

Nutrition 1

Bibliographic information	Review strategy	Summary of evidence of effectiveness	Additional information
<p>Title: An intervention portfolio to promote fruit and vegetable consumption.</p> <p>Authors: Miller M and Stafford H.</p> <p>Date: 2000</p> <p>Type of review: Intervention portfolio – review of interventions.</p> <p>Number of studies included: 74 with some emanating from the same research study.</p> <p>Publication details: National Public Health Partnership, Melbourne.</p>	<p>Review question: What are the results and processes of interventions used to promote fruit and vegetable intake?</p> <p>Intervention(s): Interventions focussing on policy interventions, program interventions and infrastructure support. Best practice interventions for each of the outcome areas identified. Expert opinion used in addition to published evidence. A settings approach was used. Settings included social marketing, supermarkets, schools, work-sites, food service, community, health sector and food supply.</p> <p>Inclusion criteria (relevance): Studies conducted in Australia and overseas. Focus of studies was policy, program or infrastructure support.</p> <p>Inclusion criteria (quality): Considers effectiveness, selectivity, time, feasibility and acceptability.</p>	<p>Outcomes measured: Nutrition knowledge, beliefs and attitudes. Fruit and vegetable purchase and consumption.</p> <p>Effect size: <u>Social marketing:</u> Relatively low mass media investment can show significant benefit in increasing the awareness and beliefs around fruit and vegetable consumption. The success of the ‘5 a day’ campaign in the USA and ‘fruit n veg with every meal’ campaign in Australia is noted. It is recommended that programs should be based on theoretical models of behaviour change. <u>Supermarket interventions:</u> Behaviour change limited or not identified. Any changes were identified as short-lived. ‘2 fruit 5 veg’ campaign run in Australia in the early 1990s mentioned. Effectiveness is dependent on segmentation of shoppers according to need. Could work with supermarkets in developing store promotion policy (promotion of fresh produce, meal solutions with recipes etc). <u>Worksite interventions:</u> Limited number of interventions identified. Those included identified increases in fruit and vegetable intake of between 0.1-0.5 serves/day. Authors suggest this is likely to have benefits at the population level.</p>	<p>Disadvantaged groups: Low SES and ethnic/cultural groups.</p> <p>Economic evaluation: Provided for each individual study where available. Often not provided. Cost of best practice not discussed.</p> <p>Criteria for evaluating evidence: Effectiveness, selectivity, time, feasibility and acceptability.</p> <p>Research gaps identified: <u>Social marketing:</u> Need to explore psychosocial predictors of fruit and vegetable consumption. Also need to investigate consumption of fruit and vegetables separately. Standard, validated methods required. <u>Supermarket interventions:</u> Authors suggest independent group may sell promotion services to supermarkets. Value of computer-based promotions requires further investigation. <u>Worksite interventions:</u> No work yet published in Australia. Authors acknowledge the importance of identifying methods to increase the appeal and availability of fruit and vegetables to workers. <u>Food service interventions:</u> Not discussed.</p>

		<p>Food service interventions: Price reductions of 50% can result in increases in purchases of between 2 and 4 fold. Collaboration and programs based on behaviour change models appear to be effective.</p> <p>Effect sustainability: <u>Social marketing</u> – Interventions need more investment to show long-term outcomes. Changes in consumption over a 2-year period have been achieved in campaigns with large budgets. <u>Supermarket interventions:</u> Immediate effects noted. Would need to develop strategies for long-term support. <u>Workplace interventions:</u> Not discussed. <u>Food service interventions:</u> Purchases can return to baseline levels within 3 weeks after the intervention.</p> <p>Conclusion: Authors provide no concluding remarks.</p>	<p>Comments: General need to develop coalitions. <u>Social marketing:</u> value of counter advertising, advocacy and community mobilisation highlighted. Need for commodity marketing recognised.</p>
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Nutrition 2

Bibliographic information	Review strategy	Summary of evidence of effectiveness	Additional information
<p>Title: Nutrition and physical activity interventions to reduce cardiovascular disease risk in health care settings: a quantitative review with a focus on women.</p> <p>Authors: S Wilcox, D Parra-Medina, M Thompson-Robinson and J Will.</p> <p>Date: 2001</p> <p>Type of review: Quantitative review.</p> <p>Number of studies included: 32, 13 diet-only interventions, 8 combined diet and physical activity interventions</p> <p>Publication details: Nutrition Reviews 2001; 59 (7): 197-215.</p>	<p>Review question: To assess the impact of diet and physical activity interventions delivered in health care settings on cardiovascular disease risk factors.</p> <p>Intervention(s): Diet and physical activity interventions delivered in health care settings. Commonly, brief behavioural counselling by a health care provider, together with printed educational materials, mailings and telephone contacts. The most common theoretical models used were Social Cognitive Theory, the Transtheoretical model, and behaviour modification principles.</p> <p>Inclusion criteria (relevance): Trials conducted in health care settings that investigated the effects of physical activity or dietary advice on CVD risk factors. Trials that focussed exclusively on women or that included women.</p> <p>Inclusion criteria (design/quality): Inclusion of a control group or minimum intervention group. Most studies were RCTs.</p> <p>Exclusion: Studies that focused on pharmacotherapy.</p>	<p>Outcomes measured: Dietary related outcome included dietary fat, caloric intake, blood pressure, serum cholesterol, BMI, weight.</p> <p>Effect size/Results: The average effect of treatment was generally small, but statistically significant for BMI or body weight, dietary fat, SBP, DBP, total serum cholesterol, and LDL. Insignificant changes were found in energy intake, general dietary factors, dietary fibre and HDL.</p> <p>Many studies that produced larger effects included tailoring to stage of readiness for change or to ethnic group, and follow-up contacts.</p> <p>Effect sustainability: Up to 36 months, most commonly 12-month follow-up.</p> <p>Applicability:</p> <ul style="list-style-type: none"> ▪ Populations: Interventions tended to produce larger effects in samples with a mean age of >50 years. Interventions in US and Europe. Focus on women and women of colour in US. ▪ Program: there was considerable program variability. ▪ Comments on transferability: the authors recommended that 	<p>Disadvantaged groups: Included a focus on women, persons of colour, and individuals of low socio-economic status.</p> <p>Economic evaluation: Not included.</p> <p>Criteria for evaluating evidence: Not applicable.</p> <p>Research gaps identified: Standardisation of outcome measures, particularly physical activity.</p> <p>Further trials in health care settings targeting disadvantaged groups.</p> <p>Comments: The relatively small effect size needs to be interpreted within the context of the wide reach of these clinical settings.</p> <p>Two large studies that were culturally tailored and designed for individuals of low socio-economic status produced significant effects.</p>

		<p>examining individual studies to determine if an intervention is likely to be feasible and effective in a particular setting.</p> <p>Conclusion: The authors concluded that, on average, these interventions were effective in reducing CVD risk factors. Although effects were modest in size, they are likely to be of significance to public health due to wide reach, particularly among persons of colour and low socio-economic status.</p>	
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Nutrition 3

Bibliographic information	Review strategy	Summary of evidence of effectiveness	Additional information
<p>Title: Dietary interventions to prevent disease</p> <p>Authors: DJ Bowen and SAA Beresford.</p> <p>Date: 2002</p> <p>Type of review: Systematic review.</p> <p>Number of studies included: 80</p> <p>Publication details: Annual Reviews 2002; 23: 255-286</p>	<p>Review question: Not clearly articulated. Focus of review was to review articles that evaluated methods to change key dietary habits including fat intake, fibre intake and consumption of fruits and vegetables.</p> <p>Intervention(s): Review is divided into 'channels' of intervention; individual randomised trials, studies based in families, interventions delivered through providers, interventions in other community channels, interventions based in worksites, point-of purchase interventions and community-wide interventions.</p> <p>Inclusion criteria (relevance): English language studies published between 1966 and April 2001 focussing on healthy free-living adults.</p> <p>Inclusion criteria (design/quality): Intervention studies reporting on at least one dietary intake or dietary behaviour outcome (fat, fruits and vegetables or fibre). Review not limited by study quality.</p> <p>Exclusion: Studies where weight loss was communicated to participants.</p>	<p>Outcomes measured: Changes in key dietary habits; fat, fibre and fruit and vegetable intake.</p> <p>Effect size: Effects are very difficult to determine given the lack of data provided in this review. In addition, methods of measurement are not always clearly described.</p> <p>Some primary care (GP) strategies and other individual strategies were effective and others produced no change. Many interventions have been undertaken in worksites and authors note that consistent changes were observed. However, the size of the effect was often small and long term follow-up was generally not reported.</p> <p>While interventions in religious settings have noted some improvement in dietary intake, authors suggest that findings may not be applicable to other groups. Point-of-purchase interventions in supermarkets produced limited effect on behaviour.</p> <p>Community-wide strategies (often health campaigns), while sometimes effective, have not been compared to control groups. The degree to which the effect is attributable to the intervention is therefore limited.</p> <p>Effect sustainability: Not always</p>	<p>Disadvantaged groups: One study included participants from a low-income neighbourhood. Results of this study are not discussed.</p> <p>Economic evaluation: Not reported.</p> <p>Criteria for evaluating evidence: Not provided.</p> <p>Research gaps identified: Lack of scientific rigour, control groups in community-wide interventions, lack of precision in dietary measures, limited follow-up. Authors also acknowledge that innovative methods of interventions need to be developed, particularly for use in communities.</p>

		<p>reported. Follow-up was generally limited to less than one year. Some long term follow-up reported.</p> <p>Other effects: Intensive intervention studies (eg MRFIT) tended to recruit selectively and set high goals for their participants. This often results in larger dietary intake effects. However, those studies targeting broader population groups generally produced smaller effects.</p> <p>Conclusion: Much of the research has been conducted with individuals and in workplaces. Authors report that improvements in dietary intake were identified. Community-based interventions, while sometimes effective require further investigation.</p>	
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Nutrition 4

Bibliographic information	Review strategy	Summary of evidence of effectiveness	Additional information
<p>Title: A systematic review of the effectiveness of promoting lifestyle change in general practice.</p> <p>Authors: R Ashenden, C Silargy, D Weller.</p> <p>Date: 1997</p> <p>Type of review: Systematic review - meta-analysis for smoking advice.</p> <p>Number of studies included: 37 - 10 of which related to dietary advice, and 6 of these examined the effectiveness of dietary advice only, while four addressed diet as part of a broader lifestyle intervention.</p> <p>Publication details: Family Practice 1997; 14: 160-175.</p>	<p>Review objective: To examine the effectiveness of lifestyle advice provided by GPs in changing patient behaviour in relation to smoking, alcohol consumption, diet and exercise.</p> <p>Intervention(s): Single consultation or intensive lifestyle advice provided in a general practice setting. Advice included written and/or verbal information, provided by a GP, nurse, dietitian or health visitor.</p> <p>Inclusion criteria (relevance): English language reports of trials which investigated the effectiveness of lifestyle advice provided in a general practice setting.</p> <p>Inclusion criteria (design/quality): random allocation of subjects to experimental and comparison conditions. Quality was assessed using a simplified scheme described by Chalmers et al (1985) which sets out three criteria to assess potential sources of significant bias.</p>	<p>Outcomes measured: Changes in fat and fibre intake, lipid and blood pressure levels, and in body weight.</p> <p>Effect size: Interpretation of the results was difficult due to considerable program, methodological and outcome variability. Some studies reported effects on dietary self-reports and certain biological measurements, but the results varied widely and meaningful conclusions were difficult to draw.</p> <p>Effect sustainability: Trials were included irrespective of follow-up duration. Subjects were followed up at least 1 year after the intervention in 7 of the 10 studies.</p> <p>Conclusion: The authors reported that there is clear evidence that GP-based lifestyle advice programs have a modest and variable effect on lifestyle change (smoking, drinking, diet and exercise). For this change to translate into a useful public health effect, either a greater proportion of GPs need to offer lifestyle advice routinely and repeatedly, or GPs should direct their efforts towards high-risk groups where the potential for substantial change may be greater.</p>	<p>Disadvantaged groups: Not reported.</p> <p>Economic evaluation: Not reported.</p> <p>Criteria for evaluating evidence: Not applicable.</p> <p>Research gaps identified: Not reported.</p> <p>Comments: The authors reported that barriers to GPs providing health promotion advice to their patients include limited time, remuneration, and the commonly held perception among doctors that providing lifestyle advice is not effective in changing patient behaviour.</p>

Nutrition 5: This study includes a review of evidence regarding the impact of environmental factors on eating and physical activity, as well as evidence of the effectiveness of community-wide interventions targeting dietary change. Only evidence related to community-wide strategies to promote healthy eating is included in this table.

Bibliographic information	Review strategy	Summary of evidence of effectiveness	Additional information
<p>Title: Environmental influences on eating and physical activity.</p> <p>Authors: SA French, M Story, RW Jeffery.</p> <p>Date: 2001.</p> <p>Type of review: Narrative review.</p> <p>Number of studies included: Not applicable.</p> <p>Publication details: Annual Reviews of Public Health 2001; 22: 309-35.</p>	<p>Review question: To review what is known about environmental influences on eating behaviours.</p> <p>Intervention(s): National mass media campaigns to promote healthy eating (Food Guide Pyramid, "5-A-Day for Better Health", Nutrition Labelling and Education), food pricing.</p> <p>Inclusion criteria (relevance): Not applicable.</p> <p>Inclusion criteria (quality): Not applicable.</p> <p>Exclusion: Not applicable.</p>	<p>Outcomes measured: Awareness, fruit and vegetable consumption, dietary quality.</p> <p>Effect size: Evaluation data are not available on the effectiveness of the use of the Food Guide Pyramid for increasing awareness or changing eating behaviours in the population.</p> <p>National surveys found an increase in the number of US adults who believed they should eat 5 servings of fruits and vegetables per day (8% in 1991, 38% in 1997). Dietary intake survey data indicated an increase in fruit and vegetable consumption (between 23% and 32% of adults met the 5-a-day goal in 1989-1991, rising to 36% in 1994).</p> <p>No data were identified to evaluate the extent to which nutrition labels have influenced the dietary quality of the population.</p> <p>At the individual level, pricing has a strong effect on food choices. Lower pricing (10%, 25%, 50% reductions) leads to increased purchasing of low-fat snacks (9%, 39%, 93% increases) and fresh fruits and vegetables in schools and</p>	<p>Disadvantaged groups: Not reported.</p> <p>Economic evaluation: Not reported.</p> <p>Criteria for evaluating evidence: Not applicable.</p> <p>Research gaps identified: Evaluation of the effectiveness of environmental strategies to promote healthy eating.</p>

		work sites among adolescents and adults.	
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Nutrition 6

Bibliographic information	Review strategy	Summary of evidence of effectiveness	Additional information
<p>Title: Fruits and vegetables: why is it so hard to increase intakes?</p> <p>Authors: K Baghurst</p> <p>Date: 2003</p> <p>Type of review: Narrative review</p> <p>Number of studies included: Not applicable</p> <p>Publication details: Nutrition Today 2003; 38: 11-24.</p>	<p>Review question: To explore why intake of fruits and vegetables in Australia remain below recommended levels by drawing on research into the psychosocial determinants of fruit and vegetable intake.</p> <p>Intervention(s): Information, education, behavioural and promotional strategies delivered in community settings, supermarkets, work sites or mass media.</p> <p>Inclusion criteria (relevance): N/A</p> <p>Inclusion criteria (quality): N/A</p> <p>Exclusion: N/A</p>	<p>Outcomes measured: Serves of fruit and vegetables.</p> <p>Effect size/Results: Most interventions in community settings in the US showed either a modest increase in consumption of half a serving a day or less, or no reported effect.</p> <p>One study in the UK reported a mean increase in consumption of 1-2 servings (233g) following an intensive small-group educational, motivational, and behavioural strategy including monitoring for an 8-week period. However, the study recruited people (mainly women) who were already thinking about increasing their intakes.</p> <p>Point-of-sale promotions, cookery demonstrations, pricing and availability, and computerised feedback interventions have small effects at the individual level (but substantial increases in sales of selected items).</p> <p>Mass media campaigns (California's 5-A-Day for Better Health; Australia's "2-fruit 'n' 5 veg") showed impacts ranging from no overall effect up to half a serving a day.</p> <p>Effect sustainability: No long-term</p>	<p>Disadvantaged groups: One study in a remote Aboriginal community achieved an increase of about 100g/day by changing the food supply to the main store.</p> <p>Economic evaluation: Not reported.</p> <p>Criteria for evaluating evidence: Not applicable.</p> <p>Research gaps identified: Research into the psychosocial determinants of fruit and vegetable intake in various sectors of the community and trials of interventions based on this knowledge and on appropriate behaviour change models.</p> <p>Comments: The author adopted a strong individual behaviour change perspective citing studies in which psychological factors explained at least 30% of the differences in consumption, while socioeconomic factors accounted for little of the variance.</p>

		<p>follow-up.</p> <p>Other effects: Not mentioned.</p> <p>Conclusion: The authors concluded that intervention strategies that provide major and sustainable improvements in fruit and vegetable consumption have been elusive, in part because they have not been based on appropriate behavioural models.</p>	
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Nutrition 7: This individual study has been included because it constitutes one of a pair of studies assessing the effectiveness of mass media plus community programs compared with mass media only for the promotion of healthy eating. This study reports on the mass media plus community programs intervention. The following study (Nutrition 8) is the mass media only study.

Bibliographic information	Study strategy	Summary of evidence of effectiveness	Additional information
<p>Title: 1% or less: a community-based nutrition campaign.</p> <p>Authors: B Reger, MG Wootan, S Booth-Butterfield, H Smith.</p> <p>Date: 1998.</p> <p>Type of review: Individual study.</p> <p>Number of studies included: N/A</p> <p>Publication details: Public Health Reports 1998; 113:410-420.</p>	<p>Study question: The study evaluated the impact of the 1% Or Less campaign in Clarksburg/Bridgeport, West Virginia.</p> <p>Intervention(s): Mass media campaign (paid advertising and public relations) plus educational programs at supermarkets, schools and worksites.</p> <p>Inclusion criteria (relevance): N/A</p> <p>Inclusion criteria (quality): The study was a quasi-experimental, pre-post, non-equivalent control group design.</p> <p>Exclusion: N/A</p>	<p>Outcomes measured: Changes in supermarket milk sales, self-reported changes in milk consumption.</p> <p>Effect size: The combined market share of low fat milks increased from 18% of milk sales at baseline to 41% in the month after the campaign. Overall milk sales increased. No changes occurred in the comparison city.</p> <p>36.4% of whole milk drinkers reported switching to lower fat milk after the campaign, compared with 15.6% in the comparison community.</p> <p>Effect sustainability: Six months after the campaign low-fat milk sales in the intervention cities averaged 35% of milk sales.</p> <p>Other effects: Not mentioned.</p> <p>Conclusion: An intensive media campaign together with community educational programs can increase the market share of low-fat milk.</p>	<p>Disadvantaged groups: Not reported.</p> <p>Economic evaluation: The community-based education components cost approximately \$36,000 compared with \$24,000 for advertisement placement costs. Production costs were not included as campaign was developed nationally. Advertising placement cost 96 cents per resident (25,000) or approximately 9 cents per person reached by the television stations used by the campaign (280,000).</p> <p>Criteria for evaluating evidence: N/A</p> <p>Research gaps identified: Investigation of the separate impact of each component of the overall campaign (see following table).</p>

Nutrition 8: This individual study has been included because it tests the hypothesis that mass media promotion of healthy eating can achieve behaviour change in the absence of other programming.

Bibliographic information	Study strategy	Summary of evidence of effectiveness	Additional information
<p>Title: Using mass media to promote healthy eating: a community-based demonstration project.</p> <p>Authors: B Reger, MG Wootan, S Booth-Butterfield.</p> <p>Date: 1999.</p> <p>Type of review: Individual trial.</p> <p>Number of studies included: N/A</p> <p>Publication details: Preventive Medicine 1999; 29: 414-421.</p>	<p>Study question: The study evaluated the impact of the 1% Or Less campaign in Wheeling, West Virginia.</p> <p>Intervention(s): 6-week mass media campaign involving paid advertising (television, radio, newspaper) and public relations to encourage members of the intervention community to switch from whole or 2% milk (high-fat milk) to 1% or fat-free milk (low-fat milk). The campaign was implemented in February and March of 1996.</p> <p>Inclusion criteria (relevance): N/A</p> <p>Inclusion criteria (quality): The study was a quasi-experimental, pre-post, non-equivalent control group design.</p> <p>Exclusion: N/A</p>	<p>Outcomes measured: Sales of low-fat milk in supermarkets, self-reported switching to low-fat milk.</p> <p>Effect size: In the intervention city, low-fat milk sales increased from 29% of overall milk sales before the campaign to 46% of sales in the month following the campaign. The increase was maintained at the 6-month follow-up.</p> <p>Based on survey data, 34.1% of high-fat milk drinkers reported switching to low-fat milk in the intervention community compared with 3.6% in the comparison community (P<0.0001)</p> <p>Effect sustainability: Effect was sustained at 6-month follow-up.</p> <p>Applicability: The authors had a great deal to say about lessons learned from the study and these are summarised in the footnote to this table.</p> <p>Other effects: Not mentioned.</p> <p>Conclusion: The authors concluded that a media-only strategy was sufficient to encourage a significant proportion of individuals in one community to alter the dietary habit targeted by the</p>	<p>Disadvantaged groups: Not reported.</p> <p>Economic evaluation: The total cost of implementing and evaluating the campaign was approximately US\$43,000 (including the cost of salaries, placement of advertisements, materials for educational and public relations activities, and data collection; excluding the cost of developing the campaign messages, materials or advertisements). The campaign was estimated to have cost 10 cents per person reached by the campaign.</p> <p>Criteria for evaluating evidence: N/A</p> <p>Research gaps identified: Not reported.</p> <p>Comments: This study challenged a commonly held belief among health promoters that mass media, in the absence of other community-based programs and activities, cannot produce significant and sustained behaviour change. While the study had some methodological limitations (only one intervention and one comparison community, the possibility of attrition bias and self-report bias in the population surveys), it provided some evidence that when certain criteria are</p>

		<p>intervention.</p> <p>The results compared favourably with a previous media-plus-community-programs campaign, and was delivered at less than half the cost per person reached.</p> <p>The previous community program was more labour intensive, cost more and reached less than 20% of the population (compared with 80-95% for the media campaign)</p>	<p>met (see footnote to table) media-only campaigns can change dietary behaviour.</p>
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Applicability (context, populations, program, transferability):

Program:

- Used *paid advertising* as well as public relations strategies (healthy eating campaigns rarely do this)
- Focused on a simple dietary change message (many healthy eating campaigns focus on whole diet or entire food groups)
- The potentially complex behaviour was broken into steps that were easier for consumers to understand, easier for consumers to do, and easier to communicate through mass media
- The advertisements and press materials included strongly worded messages that clearly communicated the benefits of drinking low-fat milk and the negative attributes of high-fat milk in a memorable way eg the ads compared the saturated fat content of one glass of whole milk to that of five strips of bacon)
- The hard-hitting messages were in contrast to "many public health campaigns, especially those run or funded by governments, that use mildly worded, vague messages to avoid upsetting anyone, including the food and other industries".
- The message could be easily communicated to the public - the switch to low-fat milk was promoted as an easy way to cut saturated fat intake and reduce the risk of heart disease.
- Paid advertising (in contrast to public service announcements) can be strategically placed to reach a target audience.
- The campaign received considerable publicity on television, radio and in newspapers.
- There was a strong link between milk, saturated fat, plasma LDL cholesterol levels, and CVD as a leading cause of death. For US men and women

Context:

- The relatively small city (34,000 people) has its own newspapers, and television and radio stations

Generalisability:

- A media-only approach may not be effective for some more complex nutrition messages (though thought should be given to how they can be broken down into a series of simple messages).
- The products promoted must be readily available in appropriate variety.

Nutrition 9

Bibliographic information	Review strategy	Summary of evidence of effectiveness	Additional information
<p>Title: The effectiveness of community interventions to increase fruit and vegetable consumption in people four years of age and older.</p> <p>Authors: D Ciliska, E Miles, MA O'Brien, C Turl, HH Tomasik, U Donovan, J Beyers.</p> <p>Date: 1999.</p> <p>Type of review: Systematic review</p> <p>Number of studies included: 18 reports of 15 different primary studies rated methodologically 'strong' or 'moderate' out of an initial list of 60. 5 studies related to adults, 2 of these were about worksite interventions.</p> <p>Publication details: Prepared by the Effective Public Health Practice Project for the Public Health Branch, Ontario Ministry of Health.</p>	<p>Review question: What is the effectiveness of community interventions to increase fruit and vegetable consumption in people four years of age and older? Are there differences in outcome by target group, by preparation of the intervenor, or by site, intensity, or theoretical basis of the intervention?</p> <p>Intervention(s): Mailed one-off nutrition information package within a primary care setting. Group plus individual counselling for women at increased risk for breast cancer (intensive plus regular follow-up for a total of 12 months). Multifaceted community-based heart health intervention. Worksite programs including interactive activities, self-assessment, self-help materials, posters, brochures, a media campaign, contests, point-of-sale labelling, behaviour change strategies, health fairs, taste-tests and food and cooking demonstrations.</p> <p>Inclusion criteria (relevance): Study included activities directed at and measurement of fruit and vegetable consumption.</p> <p>Inclusion criteria (quality): Studies</p>	<p>Outcomes measured: Fruit and vegetable consumption.</p> <p>Effect size: The one-off mail-out of a nutrition information package in a primary care setting had no effect on fruit and vegetable consumption.</p> <p>The group plus individual counselling for women at increased risk for breast cancer significantly increased fruit and vegetable intake (15.9% of total energy at baseline, 22% at 12 months and 23.1% at 24 months).</p> <p>In the heart health project, there was no change in the proportion of people who consumed five or more servings of fruits and vegetables per day.</p> <p>Two large worksite programs resulted in small but statistically significant increases in intake of fruits and vegetables (2.6 to 2.8 servings/day in one and an increase of 0.23 servings/day of vegetables only in the other)</p> <p>Effect sustainability: 24 months for the women's health trial.</p> <p>Other effects: Not mentioned.</p> <p>Conclusion: Less intensive</p>	<p>Disadvantaged groups: Not reported.</p> <p>Economic evaluation: Not reported.</p> <p>Criteria for evaluating evidence: N/A</p> <p>Research gaps identified: The development of tracking strategies to ensure greater follow-up of participants. The use of valid and reliable tools for measuring fruit and vegetable intake. Cost and cost-benefit analyses of large-scale nutrition interventions.</p> <p>Comments: Food messages that are general appear unlikely to change specific non-targeted behaviours such as fruit and vegetable intake. Addressing the issue of the significance of changes in fruit and vegetable consumption, the authors noted that Havas et al (1998) have argued that an increase in participants' consumption of fruits and vegetables by at least a half serving per day could, if maintained, result in an 8% lower cancer incidence rate (World Cancer Research Fund 1997).</p>

	<p>rated as 'strong' or 'moderate' according to a set of validity criteria.</p> <p>Exclusion: 'Weak' study designs according to a set of validity criteria.</p>	<p>interventions such as mailed messages and very broad community programs had no impact on fruit and vegetable intake.</p> <p>Worksite multi-pronged interventions had a small but statistically significant impact on intake.</p>	
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