

IMPACT AND EFFECTIVENESS TABLE 38

Point-of-Purchase Prompts for Nutrition

Effectiveness Tables

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EFFECTIVENESS TABLES

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
United States				
<p>Author Schwartz (2007)</p> <p>Connecticut</p> <p>Design Intervention Evaluation</p> <p>Group randomized trial</p> <p>Duration Medium</p> <p>1 school year</p>	<p>Measures <i>Access to healthy food and beverage options</i> (presence of point of purchase prompt advertising fruit and juice)</p> <p>Outcome(s) Affected Consumption and selection of fruit and juice (direct observation)</p>	<p>Net Positive for Nutrition in the Study Population (Point of Purchase Prompts)</p> <p>Net Positive for Purchasing Behaviors in the Study Population (Point of Purchase Prompts)</p> <p>Point of Purchase Prompts</p> <p><u>NUTRITION:</u></p> <p><i>Day 1</i></p> <ol style="list-style-type: none"> 1. Among the children who took fruit, 70% at the intervention and 69% at the control schools ate it, and among those who took juice, 64% at the intervention and 58% at the control schools drank it. 2. The likelihood of eating fruit among children in the intervention school was three and half times that of children in the control school (OR=3.5, CI 2.0-6.2), and the likelihood of drinking juice was similar (OR=1.1, CI 0.6-2.5). <p><i>Day 2</i></p> <ol style="list-style-type: none"> 3. Children in the intervention school were twice as likely to eat fruit (OR=2.3, CI 1.3-4.2) or drink juice (OR=2.9, CI 1.5-5.5) than children in the control school. <p><u>PURCHASING BEHAVIORS:</u></p> <p><i>Day 1</i></p> <ol style="list-style-type: none"> 4. At the intervention school, 76% of those who purchased a school lunch took a piece of fruit (45% in the control school), 21% took a carton of juice (20% in the control school), and 3 children stated that they did not want to take either (35% in the control school). 5. Students at the intervention school were nearly four times as likely to take fruit than students at the control school (OR=3.96, CI 2.2-7.0), but they were not more likely to take juice (OR=1.0, CI 0.5-2.0). <p><i>Day 2</i></p> <ol style="list-style-type: none"> 6. Children in the intervention school were nearly twice as likely to take fruit (OR=1.9, CI 1.1-3.3) and juice (OR=2.1, CI 1.2-3.8) than children in the control school. 	<p>Effective for Nutrition in the Study Population</p> <p>Study design = Intervention evaluation</p> <p>Intervention duration = Medium</p> <p>Effect size = Net positive for nutrition in the study population</p>	<p>Maintenance Not Reported</p> <p>Sampling / Representativeness Not Reported</p>
<p>Author Blom-Hoffman (2008)</p> <p>Massachusetts</p> <p>Design Intervention Evaluation</p> <p>Group randomized trial</p> <p>Duration High</p> <p>Winter 2006 through Spring 2008</p>	<p>Measures <i>Access to healthy food and beverage options</i> (presence of posters prompting purchase of healthier food choices in school cafeterias)</p> <p>Outcome(s) Affected Environment change (process evaluation only-logs and direct observation)</p>	<p>Not Reported (for desired health outcome)</p> <p>Point of Purchase Prompts</p> <p><u>ENVIRONMENTAL CHANGE:</u></p> <ol style="list-style-type: none"> 1. Overall integrity for lunchtime procedures was high, ranging from 75% to 100% compliance. 2. Morning announcements occurred on most school days (91% of monitored days). 3. Students were exposed to, on average, 3 songs, 6 fruit and vegetable characters, and 3 cooking videos during year 1 from CD-ROM activities (teachers reported that, on average, students paid very good attention and seemed to enjoy the CD-ROM program) 	<p>More Evidence Needed</p> <p>Study design = Intervention evaluation</p> <p>Intervention duration = High</p> <p>Effect size = Not reported</p>	<p>Maintenance Not Applicable - only process evaluation results reported</p> <p>Sampling / Representativeness Not Reported</p>

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
<p>Author Perry, Bishop (2004) Minnesota</p> <p>Design Intervention Evaluation Group randomized trial</p> <p>Duration High 2 years</p>	<p>Measures <i>Access to healthy food and beverage options</i> (presence of verbal encouragement by food service staff and additional serving of fruit and/or vegetable in the lunch line and school snack cart)</p> <p>Outcome(s) Affected Fruit and vegetable consumption (direct observation)</p>	<p>Net Positive for Nutrition in the Study Population (Point of Purchase Prompts)</p> <p>Point of Purchase Prompts NUTRITION: 1. Verbal encouragement by food service staff was associated with: increased fruit and vegetable consumption (no potatoes, no juice) at follow-up ($r^2=0.40$; regression coefficient= 0.64, $p=0.001$), increased fruit and vegetable consumption (no potatoes) at follow-up ($r^2= 0.26$; regression coefficient= 0.52, $p=0.007$), increased fruit consumption (no juice) at follow-up ($r^2= 0.24$; regression coefficient= 0.49, $p=0.011$), and increased consumption of fruits and vegetables (no potatoes, no juice) from baseline to follow-up (regression coefficient= 0.34).</p> <p>ENVIRONMENT CHANGE: 2. Intervention schools had greater verbal encouragement from food service staff than control schools (42% of observations vs. 11% of observations, $p=0.01$).</p>	<p>Effective for Nutrition in the Study Population</p> <p>Study design = Intervention evaluation</p> <p>Intervention duration = High</p> <p>Effect size = Net positive for nutrition in the study population</p>	<p>Maintenance Not Reported</p> <p>Sampling / Representativeness Not Reported</p>
<p>Author Horgen, Brownell (2002)</p> <p>Location not reported</p> <p>Design Intervention Evaluation Quasi-experimental, time series study</p> <p>Duration Low 14 weeks</p>	<p>Measures <i>Access to healthy and affordable menu options</i> (presence of point of purchase messages identifying healthy food choices on a restaurant menu and lowered prices of healthy foods in restaurants)</p> <p>Outcome(s) Affected Sales of low-fat entrees including a chicken sandwich, chicken salad and vegetable soup (sales data)</p>	<p>Not Reported (for desired health outcomes)</p> <p>Net Positive for Purchasing Behavior in the Study Population (Point of Purchase Prompts)</p> <p>(Note: Period 1 = Initial baseline; Period 2 = Price reduction; Period 3 = interim baseline; Period 4 = Point of purchase messages; Period 5 = Point of purchase messages + price reduction; Period 6 = Final baseline)</p> <p>Point of Purchase Prompts PURCHASING BEHAVIOR: 1. For target items, the effect size of period on sales was 0.39, indicating that variability in sales attributable to period was 39%. For control items, 6% of the variability in sales was attributable to period [the sales by period interaction was significant ($F(5,796)=10.69$, $p<0.001$)] 2. Sales of target items varied based on intervention period ($F(5, 398)=22.98$, $p<0.001$). Sales increased during intervention periods and decreased during baseline periods. 3. Mean sales of all items rose during period 4 from period 3 levels, but none of the increases were significant. However, the increases in sales of the target chicken sandwich ($p<0.05$), soup cup ($p<0.01$) and soup bowl ($p<0.01$) were significantly higher than period 1 sales. 4. During period 5, sales of the chicken sandwich and chicken salad were significantly higher than period 1 ($p<0.0001$ and $p<0.05$, respectively) and period 3 ($p<0.0001$ for both), but not period 4. Soup cup and soup bowl sales were significantly higher than period 1 sales ($p<0.0001$) but not period 3 or 4. 5. Average sales of all items decreased in period 6, and were not significantly different than sales during period 1 (except for soup cup sales, $p<0.05$). 6. Sales of target items during period 2 were significantly higher than those during period 4 for the chicken sandwich ($p<0.001$) and the chicken salad ($p<0.05$). For all foods, sales were higher during the price reduction than the point of purchase message period. 7. Sales during period 4 were consistently the lowest of sales during any intervention period.</p>	<p>More Evidence Needed</p> <p>Study design = Intervention evaluation</p> <p>Intervention duration = Low</p> <p>Effect size = Not reported</p>	<p>Maintenance Not Reported</p> <p>Sampling / Representativeness Not Reported</p>
<p>Author French, Jeffery (2001)</p> <p>Minnesota</p> <p>Design Intervention Evaluation Time series</p> <p>Duration Medium 12 months</p>	<p>Measures <i>Access to healthy and affordable food options in vending machines</i> (presence of promotional signage on vending machines and price reduction on low fat snacks in vending machines)</p> <p>Outcome(s) Affected Vending machine sales (sales data)</p>	<p>Not Reported (for desired health outcomes)</p> <p>Net Positive for Purchasing Behavior in the Study Population (Point of Purchase Prompts)</p> <p>Point of Purchase Prompts PURCHASING BEHAVIOR: 1. Promotion of low-fat snacks was significantly and independently associated with greater low-fat snack sales ($F=3.48$, $p<0.04$). 2. The percentages of low-fat snacks sold in the no-label, label-only, and label-plus-sign conditions were 14.3, 14.5, and 15.4, respectively. Only the label-plus-sign condition differed significantly from the no-label condition. Total number of low-fat snack sales did not differ significantly by promotion condition, but the label-plus-sign condition differed significantly from the no-label condition ($p<0.05$).</p>	<p>More Evidence Needed</p> <p>Study design = Intervention evaluation</p> <p>Intervention duration = Medium</p> <p>Effect size = Not reported</p>	<p>Maintenance Not Reported</p> <p>Sampling / Representativeness Not Reported</p>

Study Description	Measures & Outcomes	Effect Size or % Change	Effectiveness	Maintenance & Representativeness
<p>Author Curran, Gittelsohn (2005); Vastine, Gittelsohn (2005) Arizona</p> <p>Design Intervention Evaluation Non-randomized trial</p> <p>Duration Medium July 2003 - June 2004</p>	<p>Measures <i>Access to healthy food options in food stores</i> (presence of posters and shelf labels prompting purchase of healthier food choices in food stores and access to healthy foods in food stores)</p> <p>Outcome(s) Affected Fidelity of implementation (process evaluation only -interviews)</p>	<p>Not Reported (for desired health outcomes)</p> <p>Point of Purchase Prompts ENVIRONMENTAL CHANGE:</p> <ol style="list-style-type: none"> 1. At the store (institutional) level, the Apache Health Stores (AHS) intervention was implemented with a high level of reach. All 11 stores participated. 2. The intervention achieved a moderate to high level of fidelity (which improved from one phase to the next) in terms of promoting food availability, appropriate shelf labeling, and the presence of posters and educational displays. 3. The availability of the minimum standard of promoted foods was 78%. Excluding phase 6, the availability of all possible and minimum standard promoted food items increased from 31 to 100% and 71 to 100%, respectively. 4. Shelf labels were beneath the appropriate food items 91% of the time. Posters were present and visible 82% of the time. From phases 2-4, educational displays were present in the stores 73% of the time. 5. At the mass media (community) level, the AHS intervention was implemented with a low to moderate degree of fidelity and dose. Newspaper cartoons appeared at least once per phase 58% of the time and the radio announcement appeared only 42% of the time. 6. At the customer (individual) level, the AHS intervention was implemented with a high reach and dose. Satisfaction scores for the cooking demonstrations and taste tests were high. 	<p>More Evidence Needed</p> <p>Study design = Intervention evaluation</p> <p>Intervention duration = Medium</p> <p>Effect size = Not reported</p>	<p>Maintenance Not Applicable - only process evaluation results reported</p> <p>Sampling / Representativeness Not Reported</p>
International				
<p>Author Steenhuis, Van Assema (2004) Netherlands</p> <p>Design Intervention Evaluation Group randomized trial</p> <p>Duration Medium 6 months</p>	<p>Measures <i>Access to healthy food options in food stores</i> (presence of shelf labels identifying low-fat food options in supermarkets)</p> <p>Outcome(s) Affected Dietary consumption of fat (food frequency questionnaire)</p>	<p>Net Neutral for Nutrition in the Study Population (Point of Purchase Prompts)</p> <p>Point of Purchase Prompts NUTRITION:</p> <ol style="list-style-type: none"> 1. Using the supermarkets as the unit of analysis (n=13), mean fat consumption decreased 0.4 fat points in the education plus labeling group and 0.3 points in the educational only and control groups at first posttest (2 months after the start of the intervention). Analyses of covariance did not show a significant difference between groups with respect to posttest, correcting for baseline consumption (p>0.64 for all). 2. Regression analyses with the individual as unit of analysis (n=2,203) revealed no significant difference between the groups with respect to the first posttest, correcting for baseline consumption (p>0.53). 3. Looking at results after the second posttest (6 months after the start of the intervention), mean fat intake was 19.4 (education plus labeling group), 20.0 (education only group) and 19.3 (control group). Both the analyses with individuals and supermarkets as the unit of analysis did not show a significant difference between the groups with respect to fat intake at the second posttest (p>0.28 for all). 	<p>Not Effective for Nutrition in the Study Population</p> <p>Study design = Intervention evaluation</p> <p>Intervention duration = Medium</p> <p>Effect size = Net neutral for nutrition in the study population</p>	<p>Maintenance Not Reported</p> <p>Sampling / Representativeness Not Reported</p>

IMPACT TABLES

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
United States						
<p>Author Schwartz (2007) Connecticut</p>	<p>Participation/ Potential Exposure Participation = Not Reported Exposure = Low All children purchasing school lunches were exposed to the intervention. The food service director reported that on average 50% of children buy lunch at each of the two schools.</p> <p>High-Risk Population Low 5-10 year olds 11% racial/ethnic populations; fewer than 10% of students were eligible for free or reduced price lunch</p>	<p>Representative Potential Population Reach Not Reported More Evidence Needed Participation = Not reported Exposure = Low Representativeness = Not reported</p> <p>Potential High Risk Population Reach More Evidence Needed High-risk populations = Low Representativeness = Not reported</p>	<p>Intervention Components Simple Verbal prompts at the point of purchase for fruit and juice (F&J)</p> <p>Feasibility Intervention Feasibility = High Policy Feasibility = High Intervention activities: Verbal prompts to purchase fruit and juice Specialized expertise: Not reported Resources needed: Schools, school personnel (including school administrators, superintendent, cafeteria workers) Costs: Not reported</p> <p>Implementation Complexity Low Intervention components = Simple Feasibility = High</p>	<p>Population Impact More Evidence Needed Effectiveness = Effective for nutrition in the study population Potential population reach = More evidence needed Implementation complexity = Low</p> <p>High-risk Population Impact More Evidence Needed Effectiveness for high-risk populations = Not reported Potential high-risk population reach = More evidence needed Implementation complexity = Low</p> <p>Sustainability Not Reported</p>	<p>Not Reported</p>	<p>Not Reported</p>

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
<p>Author Blom-Hoffman (2008) Massachusetts</p>	<p>Participation/Potential Exposure Participation = Not Reported Exposure = Low Target population = Kindergarden through third grade children All children in the kindergarden and first-grade classes received the intervention. All children in the elementary schools were exposed to the point-of-purchase posters and school-wide announcements.</p> <p>High-Risk Population Not Reported (for intervention population) Urban 5-10 year olds Intervention group: 94% received free or reduced price lunch, 97% racial/ethnic populations (evaluation sample) Control group: 88% received free or reduced price lunch, 96% racial/ethnic populations (evaluation sample)</p>	<p>Representative Not Reported</p> <p>Potential Population Reach More Evidence Needed Participation = Not reported Exposure = Low Representativeness = Not reported</p> <p>Potential High Risk Population Reach More Evidence Needed High-risk population = Not reported Representativeness = Not reported</p>	<p>Intervention Components Complex Fruit and vegetable posters located at the point-of-purchase area in school cafeterias</p> <p><u>COMPLEX:</u> 1. School-wide fruit and vegetable of the day announcements 2. Classroom fruit and vegetable of the day posters 3. Dole CD-ROM used in classrooms to provide role modeling from animated characters 4. Lunch aides provided stickers to students "caught" eating fruit and vegetables 5. Six take-home activity books and assignments (to provide parents with consistent, simple messages and provide context for parents and children to discuss information through shared book reading)</p> <p>Feasibility Intervention Feasibility = High Policy Feasibility = High Intervention activities: Fruit and vegetable point-of-purchase posters, school-wide fruit and vegetable of the day announcements, classroom fruit and vegetable posters, CD-ROM educational curriculum in classrooms, stickers provided to students "caught" eating fruits and vegetables, take-home activities Specialized expertise: Not reported Resources needed: School staff (teachers, lunch aides, principal), Dole CD-ROM, posters, activity books, stickers, children's books Costs: Not reported</p> <p>Implementation Complexity High Intervention components = Complex Feasibility = High</p>	<p>Population Impact More Evidence Needed Effectiveness = More evidence needed Potential population reach = More evidence needed Implementation complexity = High</p> <p>High-risk Population Impact More Evidence Needed Effectiveness for high-risk populations = Not reported Potential high-risk population reach = More evidence needed Implementation complexity = High</p> <p>Sustainability Not Reported</p>	<p>Not Reported</p>	<p>1. Teachers reported that the program made them more aware of their own fruit and vegetable consumption (mean= 4.85, SD=1.63) and helped them eat more fruit and vegetables (mean= 4.69, SD=1.60).</p>

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
<p>Author Perry, Bishop (2004) Minnesota</p>	<p>Participation/Potential Exposure Participation = Not Reported Exposure = High</p> <p>26 schools from one large school district in the Twin Cities metropolitan area of Minnesota were included in the intervention. 13 schools received the intervention and 13 served as the delayed-program group and received training and materials at the end of the active study phase.</p> <p>High-Risk Population Not Reported (for intervention population) 5-10 year olds</p>	<p>Representative High 13 schools were exposed.</p> <p>Potential Population Reach High Participation = Not reported Exposure = High Representativeness = High</p> <p>Potential High Risk Population Reach More Evidence Needed High-risk population = Not reported Representativeness = High</p>	<p>Intervention Components Multi-Component Addition of verbal prompt in the school lunch line</p> <p>MULTI-COMPONENT: 1. School policy adding an additional serving of fruit and/or vegetable in the lunch line and snack cart</p> <p>COMPLEX: 1. 2 week kick-off campaign featuring life size fruit and vegetable characters on posters in cafeteria 2. Monthly samplings of fruits and vegetables 3. Annual challenge week competition encouraging students to eat 3 servings of fruits and/or vegetables per day during lunch 4. Theater production regarding fruit and vegetable consumption</p> <p>Feasibility Intervention Feasibility = Low Policy Feasibility = High</p> <p>Intervention activities: School lunch changes, promotional activities, monthly sampling, challenge week, theater production</p> <p>Specialized expertise: 1-day training for school food service staff and cook managers; monthly meetings (year 1) and quarterly meetings (year 2) with cook managers</p> <p>Resources needed: Funding for additional fruit and vegetables (lunch and monthly samplings), posters, incentives, funding and personnel for trainings, materials for theater production</p> <p>Cost: Not reported</p> <p>Implementation Complexity High Intervention components= Multi-component Feasibility = High</p>	<p>Population Impact High Impact for Nutrition in the Study Population Effectiveness = Effective for nutrition in the study population Potential population reach = High Implementation complexity = High</p> <p>High-risk Population Impact More Evidence Needed Effectiveness for high-risk populations = Not reported Potential high-risk population reach = More evidence needed Implementation complexity = High</p> <p>Sustainability Not Reported</p>	<p>School Food and Beverage Policies <u>NUTRITION:</u> 1. The number of fruits and vegetables on the snack cart was associated with increased fruit and vegetable consumption from baseline to follow-up (R2= 0.45; regression coefficient= 0.53, p=0.001). <u>ENVIRONMENT CHANGE:</u> 2. Intervention schools provided more fruits and vegetables to choose from (mean= 4.37 vs. mean= 3.89, p=0.00) than control schools.</p>	<p>Not Reported</p>

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
<p>Author Horgen, Brownell (2002) Location not reported</p>	<p>Participation/Potential Exposure Participation = Not Reported Exposure = High Approximately 225-275 customers patronized the restaurant daily. The restaurant served a varying clientele but did have a substantial base of regular (i.e., weekly) customers.</p> <p>High-Risk Population Low The restaurant was located in a relatively affluent area of a city of about 250,000 people. The majority of customers represented a Caucasian, upper-middle-class socioeconomic group</p>	<p>Representative Not Reported</p> <p>Potential Population Reach More Evidence Needed Participation = Not reported Exposure = High Representativeness = Not reported</p> <p>Potential High Risk Population Reach More Evidence Needed High-risk population = Low Representativeness = Not reported</p>	<p>Intervention Components Multi-Component Point of purchase messages identifying healthy food choices in restaurants</p> <p>MULTI-COMPONENT: 1. Prices of healthy food lowered by 20%-30% in restaurants</p> <p>Feasibility Intervention Feasibility = Low Policy Feasibility = High Intervention activities: Menu labels identifying healthy food choices and lower prices for healthy food items Specialized expertise: Not reported Resources needed: Point of purchase messages and related materials; funds to compensate restaurant for the price reductions; personnel to train restaurant staff Costs: Not reported</p> <p>Implementation Complexity High Intervention components = Multi-component Feasibility = High</p>	<p>Population Impact More Evidence Needed Effectiveness = More evidence needed Potential population reach = More evidence needed Implementation complexity = High</p> <p>High-risk Population Impact More Evidence Needed Effectiveness for high-risk populations = Not reported Potential high-risk population reach = More evidence needed Implementation complexity = High</p> <p>Sustainability Not Reported</p>	<p>Food Pricing (Note: Period 1 = Initial baseline; Period 2 = Price reduction; Period 3 = interim baseline; Period 4 = Point of purchase messages; Period 5 = Point of purchase messages + price reduction; Period 6 = Final baseline) NUTRITION: 1. For target items, the effect size of period on sales was 0.39, indicating that variability in sales attributable to period was 39%. For control items, 6% of the variability in sales was attributable to period [the sales by period interaction was significant (F(5,796)=10.69, p<0.001)] 2. Sales of target items varied based on intervention period (F(5, 398)=22.98, p<0.001). Sales increased during intervention periods and decreased during baseline periods. 3. The price decrease intervention significantly increased sales for each target food item above the initial baseline: chicken sandwich [from mean= 1.81 (SD=1.36) to 12.90 (SD=5.71), p<0.0001], chicken salad [from mean= 2.71 (SD=2.17) to 6.24 (SD=2.43), p<0.0001], soup cup (from mean= 6.71 (SD=3.20) to 15.24 (SD=5.23), p<0.0001) and soup bowl (from mean= 3.24 (SD=1.95) to 8.33 (SD=4.15), p<0.0001). 4. Average sales of all food items during period 3 were lower than those during period 2; differences were significant for the chicken salad and chicken sandwich, p<0.0001. 5. During period 5, sales of the chicken sandwich and chicken salad were significantly higher than period 1 (p<0.0001 and p<0.05, respectively) and period 3 (p<0.0001 for both), but not period 4. Soup cup and soup bowl sales were significantly higher than period 1 sales (p<0.0001) but not period 3 or 4. 6. Average sales of all items decreased in period 6, and were not significantly different than sales during period 1 (except for soup cup sales, p<0.05). 7. Sales of target items during period 2 were significantly higher than those during period 4 for the chicken sandwich (p<0.001) and the chicken salad (p<0.05). For all foods, sales were higher during the price reduction than the point of purchase message period. 8. Sales during period 4 were consistently the lowest of sales during any intervention period.</p>	<p>Not Reported</p>

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
<p>Author French, Jeffery (2001) Minnesota</p>	<p>Participation/Potential Exposure Participation = Not Reported Exposure = High Anyone using vending machines was potentially exposed to the intervention.</p> <p>High-Risk Population Not Reported Adults 14-18 year olds</p>	<p>Representative Not Reported</p> <p>Potential Population Reach More Evidence Needed Participation = Not reported Exposure = High Representativeness = Not reported</p> <p>Potential High Risk Population Reach More Evidence Needed High-risk population = Not reported Representativeness = Not reported</p>	<p>Intervention Components Multi-Component</p> <p>Three levels of promotional signage examined: 1. No signs 2. Signs labeling low-fat snacks 3. Signs labeling low-fat snacks combined with signs placed on vending machines encouraging a low-fat snack choice.</p> <p>MULTI-COMPONENT: 1. Pricing strategies examined on low-fat snacks from 55 vending machines in high schools and worksites. Four levels of pricing utilized: 1. Equal price 2. 10% price reduction 3. 25% price reduction 4. 50% price reduction</p> <p>Feasibility Intervention Feasibility = High Policy Feasibility = High Intervention activities: Price changes, promotional strategies Specialized expertise: Not reported Resources needed: Vending machines, promotion signage, vending route drivers, low-fat snacks Costs: Not reported</p> <p>Implementation Complexity High Intervention components = Multi-component Feasibility = High</p>	<p>Population Impact More Evidence Needed Effectiveness = More evidence needed Potential population reach = More evidence needed Implementation complexity = High</p> <p>High-risk Population Impact More Evidence Needed Effectiveness for high-risk populations = Not reported Potential high-risk population reach = More evidence needed Implementation complexity = High</p> <p>Sustainability Not Reported</p>	<p>Food Pricing <u>NUTRITION:</u> 1. Price reduction was significantly associated with percentage of low-fat snack sales (F=156.89, p<0.001). Price reductions of 50%, 25%, and 10% were associated with increases in low-fat snack sales of 93%, 39%, and 9%, respectively. 2. The total number of low-fat snack sales was significantly different by each price reduction condition (F=96.98, p<0.001), but the low-fat snack sales in the 10% price reduction did not differ significantly from the equal price condition. 3. Price reductions of 25% and 50% were associated with significant increases in the absolute number of low-fat snacks sold relative to the equal price and 10% price reduction conditions (p<0.05). 4. The total number of low-fat snacks sold differed significantly between the 25% and 50% price reduction conditions (post hoc comparisons (p<0.05). 5. There was a significant interaction between setting (school or worksite) and price reduction (F=13.9, p<0.0001). The size of the increase in the number of low-fat snack sales in the 50% price reduction condition was slightly larger at schools than worksites.</p>	<p>1. Average profits were not affected by the vending machine pricing strategies.</p>

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
<p>Author Curran, Gittelsohn (2005); Vastine, Gittelsohn, (2005) Arizona</p>	<p>Participation/Potential Exposure Participation = Not Reported Exposure = Low Target population = All residents on the 2 Apache reservations Patrons living close to or choosing to shop at the stores were exposed to the intervention.</p> <p>High-Risk Population High 100% American Indian Approximately 21,500 people live on the 2 reservations</p>	<p>Representative Not Reported</p> <p>Potential Population Reach More Evidence Needed Participation = Not reported Exposure = Low Representativeness = Not reported</p> <p>Potential High Risk Population Reach More Evidence Needed High-risk population = High Representativeness = Not reported</p>	<p>Intervention Components Complex</p> <p>Apache Health Stores (AHS) intervention – Shelf labels and posters promoted the availability of healthy foods in reservation food stores increasing availability of healthy foods in stores on the White Mountain and San Carlos Apache reservations</p> <p>Six intervention phases: Phase 1 - consume healthier snacks; Phase 2 - consume cereals lower in sugar and higher in fiber; Phase 3 - use cooking spray; Phase 4 - choose pork and beans instead of regular chili; Phase 5 - choose water over soda or diet soda over regular soda; Phase 6 - eat fruits and vegetables for snacks.</p> <p><u>COMPLEX:</u> 1. Cooking demonstrations and taste tests held 2-4 times at each intervention store. 2. Mass media strategies with newspaper cartoons & radio announcements</p> <p>Feasibility Intervention Feasibility = High Policy Feasibility = High</p> <p>Intervention activities: Shelf-labels promoting healthy foods, posters in the food stores, increased availability of healthy foods, cooking demonstrations/taste tests, mass media promotion</p> <p>Specialized expertise: Not reported</p> <p>Resources needed: New foods for the store food promotion program, promotional materials (posters, media announcements), cooking demonstrations and taste test materials</p> <p>Costs: Not reported</p> <p>Implementation Complexity High Intervention components = Complex Feasibility = High</p>	<p>Population Impact More Evidence Needed Effectiveness = Not reported for general population Potential population reach = More evidence needed Implementation complexity = High</p> <p>High-risk Population Impact More Evidence Needed Effectiveness = More evidence needed Potential high-risk population reach = More evidence needed Implementation complexity = High</p> <p>Sustainability Not Reported</p>	<p>Not Reported</p>	<p>Not Reported</p>

Study Description	Population	Reach	Intervention	Impact & Sustainability	Other Results	Related Benefits & Consequences
International						
<p>Author Steenhuis, Van Assema (2004) Netherlands</p>	<p>Participation/Potential Exposure Participation = Not Reported Exposure = Low Target population = Dutch citizens Residents living close to or choosing to visit the supermarkets were exposed to the intervention.</p> <p>High-Risk Population Not Reported (for intervention population) Adults Mean age=46 years 80% Female</p>	<p>Representative Not Reported</p> <p>Potential Population Reach More Evidence Needed Participation = Not reported Exposure = Low Representativeness = Not reported</p> <p>Potential High Risk Population Reach More Evidence Needed High-risk populations = Not reported Representativeness = Not reported</p>	<p>Intervention Components Complex Availability of shelf-labels identifying low-fat food choices in supermarkets (9 low-fat food product categories labeled at stores)</p> <p><u>COMPLEX:</u> 1. Educational program including posters with information about the program, a brochure about healthy eating, recipe cards, and a self-help manual. Optional elements included badges for store personnel, a healthy nutrition contest and order-separator bars at the cash register.</p> <p>Feasibility Intervention Feasibility = High Policy Feasibility = High Intervention activities: Shelf-labels identifying low-fat food choices, posters, brochures about healthy eating, recipe cards, self-help manual, options elements (badges for store personnel, contest, order-separator bars) Specialized expertise: Not reported Resources needed: Posters, brochures, recipes, self-help manual, badges for supermarket staff, materials for healthy nutrition contest, order-separator bars, shelf labels, supermarkets Costs: Not reported</p> <p>Implementation Complexity High Intervention components = Complex Feasibility = High</p>	<p>Population Impact More Evidence Needed Effectiveness = Not effective for nutrition in the study population Potential population reach = More evidence needed Implementation complexity = High</p> <p>High-risk Population Impact More Evidence Needed Effectiveness for high-risk populations = Not reported Potential high-risk population reach = More evidence needed Implementation complexity = High</p> <p>Sustainability Not Reported</p>	<p>Not Reported</p>	<p>1. No significant differences were found between intervention groups on post-test scores for attitudes, social influences, and self-efficacy, corrected for baseline scores, with both individuals and supermarkets as the unit of analysis ($p > 0.15$ for all).</p> <p>2. More than half of the respondents reported that they had looked at their own fat consumption level as a result of the intervention (52% in the education plus labeling group and 60% in the education only group), and almost half of the respondents reported their intention to follow one or more suggestions given in the program (40% in the education plus labeling group and 45% in the education only group). No significant differences existed between the two intervention groups.</p>