

Lowered Pricing for Healthy Food

This paper is part of a series of nutrition policy profiles prepared by Prevention Institute for the Center for Health Improvement (CHI).

Background

The benefits of a diet low in fat and high in fiber and fresh fruits and vegetables in promoting health and reducing chronic disease have been well established.^{1,2} However, food choices and dietary habits are influenced not just by a consumer's knowledge, but also by a number of factors in the social and physical environment. Many food choice decisions are made at the point of purchase in grocery stores, cafeterias, and restaurants.³ Nutrition research suggests that price, in addition to factors such as taste preferences, health concerns, and habits, significantly affects dietary and purchasing habits.⁴ In a recent survey in California, about one third of individuals surveyed cited expense as a barrier to eating low-fat food and fresh fruits and vegetables.⁵ Data from other fields, such as tobacco and alcohol control, also highlight the price sensitivity of consumers, especially adolescents, who reduce their purchases when the cost of a product increases. While some research shows that low-fat diets do not have to cost more, it is more difficult to eat healthily while keeping food expenditures low when people are cooking less and purchasing more prepared, convenience, and snack foods. In addition, high-fat, high-sodium fast foods are frequently priced extremely low compared to other restaurant options.

Policy

Workplaces and institutions such as universities can adopt price reduction and increased availability policies that encourage the purchase of healthier foods.

Price reduction and availability interventions encourage positive nutrition behavior by creating opportunities for action and removing barriers to following a healthy diet.⁶ The University of Minnesota School of Public Health conducted two pilot projects to examine the role of price and variety on the consumption of health food and fruits and vegetables. In the first, the number of fruit and salad choices in a University of Minnesota office cafeteria serving about 700 employees was increased by 30 percent.⁷ Simultaneously, the price of these items was cut in half and flyers were posted alerting patrons to the changes. In another study, researchers reduced the price of low-fat vending machine snacks such as pretzels, baked potato chips, popcorn, and granola bars, and utilized bright labels to highlight these choices.^{8,9} In both studies, the researchers provided funds to the cafeteria and the vending machine operators to make up the difference between the usual selling price and the reduced price.

Effectiveness

Both interventions resulted in a significant change in the purchasing behavior of consumers and showed that price incentives and increased variety of healthy food can markedly affect food choices in various settings. In the first intervention, fruit and salad purchases increased by 300 percent when prices were cut in half.¹⁰ In the vending machine interventions, a 50 percent price

reduction led to an 80 to 93 percent increase in purchases of low-fat snacks.^{11,12} In both cases, overall purchases increased.

These results demonstrate that policies that make healthier food choices more attractive economically could be an effective strategy for promoting lower-fat foods and increasing fruit and vegetable purchases and consumption. It should be noted, however, that there are obvious challenges with implementing such policies. Either food prices must be subsidized through a mechanism that leads to lower retail prices, or there must be incentives to retailers to lower prices. Further analysis is needed to determine whether increased overall sales might subsidize price reductions.

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¹ US Department of Health and Human Services. *The Surgeon General's Report on Nutrition and Health*. Washington, DC: US Dept of Health and Human Services; 1988. DHHS (PHS) Publication No. 88-50210.

² US Department of Health and Human Services. *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. Washington, DC: US Dept of Health and Human Services; 1991. DHHS (PHS) Publication No. 91-50213.

³ Jeffery RW, French SA, Raether C, Baxter JE. An environmental intervention to increase fruit and salad purchases in a cafeteria. *Preventive Medicine*. 1994;23:788-792.

⁴ French SA, Story M, Hannan P, et al. Cognitive and demographic correlates of low-fat vending snack choices among adolescents and adults. *J Am Diet Assoc*. 1999;99:471-475.

⁵ *California Dietary Practices Survey: Overall Trends in Healthy Eating Among Adults, 1989-1997, A Call to Action, Part 2*. Sacramento, Calif: California Dept of Health Services; 1999.

⁶ Glanz K, Mullis RM. Environmental interventions to promote healthy eating: a review of models, programs, and evidence. *Health Education Quarterly*. 1988;15:395-415.

⁷ Jeffery RW, French SA, Raether C, Baxter JE. An environmental intervention to increase fruit and salad purchases in a cafeteria. *Preventive Medicine*. 1994;23:788-792.

⁸ French SA, Jeffrey RW, Story M, Hannan P, Snyder MP. A pricing strategy to promote low-fat snack choices through vending machines. *American Journal of Public Health*. 1997;87:849-851.

⁹ French SA, Jeffrey RW, Story M, et al. Pricing and promotion effects of low-fat vending snack purchases: the CHIPS study. *American Journal of Public Health*. 2001;91:112-117.

¹⁰ Jeffery RW, French SA, Raether C, Baxter JE. An environmental intervention to increase fruit and salad purchases in a cafeteria. *Preventive Medicine*. 1994;23:788-792.

¹¹ French SA, Jeffrey RW, Story M, Hannan P, Snyder MP. A pricing strategy to promote low-fat snack choices through vending machines. *American Journal of Public Health*. 1997;87:849-851.

¹² French SA, Jeffrey RW, Story M, et al. Pricing and promotion effects of low-fat vending snack purchases: the CHIPS study. *American Journal of Public Health*. 2001;91:112-117.