



Healthy Vending Machines

Rationale for Healthy Vending in Youth Sites

Nationally, schools come into contact with over 95 percent of all children ages 5-17, and meals and snacks served at school provide one-third to half of many students' daily nutritional needs. Schools are seen as a "hands-on learning environment" for good nutrition and provide many opportunities to engage students in healthy eating.

The risk factors for obesity are complex and multifaceted. Vending machines are not solely to blame for obese and overweight children. However, vending machines are prevalent in schools and provide frequent access to foods of minimal nutritional value.

95% of senior high schools and **62%** of middle/junior high schools have one or more vending machines on campus.

Fats and sugars account for **40%** of children's daily energy intake.

51% of children eat less than one serving of fruit a day and **29%** eat less than one serving a day of vegetables that are not fried.

85% of adolescent females do not consume enough calcium.

During the last 25 years, consumption of milk, the largest source of calcium, has decreased **36%** among adolescent females.

Additionally, from 1978 to 1998, average daily soft drink consumption among ado-

lescent girls, increased from **6 oz.** to **11 oz.**, and from **7 oz.** to **19 oz.** among adolescent boys.

Inadequate intakes of calcium during adolescence **jeopardize** the accumulation of maximal peak bone mass at a critical time in life.



Overweight is now the most common medical condition of childhood, with the prevalence having **doubled** over the past twenty years.

A recent study found that severely overweight children **miss four times as much school** as normal weight kids and often suffer from depression, anxiety and isolation from their peers.

Rationale for Healthy Vending in Worksites

Working adults are overweight and obese, irrespective of race and gender.

Sixty percent of Latinos and African American with less than a high school education in California are overweight and/or obese.

Unhealthy diets and inactivity cost the California economy 21.7 billion dol-



lars in 2000, with a projected cost of **more than \$28 billion** in 2005.

Poor diet, obesity and physical inactivity may be responsible for **one out of every three cancer deaths**, just as many as smoking.

California adults consume an average of **4.1 daily servings of fruit and vegetables**, which is far

below the recommended daily amount of 7 to 13 servings.

Sixty percent of workers report that fruits and vegetables are hard to get at work.

Seventy percent of Californians are currently employed.

Special emphasis has been in outreaching to certain minority groups such as African Americans, Latinos and low-income employees.



Funded by the USDA Food Stamp Program, an equal opportunity employer and provider, through the California Nutrition Network. For information about the California Food Stamp Program, please call 1-800-952-5253.



Literature Review of Healthy Vending

There is a limited body of literature in the area of healthy vending.

Environmental changes in the form of the healthy vending have recently emerged as a strategy to promote healthy eating and prevent obesity among youth.

Studies reviewed promoted healthy vending using only one strategy. In other words, prices were changed or snacks were labeled, but labeling, pricing and placement strategies were not combined in the same vending machine or setting.

Only one study proposed 50% placement of health snacks in vending machines over a two year

period.



Studies demonstrate promising results, but modest effects were

Policy changes are the most promising and cost-effective strategies to promote healthy eating among youth and working adults.

The majority of these studies have been conducted in Midwest

Studies show that sales revenue did not decline as a result of the increased selection of low-fat items.

observed.

Most studies developed strategies to increase low-fat snacks

consumption and only one study examined the effects of peer health promotion on fruit and vegetable consumption.

All studies have been implemented in school settings or worksites, but not in youth centers.

states in middle to upper income communities with low rates of minorities. No studies have been conducted in low-income communities.

Strategies used to promote healthy eating were:

- Price change
- Promotion in the form of labeling, peer health promotion, a la carte promotions, posters, videos, newsletter articles and letter to parents.

Vending Machine Snacks that Qualify as Healthy:

- Nuts
- Granola bars
- Dried fruit
- Pop-Tarts
- Rice Krispie Treats
- Sun Chips
- Beef jerky
- Baked chips
- Pretzels
- Nutrigrain bars
- Chex Mix
- Animal crackers



How can I help?

Through a partnership with members from the San Diego and Imperial Regional Nutrition Network, the City of Chula Vista, HEAC (Healthy Eating, Active Communities), American Cancer Society, and the 5 a Day Campaigns, a pilot study is in the works to determine the effects of 50% healthy vending machine options on sales and customer satisfaction.

With the support of policy makers, community members, and worksites, Chula Vista can become a model for other cities through the San Diego and Imperial Region. The community of Chula Vista can mobilize for a healthier city!