



NUTRIENT DATABASE OF COMPETITIVE SCHOOL FOODS:

ASSESSING THE SCHOOL FOOD ENVIRONMENT & EVALUATING ADHERENCE TO SCHOOL NUTRITION POLICIES

**Sarah Stone-Francisco, MPH
Samuels & Associates**

**National Nutrient Databank Conference
Wednesday, September 20, 2006**

Acknowledgements

- **Miriam Walter**
- **Kate Schluter**
- **Lisa Craypo**
- **Maria Boyle**
- **Liz Schwarte**
- **Sarah E. Samuels**
- **The California Endowment**
- **The Robert Wood Johnson Foundation**

Research → Policy

- The most frequently sold a la carte items were pizza (75%), chips (75%), cookies (72%), and soda (71%).



School Food and Beverage Venues

School Vending Machines



School Store



School Cafeteria

Governor Signs Legislation



Uses of Environmental Assessment Data

- Snapshot of the nutritional quality of school environment
- Monitor environmental change over time
- Measure extent of nutrition standards implementation
- Assess nutrient profile of foods and beverages sold on campus

Assessment process: Environmental Assessment methods

- Inventory foods and beverages in the main competitive food venues
 - Vending Machines
 - School Stores
 - Food Service (snack bar, snack cart, cafeteria)
- Observe snack and lunch periods
- Interview school administrators & staff

Assessment tools: Food and Beverage Environmental Assessment Tool

- Locations and times of competitive food and beverage sales
- Marketing and advertising
- Food and beverage item name, size, selling price
- Nutrient content of foods
- Supplemental:
 - presence of healthy items, water fountains, revenues, fundraisers, purchase mechanisms, concessions

Assessment tools:

School Foods Nutrient Database

- 1311 food products and 508 beverages
- Data collection:
 - Environmental assessment tool
 - Tracking down manufacturers' data
 - Web searches
 - Phone calls
 - Convenience or grocery store visit
 - School food service data
 - USDA nutrient databanks
 - Standard Reference (SR18)
 - What's In The Foods You Eat
 - Food and Nutrient Database for Dietary Studies (FNDDS)

Assessment tools:

School Foods Nutrient Database (cont.)

- For each item, the SFND contains:
 - Product information
 - Name of product
 - Manufacturer
 - Serving and product size
 - Total calories
 - Nutrient information
 - Total fat grams per serving
 - Total saturated fat grams per serving
 - Total grams of sugar
 - Source of data

Nutrient analysis

- Apply the nutrient profiles in the database to each food item
- Calculate total calorie size, percent of total calories from fat and saturated fat, and percent of weight from sugar
- Compare the nutrient profiles to nutrition standards to determine the level of adherence
- Report back to schools to facilitate removing unhealthy foods

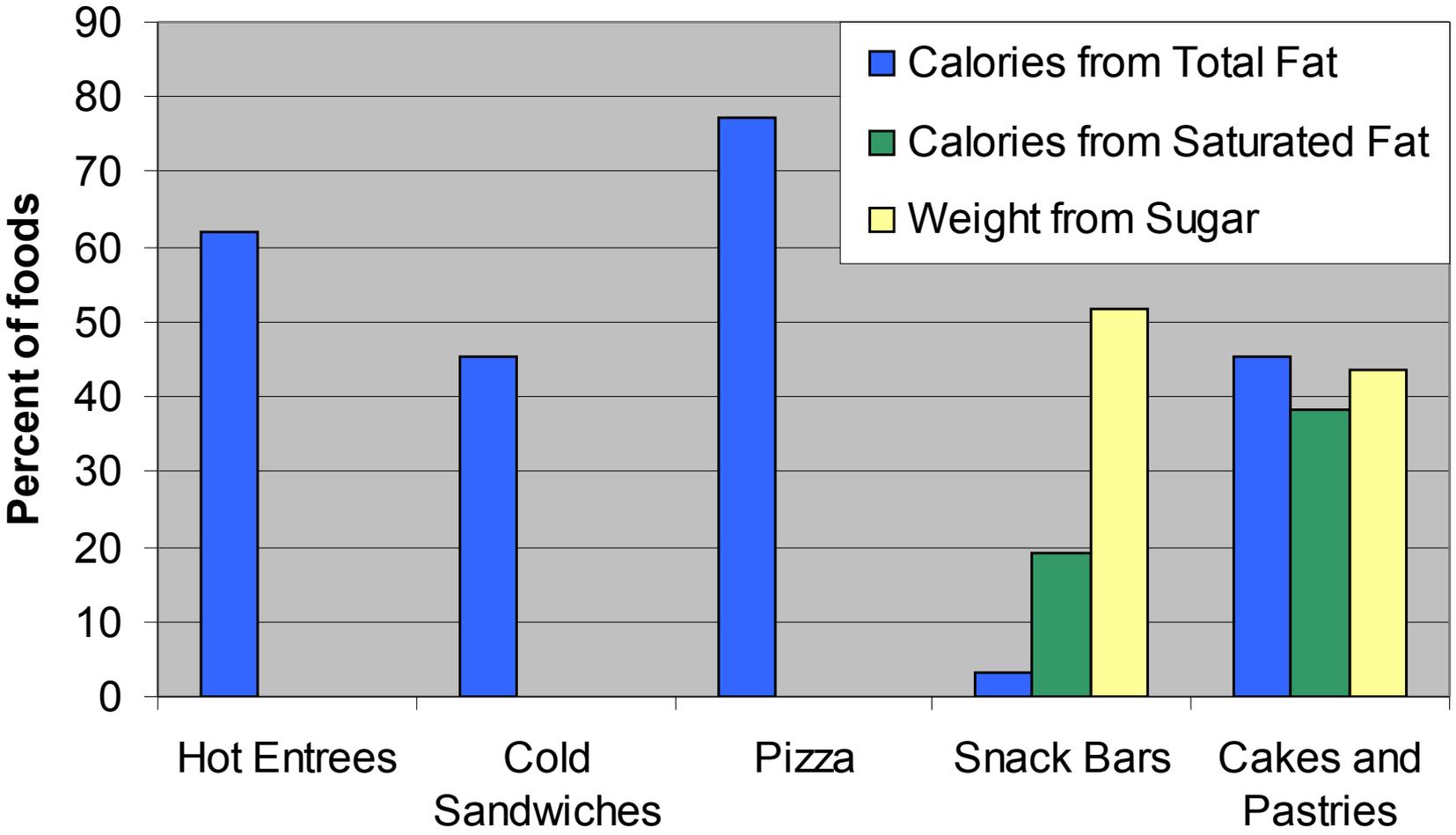
Analysis: Comparing school beverages to policies

Venue	Middle (%)	High (%)	Total (%)
Vending Machines	72	86	85
School Food Service	75	80	79
School Store	44	56	55
Total	71	84	82

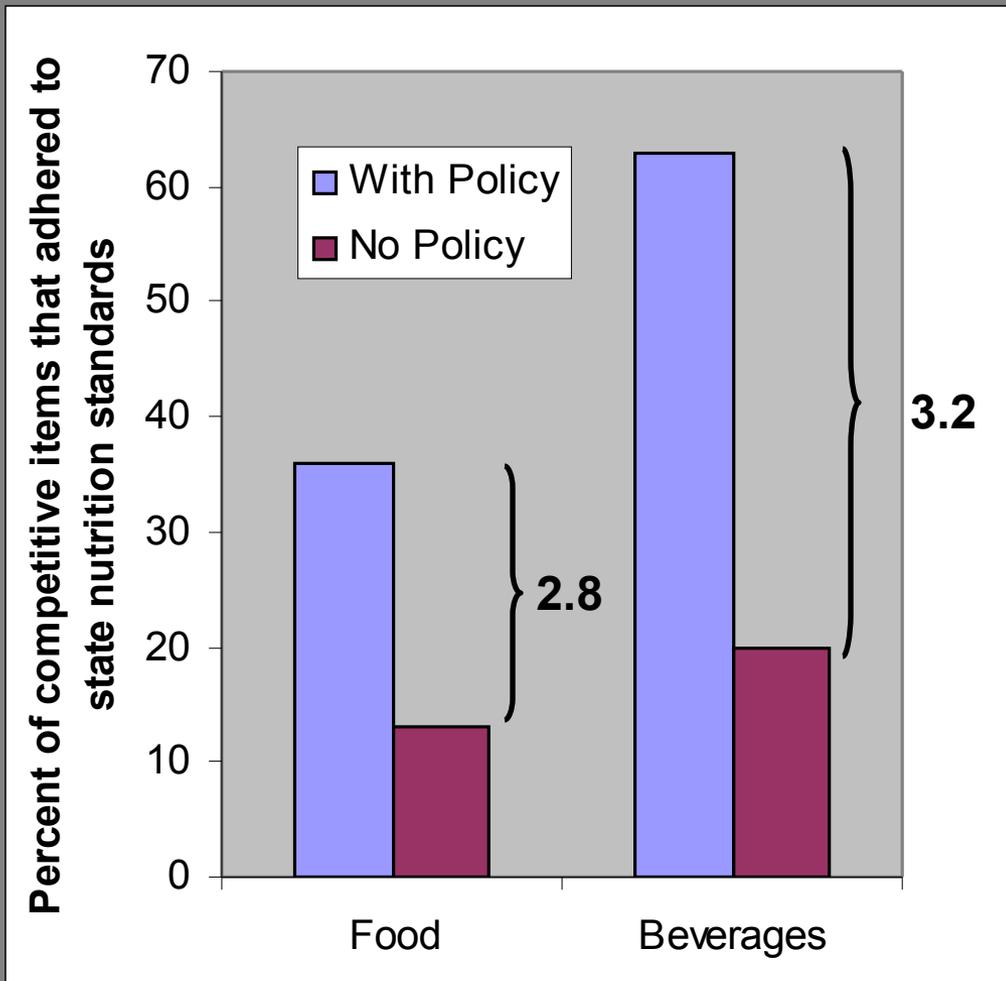
Beverages found on school campuses: NOT ALLOWED under SB965

- A&W Rootbeer
- Barq's Rootbeer
- Cactus Cooler
- Coke
- Coke Cherry
- Dr. Pepper
- Fanta Orange
- Fanta strawberry
- Mountain Dew
- Mountain Dew Code Red
- Mug Root Beer
- Pepsi
- Pepsi Wild Cherry
- RC Cola
- Seven Up
- Sierra Mist
- Slice
- Slice Orange
- Sprite
- Squirt
- Sunkist Orange Soda
- Vanilla Coke
- Welch's Grape Soda
- Pepsi Vanilla
- Welch's Pineapple soda
- Hansen's- flavor unknown
- Pibb Xtra, from soda fountain
- Minute Maid Orange soda, from soda fountain
- Minute Maid Strawberry soda, from soda fountain
- Dr. Shasta
- Shasta Cola
- Shasta Root Beer caffeine free
- Mirinda strawberry soda
- Mirinda naranja
- Diet Coke
- Diet Dr. Pepper
- Coke C2
- Diet Coke Vanilla
- Diet Pepsi
- Diet RC Cola with Splenda
- Diet Seven Up
- Diet Sierra Mist
- Diet Coke with Lime Soda
- Diet Shasta Cola
- Hawaiian Punch Fruit Juicy Red
- Hawaiian Punch
- Cool tropics slushie-cherry
- Cool tropics slushie-blue raspberry
- Tropicana strawberry lemonade
- Fruit Works Fruit Punch Juice Drink
- Ocean Spray-kiwi strawberry
- Capri Sun pacific cooler
- Capri Sun fruit punch
- Capri Sun Wild Cherry
- Minute Maid Pink Lemonade
- Minute Maid Ruby Red Grapefruit
- Ridgefield smoothies-raspberry blue
- Ridgefield smoothies-kiwi
- Ridgefield smoothies-cherry
- Veryfine fruit2o plus citrus energy
- Snapple Kiwi Strawberry
- Snapple Mango Madness
- MinuteMaid apple raspberry 25% juice
- Minute Maid Strawberry Raspberry 30% Juice
- Minute Maid Cran Apple
- Minute Maid Lemonade Juice drink
- Tropicana orangeade 3% juice
- Tropicana strawberry melon drink 5% juice
- Tropicana pink lemonade 3% juice
- Snapple Pink Lemonade
- Minute Maid cranberry raspberry apple blend
- pink lemonade, from soda fountain
- Snapple Fruit Punch
- Snapple Orange Mango
- Welch's fruit punch
- Welch's Strawberry Kiwi Drink
- Welch's lemonade
- Welch's grape juice
- Country Time Lemonade
- Tahitian Treat Fruit Punch
- Ridgefield Lemonade Slushy
- Ridgefield Strawberry Slushy
- Ridgefield Watermelon Slushy
- Ridgefield Green Apple Slushy
- Minute Maid cranberry grape juice
- Tropicana Lemonade
- Tropicana Peach Papaya
- Tropicana fruit punch
- Tropicana Strawberry Kiwi
- Sunny Delight Original
- Aquafina flavored water- wild berry
- Nestea Iced Tea
- Snapple peach ice tea
- Snapple Raspberry Iced Tea
- Lipton Brisk Iced Tea
- Nestea Cool iced tea
- Lipton's Brisk lemon iced tea
- Lipton brisk iced tea- raspberry
- Nestea Natural Lemon Flavored Iced Tea
- Nestea hot cocoa mix-dark chocolate
- Lipton brisk iced tea- pink lemonade
- Nestea Iced Tea, from soda fountain
- Glaceau Vitamin water- fruit punch
- Glaceau Vitamin water- kiwi strawberry
- Glaceau Vitamin water- tropical citrus
- Sparkling riptide fortified water-raspberry boost with sucralose
- Aquafina- flavor splash- raspberry
- Tropicana sugarfree orangeade
- Aquafina flavored water- citrus blend
- Slush Puppie- blue raspberry
- Slush Puppie- cherry
- Slush Puppie- Thelma's frozen lemonade
- Dole light cranberry juice
- Welch's cranberry juice cocktail
- Minute Maid lemonade, from soda fountain
- Hi-C Poppin' Pink Lemonade, from soda fountain

Percent of foods in select food categories that exceed nutrition standards



Policy → Evaluation



The image shows the cover of a 'Policy Brief' titled 'Selling Obesity: Beverage Vending Machines in California High Schools'. The cover features a photograph of three young women at the top. The text on the cover includes the title, a quote: 'The number of vending machines on campus ranged from zero to 34, with an average of 9 per school, or one machine for every 241 students.', and a small illustration of a vending machine and people. The brief is published by 'The California Endowment' and 'Research & Associates'.

<http://calendow.org/reference/publications/>

Contact

For more information contact:

Sarah Stone-Francisco

Samuels & Associates

(510) 271-6799

stone@samuelsandassociates.com

www.samuelsandassociates.com