaign = 46.8% p<0.001																																	
Relative net change = 56.62%																																	
Absolute difference = 16.9 percentage points																																	
BMI Self-reported	-2.80%																																
Normal BMI category	48.28%																																
Obese BMI category	-10.38%																																
Overweight BMI category	5.37%																																
Satisfaction with weight	20.53%																																
Weight Self-reported	-2.80%																																
All changes statistically significant	p<0.001																																
<p>Author (Year): Peterson (2008)</p> <p>Design Suitability; Design: Least; Cross-sectional</p> <p>Quality of Execution: Fair; 3 limitations</p> <p>Evaluation Setting: Mass media = Statewide</p>	<p><u>Location:</u> Delaware, USA</p> <p><u>Components:</u> "Get Up and Do Something" media campaign targeting youth and adolescents. Program advertisements were used on 2 TV ads and 1 billboard design located in five high-visibility areas spanning the state.</p> <p><u>Comparison:</u> Post campaign measurement</p>	<p>Sampling method: Probability sample</p> <p>Sample Size: 4882 Analytic sample: 2895</p> <p>Arm: Mass media Mean Age: 12-17 yrs Race/Ethnicity: NR</p>	Net % change from pre to post campaign	<table border="0"> <thead> <tr> <th><u>Outcome</u></th> <th><u>Net % change</u></th> </tr> </thead> <tbody> <tr> <td>Exposed to the campaign</td> <td></td> </tr> <tr> <td>Of 2895 people, 34.58% became more active</td> <td></td> </tr> </tbody> </table>	<u>Outcome</u>	<u>Net % change</u>	Exposed to the campaign		Of 2895 people, 34.58% became more active		6 weeks																						
<u>Outcome</u>	<u>Net % change</u>																																
Exposed to the campaign																																	
Of 2895 people, 34.58% became more active																																	

Study Characteristics	Location, Components/Comparison, Costs (where available)	Study Population Description, Sample Size	Effect Measure	Value Used in Summary	Study Duration																		
<p>Author (Year): Price (2008)</p> <p>Design Suitability; Design: Least; Cross-sectional</p> <p>Quality of Execution: Fair; 2 limitations</p> <p>Evaluation Setting: Mass media = Nationwide</p>	<p><u>Location:</u> USA</p> <p><u>Components:</u> Overall goal was to increase parents' awareness of importance of tweens' physical activity and encourage positive attitudes and supportive behaviors for facilitating tweens' physical activity. Print messages placed in 21 national women's magazines, 2 TV PSAs directed at parents; included media efforts directed at ethnic-parent markets; in-language television advertising for Hispanic or Latino parents (Spanish speakers) and Asian-American parents (Korean, Mandarin, Cantonese, and Vietnamese speakers).</p> <p><u>Comparison:</u> Assessment only (Parents not aware x total group)</p>	<p>Sampling method: No description</p> <p>Sample size: 3084 Analytic sample: 1946 Samples Aware = 1077 Not aware = 869</p> <p>Arm: VERB mass media campaign Age: NR % Female: NR Race/Ethnicity: Hispanic 11.30% African American 9.50% White 73.90% Other Race 5.30%</p> <p>SES: Mixed</p>	<p>Net % change from post campaign (Parents aware x not aware)</p>	<table border="0"> <tr> <td><u>Outcome</u></td> <td><u>Net % change</u></td> </tr> <tr> <td>PA Behavior</td> <td></td> </tr> <tr> <td>Frequency of PA (# of days in 7 days that parent and child were active together)</td> <td></td> </tr> <tr> <td>Aware = 1.75 ± 1.69</td> <td></td> </tr> <tr> <td>Not aware = 1.48 ± 1.62 days</td> <td></td> </tr> <tr> <td>18.24% p<0.01</td> <td></td> </tr> <tr> <td>Total (Aware + Not aware) = 1.63 ±1.67 days</td> <td></td> </tr> <tr> <td>Frequency that Parent attends sporting events - behavioral support</td> <td>0.48%</td> </tr> <tr> <td>Frequency that Parents transport child to physical activity - behavioral support</td> <td>1.19 %</td> </tr> </table>	<u>Outcome</u>	<u>Net % change</u>	PA Behavior		Frequency of PA (# of days in 7 days that parent and child were active together)		Aware = 1.75 ± 1.69		Not aware = 1.48 ± 1.62 days		18.24% p<0.01		Total (Aware + Not aware) = 1.63 ±1.67 days		Frequency that Parent attends sporting events - behavioral support	0.48%	Frequency that Parents transport child to physical activity - behavioral support	1.19 %	<p>48 months</p>
<u>Outcome</u>	<u>Net % change</u>																						
PA Behavior																							
Frequency of PA (# of days in 7 days that parent and child were active together)																							
Aware = 1.75 ± 1.69																							
Not aware = 1.48 ± 1.62 days																							
18.24% p<0.01																							
Total (Aware + Not aware) = 1.63 ±1.67 days																							
Frequency that Parent attends sporting events - behavioral support	0.48%																						
Frequency that Parents transport child to physical activity - behavioral support	1.19 %																						

Study Characteristics	Location, Components/Comparison, Costs (where available)	Study Population Description, Sample Size	Effect Measure	Value Used in Summary	Study Duration														
<p>Author (Year): Renger (2002)</p> <p>Design Suitability; Design: Least; Before-After</p> <p>Quality of Execution: Fair; 3 limitations</p> <p>Evaluation Setting: Mass media = Community-wide</p>	<p><u>Location:</u> Yuma County, AZ, USA</p> <p><u>Components:</u> Community-based effort to address problem of physical inactivity using TV and worksite media messages (consciousness-raising strategies). Specifically, methods included PSAs, comic strips, and worksite posters. PSAs were released and tracked by stations that showed the number of times and when PSA aired. Comic strips released in 17 worksite newsletters, and second published in 5 worksite newsletters 1 year later. Circulation tracked to estimate potential reach. Posters were displayed at 74 worksites and community buildings, with a second poster in 71 high-traffic locations (chambers of commerce, companies, etc.).</p> <p><u>Comparison:</u> Assessment only (baseline and post campaign)</p>	<p>Sampling method: Convenience sample</p> <p>Sample size: 500 Analytic sample: 500</p> <p>Yuma County Demographics</p> <p>55% aged under 35 yrs</p> <p>Hispanic 48.5% White 46.8%</p>	<p>Net % change from pre to post campaign</p>	<table border="0"> <tr> <td><u>Outcome</u></td> <td><u>Net % change</u></td> </tr> <tr> <td>All Yuma</td> <td></td> </tr> <tr> <td>No leisure time PA (%)</td> <td>-14.09%</td> </tr> <tr> <td>Pre-Campaign = 29.8%</td> <td></td> </tr> <tr> <td>Post-Campaign = 25.6%</td> <td></td> </tr> <tr> <td>Absolute difference = 4.20 percentage points</td> <td></td> </tr> <tr> <td colspan="2">(Increased leisure time in All Yuma)</td> </tr> </table>	<u>Outcome</u>	<u>Net % change</u>	All Yuma		No leisure time PA (%)	-14.09%	Pre-Campaign = 29.8%		Post-Campaign = 25.6%		Absolute difference = 4.20 percentage points		(Increased leisure time in All Yuma)		<p>2 years</p>
<u>Outcome</u>	<u>Net % change</u>																		
All Yuma																			
No leisure time PA (%)	-14.09%																		
Pre-Campaign = 29.8%																			
Post-Campaign = 25.6%																			
Absolute difference = 4.20 percentage points																			
(Increased leisure time in All Yuma)																			

Abbreviations:

FU = follow-up

min = minutes

NR = not reported

OR = odds ratio

PA = physical activity

SES = socioeconomic status

wk = week

yrs = years