

CX³ School Neighborhood Scoring: Beyond School Walls to the Surrounding Community

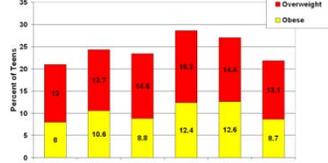
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Introduction

- Recent studies have examined the relationships between student BMI and the proximity of fast food restaurants, convenience stores and small grocery markets to schools
- The types of food available within a half mile of schools can influence choices made by youth, before, after and even during school for those with open campuses.
- Since 2006, over 90 low-income neighborhoods with more than 55 schools in California have been assessed by 23 health departments through CX3 (Communities of Excellence in Nutrition, Physical Activity and Obesity Prevention).
- CX³ School Neighborhood Scoring is under development as a new method to add to existing measures documenting neighborhood conditions including a reliable store survey instrument.
- Local health departments implementing CX³ in California will utilize the School Neighborhood Scoring to inform local action and targeting of efforts with schools, parent, student and community groups.

Background

California Teen Eating, Exercise, and Nutrition Survey (CalTEENS) Trends Overweight and Obesity California Teens Aged 12-17



Survey Tools:
Within 1/2 mile
 Grocery stores
 Convenience stores
 Small markets
 Other markets (dollar, pharmacies)
 Fast food
Within 1000 feet
 Outdoor marketing
Within 500 feet
 Mobile vending

Methodology

- Local health departments collect data in low-income neighborhoods with preferably middle or high schools, but elementary optional
- All scoring elements document positive conditions and will contribute to a School Neighborhood Grade
- Neighborhoods are located in both coastal and inland regions, as well as in rural, suburban and urban communities
- Scoring criteria developed for public health and nutrition professionals to engage with neighborhood groups and schools to identify areas for improvement and develop steps to implement policies and activities to change local conditions and provide nutrition education
- Scoring standards set by California Department Public Health staff in collaboration with local health department nutritionists and other advisors working with school environments



Scoring Criteria[†]

Stores

Store prices for fresh fruits are <10% of county average:
Max score= 4, meets standards ≥ 3
 Store sells wide range and good quality fruit:
Max score = 20, meets standards ≥ 18
 Nutrition information score:
Max score of 4, meets standards ≥ 3
 Store has limited exterior marketing:
Max score of 16, meets standards ≥ 8
 Store limits unhealthy and offers healthy products at checkout:
Max score of 16, meets standards ≥ 10
Subtotal Store Score: Max=60, meets standards ≥ 42

Mobile Vending

School has no mobile vendors (30 points)
 OR
 School has minimal vendors & all or most sell > 50% of products healthy:
Max score of 18, meets standards ≥ 13
 School has any vendors selling mostly fresh fruit= 3
 School with all vendors in permit compliance= 3
 Any not in compliance= 0
 School has few or no vendors with egregious marketing practices:
Max score of 4, meets standards ≥ 3
Mobile Vending Score: Max = 30, only 28 for those w/ mobile vending, meets standards 21 points*
 * if > 5 vendors with ≤ 50% products healthy, not eligible for meeting standards

Descriptive GIS Data

- Food Retail Mix Exposure Scale
- Uses Geographic Information Systems (GIS)
- Examines mix of several types of retail food opportunities around a school

Optional

Policies and programs promote physical activity and active transport

- School participation in Walk/Bike to school day event, coordination of walking or biking, or incentives
- Safe routes to school funding (current/previous), program activities, or grant application

Physical environment is supportive of walking or biking

- Existence of bike lanes & racks
- Safety/Walkability score
- Pedestrian and bike safety
- Designated school "safe drop off" zone/area
- Existence of cross walks/crossing guards/parent volunteers
- Convenient public transit

Partnerships exist between school and community

- Joint use agreement

Fast Food Outlets

Fast food outlet has limited exterior marketing, healthy and unhealthy: **Max score of 14, meets standards ≥ 10**
 Fast food outlets have limited child oriented marketing: **Max score of 5, meets standards ≥ 4**
 Fast food outlet offers and promotes healthy foods: **Max score of 31, meets standards ≥ 23**
Subtotal Outlet Score: Max=50, meets standards ≥ 37

Outdoor Marketing

School has no outdoor ads for food, beverages or physical activity within 1000 feet:
Max score of 10
 School has no more than 2 outdoor ads for unhealthy food or beverages within 1000 feet:
Max score of 5
 School has outdoor ads for healthy food, beverages or physical activity within 1000 feet:
Max score of 5
Outdoor Marketing Score: Max = 20, meets standards ≥ 10

Combined Scores

Total Score: Max = 160, meets standards ≥ 110

[†] Scoring criteria under development, subject to change

Descriptive School Neighborhood Snapshot with Example Schools

California County/City/Neighborhood Name	School 1	School 2	School 3
SCHOOL NEIGHBORHOOD SNAPSHOT (w/in 1/2 mile of school)			
Type of school (Elementary, Middle, High, Continuation)	Elementary	Middle	High
Total school enrollment	639	785	1,267
Percent participation in free or reduced price lunch	92%	79%	83%
FITNESSGRAM - Percent of students in the healthy fitness zone for body composition (available for grades 5, 7, 9 only)	61%	57%	67%
FITNESSGRAM - Percent of students in the healthy fitness zone for aerobic capacity (available for grades 5, 7, 9 only)	82%	45%	63%
Participation as Network for a Healthy California School	Yes	No	No
School participates in any healthy choices campaign (i.e., Let's Move, etc.)	No	No	No
Percent of neighborhood population at or below 185% Federal Poverty Level	67%	67%	73%
Number of supermarkets/large grocery stores	2	1	1
Number of small markets and other stores (meeting standards)	0	1	0
Number of small markets and other stores (not meeting standards)	2	0	5
Number of convenience stores	3	2	1
Number of fast food outlets (all types)	1	6	7
Ratio of fast food outlets to enrollment (1 : X)	1:639	1:130	1:17
Index of unhealthy to healthy food sources (auto calculated: convenience stores + fast food + small markets not meeting standards ÷ supermarkets or lg grocery stores + small markets meeting standards) low score = better index (zero shows inability to calculate due to lack of healthy sources)	3.0	4.0	13.0



Fast Food and Soda Consumption Among Youth Ages 12-17

- 20% reported eating fast food at least once on a previous day (CalTEENS 2008)
- 48% of youth report eating fast food 2 or more times per week (CHS 2009)
- 13% report 4 or more times each week (CHS 2009)
- Nearly 9% reported eating fast food 2 or more times on a previous day (CHS 2005)
- 26% drank 2 or more SSB's per day, down from 31% on previous survey (CHS 2005, 2007)
- 50% drank one or more SSB per day (CalTEENS 2008)



June 2011; Childhood Obesity Conference



Implications

- More evidence documenting community environment around schools
- Important for developing meaningful, targeted nutrition education
- Critical for understanding what kids are up against outside the school walls
- Can inform partnerships and policies
- Shows need for initiatives to reduce marketing of less healthy foods around schools

