

Supplementary Table 1. Media and Education Campaigns to Promote Healthier Diets				
Author, y	Population	Duration	Intervention/Evaluation	Findings
Economic Research Service, 1999 <sup>41</sup>	US population	10 y+	In 1991, the California campaign 5-A-Day—For Better Health! was adopted as a national campaign initiative by the National Cancer Institute to increase consumption of fruits and vegetables. Also in 1991, the produce industry established the PBH Foundation, a nonprofit consumer organization, to partner with the National Cancer Institute and US Department of Health and Human Services. Cooperative agreements were established between PBH and members of the supermarket industry, and a package of supermarket activities was designed for both in-store and promotional use. By using the licensed 5-A-Day logo, supermarkets joined PBH as active partners in promoting increased fruit and vegetable consumption.	<ul style="list-style-type: none"> <li>• Since the launch of the 5-A-Day campaign, intake of fruits and vegetables increased from ≈2.8 servings per day in 1988 to 4.3 servings in 1999.</li> <li>• The independent effects of supermarket-based activities are still being quantified.</li> </ul>
Connell et al, 2001 <sup>51</sup>	N=374 shoppers in 3 intervention stores; 378 control shoppers in 3 other stores matched by demographic characteristics	4 wk of in-store audio messages, plus take-home audiocassettes	The 5-A-Day For Better Health audio intervention included 2 components: in-store audio PSAs, and take-home audiotapes. Both contained 5-A-Day messages promoting the value of eating fruits and vegetables. During the 4-wk intervention, 1 of 4 PSAs was broadcast through the in-store audio system approximately every 30 min. The PSAs were rotated throughout the shopping day. Two were 30 s long and 2 others were 60 s long. Shoppers in the intervention stores who agreed to participate in the study were given a set of 2 audiocassettes, each with a 1-h program. The first focused on skill-building information about fruit and vegetable preparation. It featured chefs who described shortcuts for easy ways to prepare vegetable-based meals. The second provided a nutrition knowledge test using celebrity hosts.	<ul style="list-style-type: none"> <li>• At posttest, the original questionnaires were readministered in telephone interviews with 87.7% of the original intervention group and 93.7% of the original control group.</li> <li>• Knowledge scores in the intervention group increased significantly over baseline (from 59.3 to 74.5; <math>P&lt;0.001</math>) and as compared with the control group (61.9 to 66.4; <math>P&lt;0.001</math>).</li> <li>• Self-reported intake of fruits and vegetables increased significantly (<math>P&lt;0.01</math>) in both intervention and control groups (5.39 servings per day to 6.19 servings per day; 5.38 servings per day to 5.63 servings per day, respectively); however, the magnitude of the difference was significantly greater in the intervention group (<math>P&lt;0.05</math>).</li> </ul>
PBH Gen X Mom 2010 Survey, by OnResearch <sup>42</sup>	N=1000 Gen X moms; N=300 Gen Y moms	Online survey	After extensive consumer research, PBH, the CDC, and other national partners launched a new call to action, Fruits & Veggies—More Matters, in March 2007. The Fruits & Veggies—More Matters	<ul style="list-style-type: none"> <li>• Among Gen X moms, total “definite” awareness of the Fruits &amp; Veggies—More Matters campaign grew from 12% in 2007 before the campaign launch to 18% in 2010.</li> </ul>

			<p>campaign replaced the 5-A-Day program as the rallying cry to deliver the benefits of fruits and vegetables to consumers in a way designed to change and sustain their behavior over the long term. Fruits &amp; Veggies—More Matters was developed with moms, the “gatekeepers” to their family’s meals, as the primary target audience. Gen X moms were chosen as a subset for PBH’s targeted efforts. In January 2010, PBH developed and fielded a customized online survey, commissioned through OnResearch, which included 1000 Gen X moms (those born between 1965 and 1979) with children age ≤18 y living at home. The survey included several questions that have been tracked annually since the initial baseline survey was conducted in early February 2007. In 2010, a sample of 300 Gen Y moms (those born between 1980 and 1990) with children ≤18 y living at home was added for comparative purposes, because many of the Fruits &amp; Veggies—More Matters campaign messages are targeted at mothers with younger children. An understanding of Gen Y moms and how they compared with Gen X moms was sought because Gen X moms and their children are aging.</p>	<ul style="list-style-type: none"> <li>• In 2010, 45% of moms said they were more likely to purchase a product with the Fruits &amp; Veggies—More Matters logo on it, up 5% since 2009.</li> <li>• In 2010, of the Gen X moms who were aware of the Fruits &amp; Veggies—More Matters logo, 38% said it motivates them to help their family eat more fruits and vegetables, up from 23% in 2007. This motivational level was consistent among both Gen X and Gen Y moms.</li> <li>• Of those moms who were aware of the Fruits &amp; Veggies—More Matters logo, 74% said that if they saw the Fruits &amp; Veggies—More Matters logo on a product, it would mean that the product was healthy; 66% said it meant that the food was nutritious; and 55% said that it provides a serving of fruit and/or a vegetable.</li> <li>• The Internet remains the most effective medium of communication with Gen X and Gen Y moms. Driving traffic to the Fruits &amp; Veggies—More Matters website as well as providing additional content on the website should help increase awareness and positive brand associations.</li> </ul>
Wardle et al, 2001 <sup>52</sup>	N=1894 residents of Great Britain. The study targeted groups with a higher prevalence of overweight.	7-wk intervention, with data collected 3 mo after intervention	<p>A survey evaluated the success of the “Fighting Fat, Fighting Fit” campaign in achieving public awareness of the need for preventing obesity. Questions included weight, height, recognition of campaign name, content recall, and participation in the campaign registration scheme.</p> <p>The Fighting Fat, Fighting Fit campaign was the largest health education campaign ever undertaken by the BBC (British Broadcasting Corporation), spanning 7 wk of numerous types of peak and daytime programming across local TV/radio stations, websites, books, and videos.</p> <p>As part of the campaign, people were invited to receive a registration packet for a small fee. The packet included a self-help guide for lifestyle change and 3 registration cards to return over a 5-mo period to chart progress in weight loss, activity levels, and eating habits.</p>	<ul style="list-style-type: none"> <li>• Of the respondents, &gt;50% had heard of the campaign and 30% were able to recall the healthy lifestyle messages. However, only 1% registered to participate.</li> <li>• Those who registered were white and had higher education levels and SES.</li> <li>• Awareness was high in all socio-economic groups, but memory for the healthy lifestyle messages was significantly poorer in those with lower levels of education and those from ethnic minority groups.</li> <li>• Awareness was no higher in overweight vs normal-weight respondents.</li> </ul>
Miles et al,	N=2112 from a	5 mo after	To increase active participation in the “Fighting Fat,	<ul style="list-style-type: none"> <li>• Average weight loss was 2.3 kg (<math>P&lt;0.001</math>); 78% of</li> </ul>

2001 <sup>56</sup>	random sample of 6000 registrants in Britain. Most were overweight or obese women.	baseline evaluation	<p>Fighting Fit” campaign, the campaign message was supplemented with a booklet offering practical advice about how to make healthy lifestyle changes in eating and physical activity. Each booklet provided registration cards allowing people to register with the campaign. Registration included 6 mo of membership and 3 registration cards to return over a 5-mo period to chart progress in weight, activity levels and eating habits.</p> <p>Registration incentives were available, including free exercise sessions and prizes for those who had made the greatest improvements.</p> <p>The campaign aimed to stimulate behavior change; therefore, both the program and the booklet provided specific guidance for self-management.</p>	<p>those who lost weight completed at least 1 evaluation.</p> <ul style="list-style-type: none"> <li>• The percentage of people classified as obese was reduced by 11% (<math>P&lt;0.001</math>)</li> <li>• Satisfaction with weight improved, and the percentage of people saying they were very or quite satisfied with their weight increased from 3% to 17%.</li> <li>• There were significant reductions in fat and snack intake as well as increases in fruit and vegetable intake (an increase of 1.3 portions per day [<math>P&lt;0.001</math>]); the number of people eating 5 portions per day increased by 23%.</li> <li>• There were significant increases in brisk walking, moderate activity, and vigorous activity. Overall, 74% of participants increased their activity levels following the campaign.</li> <li>• There also were significant increases in overall psychological well-being and perceptions of health.</li> </ul>
Beaudoin et al 2007 <sup>53</sup>	Low-income, predominantly black urban population in New Orleans, Louisiana	5 mo Ads and signs were targeted to adults with specific emphasis on black women age 18-49 y.	<p>A mass media campaign resulted from a partnership between the Louisiana Public Health Institute and the city of New Orleans, with funding from the CDC. The campaign was aimed at increasing physical activity levels and intake of fruits and vegetables while lowering consumption of high-calorie snack foods. This study evaluated phase 1 of the intervention (February 2005–August 2005), which focused on the goals listed above. During this phase the campaign produced 2 TV ads, 4 radio ads, 26 tailgate bus signs, 20 large side-panel bus signs, 2 tailgate streetcar signs, and 2 large side-panel streetcar signs. Data collection instruments came from the 2004 and 2005 versions of the BRFSS survey, with locally added questions addressing the media campaign and its intended effects.</p>	<ul style="list-style-type: none"> <li>• From baseline, there were significant increases in message recall measures, positive attitudes toward fruit and vegetable consumption, and positive attitudes toward walking. However, actual behaviors did not change significantly</li> </ul>
Sanigorski et al, 2008 <sup>45</sup>	Intervention: N=1001 (baseline) and 839 (follow-up) children age 4-12 y attending school in Colac, Australia	3 y	<p>Be Active Eat Well was a multifaceted community capacity-building campaign promoting healthy eating and physical activity. The program was designed to build the community’s capacity to create its own solutions to promote healthy eating, physical activity, and healthy weight in children age 4-12 y.</p> <p>The intervention program was designed, planned, and implemented by the key organizations in Colac,</p>	<ul style="list-style-type: none"> <li>• Children in the intervention group gained less weight (–0.92 kg), showed significantly lower increases in waist circumference (–3.14), BMI z score (–0.11), and waist-height ratio (–0.02) compared with children in the control group.</li> <li>• The prevalence of overweight/obesity increased in both groups, and the incidence was not significantly</li> </ul>

	Control: N=1183 (baseline) and 979 (follow-up) children from a stratified sample from a nearby town Average age of study population: 8 y at baseline and 11 y at follow-up		including Colac Area Health, Colac Otway Shire, and Colac Neighborhood Renewal, with Deakin University providing support. Numerous intervention strategies were used. Examples of media strategies were broad area coverage (57 newspaper ads, 21 paid TV ads) and local festivals and events.	different between groups. <ul style="list-style-type: none"> <li>• There were no differences in anthropometric measures by SES in the intervention group, whereas in the control group there were significantly greater gains in anthropometric values in children of lower SES status.</li> <li>• Changes in underweight and attempted weight loss were not different between groups.</li> </ul>
de Silva-Sanigorski, et al, 2010 <sup>48</sup>	Children age 0-5 y living in Geelong, Victoria, Australia	2004-2008	Romp and Chomp was a program similar to Be Active Eat Well, designed for children age 0-5 y. Data were evaluated using a repeat cross-sectional quasi-experimental design with measures taken pre- and postintervention from children who underwent annual health checks at ages 2 and 3.5 y.	After the intervention: <ul style="list-style-type: none"> <li>• In the intervention group, 2-y-olds were heavier than the control group at baseline and remained heavier at follow-up (<math>P&lt;0.05</math>), although there were reductions in the size of the differences and there was a significantly lower proportion of 2-y-old children who were overweight or obese at follow-up compared with baseline levels (<math>P&lt;0.05</math>).</li> <li>• In the 3.5-y-old intervention sample there were significant (<math>P&lt;0.05</math>) reductions in mean weight (17.05 kg to 16.76 kg), BMI (16.35 to 16.17), and BMI z score (0.67 to 0.54) at follow-up.</li> <li>• There was a significantly lower prevalence of overweight/obesity in both the 2- and 3.5-y-old subsamples (by 2.5 and 3.4 percentage points, respectively) than in the control sample (a difference of 0.7 percentage points; <math>P&lt;0.05</math>) compared with baseline values.</li> <li>• Intervention child behavioral data showed a significantly lower intake of packaged snacks (by 0.23 serving), fruit juice (0.52 serving), and cordial (0.43 serving) than that in the control sample (all <math>P&lt;0.05</math>).</li> </ul>
Nishtar et al 2004 <sup>44</sup>	N=500 residents of Pakistan	130 consecutive wk of newspaper articles	THE NEWS—Heartfile Public Awareness Drive intervention involved posting articles on a regular weekly basis for 130 wk on the inside front page of the newspaper. The aim was to evaluate changes in the levels of knowledge and attitudes as indicators of a community health education campaign. The campaign was launched through complimentary space donated by the newspaper group that owns <i>The</i>	Of the regular readers: <ul style="list-style-type: none"> <li>• 93% remembered seeing the Heartfile articles.</li> <li>• Of the 93% who remembered seeing the articles, 87% said the articles significantly supplemented their knowledge about diet, and 5% said they were their sole source of information.</li> </ul> Of the 500 regular readers, only those who reported seeing and reading the articles were eligible for another

			<p><i>News</i>, which is the largest circulating daily English newspaper in the country. The postintervention evaluation involved a cross-sectional telephone survey in a major city. A total of 2621 persons were called, but only those who were considered regular readers (N=500) were eligible for the interview.</p>	<p>interview (N=375). Of these:</p> <ul style="list-style-type: none"> <li>• 40% reported making some dietary changes.</li> <li>• 39% changed their exercise habits.</li> <li>• 8% reduced the amount they smoked.</li> </ul>
Lutz et al, 1999 <sup>57</sup>	5-A-Day For Better Health newsletter intervention	Intervention: newsletters	<p>This intervention included 4 groups: 1 control group and 3 newsletters (computer-tailored, nontailored, and tailored with goal-setting information). All 3 newsletters contained strategies for improving fruit and vegetable consumption. The tailored newsletters used computer algorithms to match individuals' baseline survey information with the most relevant newsletter messages promoting dietary change. Baseline surveys were completed by 710 health maintenance organization clients. Postintervention surveys were completed by 573 participants (80.8%) 6 mo after baseline.</p>	<ul style="list-style-type: none"> <li>• All newsletter groups had significantly higher daily intake (from 3.4 to 4.1 servings vs no increase in control; <math>P&lt;0.002</math>) and variety scores (from 6.5 to 8 vs no change in control; <math>P&lt;0.0001</math>) compared with the control group, as measured using FFQs.</li> <li>• Although a trend toward improved intake and variety was noted with each added newsletter element, there were no significant differences among newsletter groups.</li> </ul>
Kelder et al, 1995 <sup>46</sup>	N=2376 6th graders from 13 junior high schools	5 y	<p>The Lunch Bag Program for 6th graders and the Slice of Life for 10th graders consisted of the following:</p> <ul style="list-style-type: none"> <li>• Brief 1-session intervention</li> <li>• Students were provided with lunch bags containing a recipe book, heart-healthy snacks, food lists, a comic book, and several games about healthy foods for students and parents.</li> <li>• Students also wrote their own newspaper, designed to influence intentions to eat healthy foods.</li> <li>• Data were collected at baseline (grade 6) through grade 12 (7 time points total)</li> </ul>	<ul style="list-style-type: none"> <li>• An upward trend in healthier food choices was seen for both males and females in the intervention group.</li> <li>• Females: At all but the final time point (12th grade), a significantly (<math>P&lt;0.01</math>) greater number of healthier food choices were made by the intervention group compared with the reference group; the total increase from baseline was 6.0 to 9.5 vs 6.0 to 8.5 choices, respectively.</li> <li>• Knowledge of healthy food choices was significantly greater (at <math>P&lt;0.01</math>) in the intervention group vs reference group for all but the 4th time point (9th grade; <math>P&lt;0.05</math>); the total increase was 12.5 to 16 vs 12.5 to 15, respectively.</li> <li>• Restraint in salting food was also significantly greater (<math>P\leq 0.05</math>) in the intervention group compared with the reference group at all time points. Total restraint increased from 5.6 to 6.7 vs 5.6 to 6.0, respectively.</li> <li>• Males: A significantly higher (<math>P&lt;0.05</math>) number of healthy food choices were selected at time points 2-4 (grades 6-10) but not at the final 2 time points (grades 11-12). The total increase from baseline was the same for both the intervention and reference groups.</li> </ul>

				<ul style="list-style-type: none"> <li>• Knowledge of healthy food choices was significantly greater (<math>P \leq 0.01</math>) in the intervention group compared with the reference group at all but the 3rd time point (grade 8). The total increase in knowledge score was 12.0 to 15.5 in the intervention group vs 12.0 to 14.5 in the reference group.</li> <li>• Restraint in salting food was significantly different (<math>P &lt; 0.05</math>) between the 2 groups at all but the final end point (grade 12) compared with the reference group. The total increase in restraint score was 5.4 to 6.2 vs 5.4 to 5.7 in the intervention and reference groups, respectively.</li> </ul>
Reger et al, 1998 <sup>55</sup>	Clarksburg and Bridgeport, West Virginia	7-wk campaign	The concept of The 1% or Less campaign was developed in 1994 by the CSPI. The first demonstration project was conducted from February to April 1995 in West Virginia. The campaign lasted 7 wk and consisted of paid TV/newspaper/radio ads, public relations efforts, taste tests, and educational programs at supermarkets, schools, and worksites. Ads (1 newspaper ad, 2 30-s TV ads, and 2 60-s radio ads) were developed to encourage consumers to switch from whole/2% milk to 1%/skim milk. TV ads ran 366 times during the first 2 wk and last 2 wk of the campaign. Radio ads aired 244 times over a 2-wk period in the middle of the campaign. Fourteen quarter-page newspaper ads were run during the campaign. Data were collected at baseline, immediately following the campaign, and 6 mo later.	<ul style="list-style-type: none"> <li>• 80% of the 1910 taste test participants reported liking the taste of the skim milk sample, and 94% said they liked the taste of 1%, skim, or both.</li> <li>• Milk sales increased by 16% and remained high at follow-up.</li> <li>• The share of low-fat milk sales increased from 18% of overall milk sales to 41% of overall milk sales immediately following the campaign and was sustained at the 6-mo follow-up.</li> <li>• In the postintervention survey, 38% of respondents who reported drinking whole milk reported they had switched to low-fat milk.</li> </ul>
Dunt et al, 1999 <sup>54</sup>	N=591 residents of Greater Shepparton, central Victoria, Australia	3 mo in 1991; pre- and postintervention surveys	Towards a Healthy Diet ran as an early 3-mo component of a 2-y project conducted by the Victoria division of the Heart Foundation. Two 5-wk media campaigns were implemented. Promotional tools included TV, radio, brochures, T-shirts, and other media events. In addition, public policy initiatives were integrated into the media campaigns throughout.	<ul style="list-style-type: none"> <li>• The intervention did not alter either individual dietary behavior or intention to change dietary behavior, as assessed by questionnaires and in supermarket sales figures for milk and table spreads.</li> <li>• The intervention did affect perceptions about the level of interest in healthy diet in the community (more eating places offering healthy food and more local residents eating healthy foods).</li> </ul>
Dixon et al, 1998 <sup>43</sup>	N=500 residents age $\geq 20$ y in Victoria, Australia	Campaign TV ads ran from 1992 to 1995: Phase 1: Sept 1-19, 1992 Phase 2: Oct 3-	The Victoria "2 Fruit 'n' 5 Veg Every Day" campaign was a broadly based, multilevel statewide nutrition promotion initiative aimed at increasing awareness of the need to eat more fruits and vegetables and encouraging increased consumption of these foods. The lead health agency for the	<ul style="list-style-type: none"> <li>• Reported fruit and vegetable consumption increased significantly between phases 1 and 2 (during the most intensive TV advertising) from 1.5 to 1.7 servings per day of fruits (<math>P &lt; 0.05</math>) and from 2.6 to 3.1 servings per day of vegetables (<math>P &lt; 0.001</math>).</li> <li>• No additional increases were seen across the</li> </ul>

		23, 1993 Phase 3: Oct 9-16, 1994 Phase 4: little media coverage	campaign was the Victoria Food and Nutrition Program. The campaign was designed in part after the 5-A-Day For Better Health program. A central feature of the campaign was a short, intensive burst of TV ads conducted over a 3-wk period in the first 2 phases of the campaign and 1 wk in the third phase. The mass media program was primarily TV based, but some print and radio ads were also included. In addition to advertising, community-based health and education professionals, food retailers, and food service providers were also targeted as routes of influence. Data were collected via 4 annual postcampaign telephone surveys conducted ≈2-3 wk postintervention.	remaining phases. However, the initial increase was maintained. <ul style="list-style-type: none"> <li>• Similarly, during the most media-intensive phases (1 and 2), significant increases were found in the level of public awareness, reported consumption, and beliefs about appropriate levels of consumption.</li> </ul>
Croft et al, 1994 <sup>47</sup>	N=9839 adults age ≥18 y living in 2 South Carolina communities (intervention and control)	Intervention phase: February 1988–September 1990	The South Carolina Cardiovascular Disease Prevention Project was designed to reduce CVD morbidity and mortality by decreasing the prevalence and severity of high blood pressure, elevated cholesterol, and smoking. The intervention focused on media and education and involved multiple segments of the community to promote cardiovascular health and help residents make lifestyle changes. Numerous programs were offered, including community classes, grocery store tours, speakers' bureaus, professional education classes, home study courses, and worksite nutrition programs. Media programs included radio and TV PSAs, talk shows, newspaper articles and supermarket ads. A task force of local restaurant managers, registered dietitians, and news media was established to implement the restaurant labeling program entitled "Eat Smart for a Healthy Heart." Data were collected during 3 telephone surveys taken in 1987, 1989, and 1991.	<ul style="list-style-type: none"> <li>• Favorable changes in most eating behaviors and levels of awareness were observed in both the intervention and control communities.</li> <li>• From 1987 to 1991, the intervention community experienced greater absolute changes than the control community in use of animal fats (−8.9 vs −4.0%; <math>P&lt;0.05</math>) and unsaturated fats (+8.4% vs +3.6%; <math>P&lt;0.05</math>) and in awareness of restaurant nutrition information (+33.0% vs +19.4%; <math>P=0.0001</math>).</li> <li>• These favorable changes were noted among both black and white respondents.</li> </ul>
Tian et al, 1995 <sup>58</sup>	7 intervention neighborhoods and 10 control neighborhoods in Tianjin, China	1989-1992	The Tianjin Project was a community-based education program to reduce salt consumption. The main activities included training of healthcare personnel about salt and blood pressure and providing practical advice to patients, community education via distribution of door-to-door leaflets, and distribution of posters and stickers to food retailers. Lower-sodium salt was also introduced in some limited retail stores. Sodium intake	<ul style="list-style-type: none"> <li>• From 1989 to 1992, mean sodium intake decreased in men and women by 22 and 11 mmol/d, respectively, compared with increases of 18 and 4 mmol/d, respectively, in the control area (<math>P&lt;0.001</math> for men, <math>P=0.065</math> for women).</li> <li>• These changes did not vary by education level or occupation groups.</li> <li>• Compared with the control area, systolic blood pressure decreased in men and women in the</li> </ul>

			(consecutive 3-d weighed food records) and blood pressure (directly measured) were assessed in representative cross-sectional surveys, with >90% participation.	<p>intervention area by 5 and 6 mm Hg, respectively (<math>P=0.065</math> for men, <math>P=0.008</math> for women).</p> <ul style="list-style-type: none"> <li>• Knowledge related to recommended levels of salt intake, importance of controlling salt, and differences between regular and low-sodium mineral salt also improved.</li> </ul>
Dowse et al, 1995 <sup>65</sup>	Mauritius	1987-1992	<p>In 1987, the Mauritius government launched a national prevention program to improve lifestyle-related risk factors by promoting healthier diets, increased exercise, smoking cessation, and reduced alcohol intake. Primary components of the program included extensive use of mass media and widespread community, school, and workplace education activities. Fiscal and legislative measures were also introduced to improve cooking oils (see Supplementary Table 12).</p> <p>Cross-sectional cluster surveys of all adults age 25-74 y living in geographically defined clusters were performed in 1987 and 1992.</p>	<ul style="list-style-type: none"> <li>• From 1987 to 1992, moderate leisure-time physical activity increased from 16.9% to 22.1% in men and from 1.3% to 2.7% in women. Cigarette smoking decreased from 58.2% to 47.2% in men and from 6.9% to 3.7% in women.</li> <li>• Heavy alcohol use also declined substantially (from 38.2% to 14.4% and 2.6% to 0.6%, respectively).</li> <li>• Changes in cooking oils and their estimated effects are presented in Supplementary Table 12.</li> <li>• During this same period, declines were seen in prevalence of hypertension (from 15.0% to 12.1% in men and 12.4% to 10.9% in women), and mean population serum total cholesterol fell by 15%, from 5.5 to 4.7 mmol/L (<math>P&lt;0.001</math>).</li> <li>• Conversely, prevalence of overweight/obesity rose, and rates of glucose intolerance did not change.</li> </ul>
Pekka et al, 2002 <sup>59</sup> Puska and Stahl, 2010 <sup>60</sup>	North Karelia, Finland	1972-1977; extended nationally thereafter	<p>The North Karelia Project was a media- and education-based community intervention to improve population blood cholesterol levels and other cardiovascular risk factors by reducing consumption of butter, whole-fat dairy products, nonlean meats, and salt, and increasing consumption of vegetable oil-based margarine and vegetable oils, low-fat dairy products, lean meats, vegetables, berries, and fruit. Diet education was provided via posters, leaflets, and messages; local newspaper and radio coverage; primary care doctors and nurses; schools; collaborative efforts with community groups such as a powerful housewives' organization; and a network of lay community leaders. Local food manufacturers were encouraged to produce healthier food options, for example, cooperating with the food and catering industry to lower the sodium content of foods.</p> <p>The project was subsequently extended to the national level, with additional substantial focus on other policy approaches (see "Multicomponent</p>	<ul style="list-style-type: none"> <li>• Targeted dietary habits improved substantially, with associated declines in population blood cholesterol and blood pressure levels and, over time, rates of CHD.</li> </ul>



			Interventions”).	
Lefebvre et al 1987 <sup>63</sup>	Pawtucket, Rhode Island	1984-1988	The Pawtucket Heart Health Program was a community-based, multicomponent educational intervention to lower cardiovascular risk factors, based on a blend of social learning theory, community organization models, community psychology tenets, and diffusion research. Point-of-purchase nutrition education in supermarkets was 1 intervention strategy. By using consumer intercept interviews, awareness of shelf labels and their effect on purchase behavior has been continuously evaluated.	<ul style="list-style-type: none"> <li>Between 1984 and 1988, the percentage of shoppers who could identify labels correctly increased from 11% to 24% (<math>P&lt;0.05</math>). The percentage who reported they were encouraged to purchase the identified foods increased from 36% to 54% (<math>P&lt;0.05</math>).</li> </ul>
Farquhar et al, 1990 <sup>49</sup>	2 treatment cities (N=122,800) and 2 control cities (N=197,500) in California	30-64 mo of education	The Stanford Five-City Project tested whether community-wide health education can reduce risk of stroke and CHD. Treatment cities received a 5-y, low-cost, comprehensive program using social learning theory, a communication-behavior change model, community organization principles, and social marketing methods that resulted in about 26 h of exposure to multichannel and multifactor education. Risk factors were assessed in representative cohort and cross-sectional surveys at baseline and in 3 later surveys.	<ul style="list-style-type: none"> <li>When compared with control communities, significant net reductions in community averages favoring treatment occurred in plasma cholesterol (2%), blood pressure (4%), resting pulse rate (3%), and smoking prevalence (13%).</li> <li>These risk factor changes resulted in decreases in composite total mortality risk scores (15%) and CHD risk scores (16%).</li> <li>Subjects in the treatment communities also gained significantly less weight (0.57 kg) compared with control communities (1.25 kg) over 6 y.</li> </ul>
Luepker et al, 1996 <sup>61</sup>	3 upper Midwestern communities with 3 matched comparison communities	1980-1990	The Minnesota Heart Health Program was a 5- to 6-y intervention program that used community-wide and individual health education in an attempt to decrease population risk.	<ul style="list-style-type: none"> <li>In the education communities, CHD incidence declined by 1.8% per year in men (<math>P=0.03</math>) and 3.6% per year in women (<math>P=0.007</math>), but these declines were not significantly different from secular trends in matched control communities.</li> <li>Stroke incidence did not decline in either education or control communities.</li> </ul>
Winkleby et al, 1997 <sup>62</sup>	Communities in California, Minnesota, and Rhode Island	1980s	The Stanford Five-City Project, Minnesota Heart Health Program, and Pawtucket Heart Health Program were community-based heart disease prevention interventions conducted in the 1980s. Among 12 total cities, 6 cities received 5–8-y interventions for risk reduction, with a major focus on media and education. When data from the 3 studies were pooled, time trends were estimated for cigarette smoking, blood pressure, total cholesterol level, BMI, and CHD mortality risk in men and women age 25-64 y.	<ul style="list-style-type: none"> <li>The joint estimates of intervention effect were in the expected direction in 9 of 12 gender-specific comparisons. However, none of these were statistically significant.</li> </ul>

<b>Multicomponent Interventions (Including Major Components Beyond Media and Education, Such as Environmental Change)</b>				
<b>Author, y</b>	<b>Population</b>	<b>Duration</b>	<b>Intervention/Evaluation</b>	<b>Major Findings</b>
Pekka et al, 2002 <sup>59</sup> Puska and Stahl, 2010 <sup>60</sup>	Finland	1970s to present	The Finnish North Karelia Project was a media- and education-focused community intervention to improve population dietary habits. The project was subsequently extended to the national level, with additional substantial focus on voluntary agreements with industry to increase production and sales of more healthful foods, modifications of taxation and subsidy policies for several foods, government-supported programs to increase local production and consumption of berries and vegetables, and restrictions on milk fat (see “Taxation and Subsidies” and “Direct Restrictions and Mandates”).	<ul style="list-style-type: none"> <li>• From the late 1970s to 1998, the proportion of Finns who reported using mostly butter on bread declined from 60% to 5%. Vegetable-oil soft margarines and butter-vegetable oil mixtures were the main replacement for butter.</li> <li>• From 1978 to 1998, the proportions of men and women using whole milk declined from 44% to 9% and 35% to 4%, respectively.</li> <li>• From 1972 to 1997, the proportion of Finns who mainly used vegetable oil for cooking increased from 1% to 2% to 34%; increases were even higher in urban areas.</li> <li>• Overall, between 1972 and 1997, the percentage of energy derived from saturated fats declined from 21% to 14% and from polyunsaturated fat increased from 3.5% to 5.0%, substantially increasing the ratio of polyunsaturated to saturated fats.</li> <li>• These and other dietary changes were associated with substantial declines in population cholesterol levels, including 18% declines in North Karelia and similar declines in other monitored areas.</li> <li>• On the basis of urine sodium excretion, mean daily salt intakes declined from about 14-15 g in men (unknown in women) to about 11 g in men and 7 g in women.</li> <li>• Diastolic blood pressure decreased by 5% in men and 13% in women.</li> <li>• Age-standardized CHD mortality among adults age 35-64 y decreased by 73% in North Karelia and by 65% in the whole country between 1971 and 1995.</li> <li>• About 75% of this decline could be explained by improvements in population risk factors (especially declines in blood cholesterol) rather than changes in medical treatments.</li> </ul>
Bhalla et al, 2006 <sup>64</sup>	N=4084 Singapore residents	1998-2004	A survey evaluated the National Healthy Lifestyle Program, a population-wide, noncommunicable disease, multicomponent intervention program created in 1992. It aimed to provide information, skill training, and the social and physical	<ul style="list-style-type: none"> <li>• Hypertension in Singapore residents age 30-69 y decreased from 28% in 1998 to 24% in 2004.</li> <li>• Prevalence of high cholesterol (<math>\geq 6.2</math> mmol/L) decreased from 26% to 18%.</li> </ul>

			environments necessary to encourage healthy living by Singapore residents. This multiple-strategy program includes innovative media and communication activities, systematic involvement of government agencies, community organizations, workplaces and schools, and collaboration with the food industry to provide healthier food choices. The program is evaluated every 6 y using population-based cross-sectional surveys. This paper reported findings from 1998 to 2004.	<ul style="list-style-type: none"> <li>• Prevalence of diabetes decreased from 9.5% to 7.8%.</li> <li>• Prevalence of obesity was not significantly changed.</li> <li>• Smoking rates decreased from 15% to 12.5%.</li> <li>• Regular exercise increased from 17% to 25%.</li> </ul>
Economos et al, 2007 <sup>66</sup>	N=1178 children in grades 1-3 attending public schools in 3 culturally diverse communities in Somerville, Massachusetts (1 intervention, 2 controls)	Intervention lasted 3 y (September 2002–August 2005); data collected covered 1 school year Pretest: September 2003 Posttest: May 2004	Shape Up Somerville: Eat Smart, Play Hard was one of the first collaborative community-based participatory research initiatives designed to change the environment to prevent obesity in early elementary school-age children. Many groups and individuals within the community, including children, parents, teachers, school food service providers, city departments, policy makers, healthcare providers, before- and after-school programs, restaurants, and the media were involved in the multicomponent intervention.	<ul style="list-style-type: none"> <li>• The average change in BMI <i>z</i> score in the intervention community was <math>-0.130</math> compared with control 1 (<math>P&lt;0.02</math>) and <math>-0.105</math> compared with control 2 (<math>P&lt;0.02</math>). When the 2 control communities were pooled, the average change in BMI <i>z</i> score was <math>-0.1005</math> in the intervention community compared with the control communities (<math>P&lt;0.001</math>).</li> <li>• Parental education was not a significant predictor of BMI <i>z</i> score change, nor were other factors such as the child's sex, grade, age, race, primary language spoken at home, school, or local community.</li> </ul>

PBH indicates Produce for Better Health Foundation; PSA, public service announcement; Gen X, Generation X; Gen Y, Generation Y; CDC, Centers for Disease Control and Prevention; BRFSS, Behavioral Risk Factor Surveillance System; SES, socioeconomic status; FFQ, food frequency questionnaire; CSPI, Center for Science in the Public Interest; CVD, cardiovascular disease; CHD, coronary heart disease; and BMI, body mass index.

Note: Reference numbers (eg, Connell et al, 2001<sup>50</sup>) appearing in this supplementary table correspond with those listed in the reference section of the statement. For the purposes of this supplementary table, these meta-analyses or systematic reviews (see "Author, y" column) are considered the primary citation. Additional studies mentioned in the primary citation may be included in the "Intervention/Exposure" and "Findings" columns. The additional studies can be accessed through the primary citation.