

Searching for Healthy Food

The Food Landscape in California Cities and Counties

WHAT

Searching for Healthy Food: The Food Landscape in California Cities and Counties, an analysis of the distribution of food outlets in the most populous cities and counties in the state released by the California Center for Public Health Advocacy (CCPHA).

WHY

There is growing scientific evidence that what people eat—and their likelihood of being obese—is influenced by the food environment in which they live. As Californians struggle to address the state's out-of-control obesity crisis, ready access to healthy foods is critical. Sadly, the CCPHA's analysis shows a landscape crowded with food outlets that commonly offer relatively little in the way of fruits, vegetables, and other healthy products.

WHEN

This report is based on April 2005 data from the Geographic Information Systems (GIS) and mapping software firm of ESRI.

HOW

The Retail Food Environment Index (RFEI) is constructed by dividing the total number of fast-food outlets and convenience stores by the total number of supermarkets and produce vendors (produce stores and farmers markets) in an area.

WHO

The study was conducted by the California Center for Public Health Advocacy with funding from the California Vitamin Cases Consumer Settlement Fund.

KEY FINDINGS

- In California as a whole, there are more than four times as many fast-food restaurants and convenience stores as supermarkets and produce vendors.
- Among California counties with populations greater than 250,000, San Bernardino County has the highest ratio by having almost six times as many fast-food restaurants and convenience stores as grocery stores and produce vendors.
- Among California cities with populations greater than 250,000, Bakersfield, Fresno, Long Beach and Riverside have the highest ratios with more than five times the number of fast-food restaurants and convenience stores as grocery stores and produce vendors.

CALIFORNIA CENTER FOR
PUBLIC HEALTH ADVOCACY



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RETAIL FOOD ENVIRONMENT INDEX (RFEI)

A ratio describing the relative abundance of different types of retail food outlets in a given area. The RFEI is constructed by dividing the total number of fast-food restaurants and convenience stores by the total number of supermarkets and produce vendors (produce stores and farmers markets) in the area.

The result is the ratio of retail food outlets that offer little in the way of fruits and vegetables and other healthy foods to those in which fruits and vegetables are readily available.

$$\text{RFEI} = \frac{(\# \text{ fast-food restaurants} + \# \text{ convenience stores})}{(\# \text{ supermarkets} + \# \text{ produce stores} + \# \text{ farmers' markets})}$$

RETAIL FOOD LANDSCAPE OR ENVIRONMENT

The collection of retail businesses available in communities as options for purchasing food. Increasing evidence suggests that environmental factors, including the retail food environment, influence the types and quantities of food that people purchase and consume.

FAST-FOOD RESTAURANTS

Fast-food restaurants are defined as restaurants offering (1) quick service based on criteria of the National Restaurant Association, (2) meal service (vs. snacks, dessert and coffee) and (3) prices less than \$7.00 per meal. Restaurants with more than five locations with the same name are included encompassing major fast-food chains as well as regional and locally owned chains.

CONVENIENCE STORES

A retail business that has as its primary emphasis providing the public a convenient location at which to purchase from a wide array of consumable products (predominantly food or food and gasoline services), as defined by The National Association of Convenience Stores.

SUPERMARKETS

Defined by the grocery industry as any full-line self-service grocery store generating a sales volume of \$2 million or more annually. The CCPHA study modified this definition somewhat to include stores with annual sales of at least \$1 million.

PRODUCE VENDORS

Retail outlets whose primary function is the sale of produce, including produce stores and farmers markets.

GIS: *Geographic Information Systems*

Software used to determine geospatial locations (longitude and latitude). In the CCPHA study, GIS software was used to determine the location of retail food outlets in California and assign them to the appropriate census tract.

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retail food environment index data

Retail Food Environment Index (RFEI) by County and City* (Sorted by RFEI)

COUNTY	RFEI
SAN BERNARDINO	5.72
SACRAMENTO	5.66
FRESNO	5.34
ORANGE	5.13
SOLANO	5.08
KERN	4.87
STANISLAUS	4.79
CONTRA COSTA	4.66
RIVERSIDE	4.63
ALAMEDA	4.61
LOS ANGELES	4.60
TULARE	4.42
SANTA CLARA	4.32
SAN DIEGO	4.20
SAN JOAQUIN	4.03
VENTURA	3.86
SAN FRANCISCO	3.85
PLACER	3.84
SANTA BARBARA	3.00
SAN MATEO	2.79
SONOMA	2.52
MONTEREY	2.14
SAN LUIS OBISPO	2.01
MARIN	1.85
SANTA CRUZ	1.84

CITY	RFEI
BAKERSFIELD	6.63
FRESNO	6.23
LONG BEACH	5.80
RIVERSIDE	5.58
SACRAMENTO	4.97
ANAHEIM	4.79
STOCKTON	4.73
SAN JOSE	4.62
SAN DIEGO	4.58
SANTA ANA	4.40
LOS ANGELES	4.24
SAN FRANCISCO	3.85
OAKLAND	3.81

*California counties and cities with populations greater than 250,000 as estimated by the California Department of Finance.

The higher the RFEI, the greater the number of fast-food restaurants and convenience stores compared to supermarkets and produce vendors.

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by the numbers

More than half of all California adults are now obese or overweight.¹ Overweight and obesity are serious health issues associated with increased risk of morbidity and mortality from chronic diseases, including cardiovascular disease and diabetes.²

Adult obesity rates in the state have **more than doubled** since 1990, when about **10 percent** of the state's population was considered medically obese. By 2003, that number was over **20 percent** — almost **4.5 million** California men and women (ages 20–69).³

Less than one-fourth of U.S. adults eat the recommended five or more servings of fruits and vegetables each day.⁴

On a typical day, **30 percent** of American children and teenagers eat at least one fast-food meal.⁵

In the year 2000, the cost of medical care, workers' compensation and lost productivity attributable to overweight, obesity and physical inactivity for California adults was **\$21.7 billion**.⁶

1. Centers for Disease Control and Prevention (CDC). Overweight: by body mass index, Trends Data: California <http://apps.nccd.cdc.gov/brfss/Trends/trendchart.asp?qkey=10080&state=CA>. Accessed November 16, 2006.

2. Visscher T.L. and Seidell, J.C. The public health impact of obesity. *Annu Rev Public Health*, 2001,22:355-375; and U.S. Department of Health and Human Services. Overweight and obesity: health consequences." 29 Nov. 2006. <http://www.surgeongeneral.gov/topics/obesity/calltoaction/fact_consequences.htm>.

3. Lee, Helen. "Obesity Among California Adults: Racial and Ethnic Differences," Public Policy Institute of California, 2006.

4. Preventing Obesity and Chronic Diseases Through Good Nutrition and Physical Activity," Centers for Disease Control and Prevention. 3 Jan. 2007. <www.cdc.gov/nccdphp/publications/factsheets/Prevention/obesity.htm>.

5. Bowman, Shanthi A., Gortmaker, Steven L., Ebbeling, Cara B., Pereira, Mark A. and Ludwig, David S. Effects of Fast-Food Consumption on Energy Intake and Diet Quality Among Children in a National Household Survey. *PEDIATRICS* Vol. 113 No. 1, pp. 112-118. January 2004.

6. Chenoweth, D. "The economic costs of physical inactivity, obesity, and overweight in California adults: health care, workers' compensation, and lost productivity." California Department of Health Services, Apr. 2005.

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health impact

- ➔ In Chicago neighborhoods with no or distant grocery stores but an abundance of fast-food restaurants and other retail outlets offering little or no nutritious food, residents experience higher obesity rates and higher rates of residents dying prematurely from heart disease, cancer and diabetes. Diabetes death rates in these neighborhoods are more than twice as high as the diabetes death rates in neighborhoods with a more balanced mix of retail food choices. (For a copy of the report, go to <http://www.lasallebank.com/about/pdfs/report.pdf>).¹
- ➔ In Philadelphia, poor supermarket access is linked to a higher incidence of diet-related deaths (diabetes, cancer, and heart disease) in many low-income neighborhoods. (For a copy of the report go to <http://www.thefoodtrust.org/pdf/supermar.pdf>).²
- ➔ In a multi-state study, African Americans living near a supermarket were found to be 54 percent more likely to meet nutritional guidelines for fruit and vegetables and 22 percent more likely to meet recommended limits for fat consumption compared to those without a supermarket nearby.³
- ➔ A landmark national study showed a clear association between each state's obesity rate and the density of fast-food retailers in that state. (For a summary of the study go to <http://www.mcph.org/PRC.04/IM.Dec.04/Michelle/PRC%20Info%20Monthly%20December%202004%20fast%20food%20prevalence.pdf>).⁴
- ➔ Between 1975 and 1992, the number of fast-food restaurants grew 147%, and the number of meals and snacks eaten at fast-food restaurants increased 200%.⁵ Fast food is typically higher in calories and fat compared to meals prepared at home.⁶

1. Gallager, M. Examining the Impact of Food Deserts on Public Health in Chicago, 2006.

2. The Food Trust. Food for Every Child: The Need for More Supermarkets in Philadelphia. Philadelphia, PA. Available at: www.thefoodtrust.org/pdf/supermar.pdf.

3. Morland, K., Wing, S., Diez Roux, A. "The contextual effect of the local food environment on residents' diets: The Atherosclerosis Risk in Communities Study." *American Journal of Public Health*. 2002; 92:1761-1767.

4. Maddock, J. The relationship between obesity and the prevalence of fast food restaurants: State-level analysis. *American Journal of Health Promotion*. 2004, 19:137-143.

5. French, S.A., Story, M., Jeffery, R.W. Environmental influences on eating and physical activity. *Annals of Public Health*. 2001;22: 309-35.

6. French, S.A., Story, M., Jeffery, R.W. Environmental influences on eating and physical activity. *Annals of Public Health*. 2001;22: 309-35.

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background

The California Center for Public Health Advocacy

(CCPHA) raises awareness about critical public health issues and mobilizes communities to promote the establishment of effective state and local health policies. Established in 1999 by California's two public health associations—Southern California Public Health Association and California Public Health Association-North — CCPHA is an independent, nonpartisan, nonprofit organization.

CCPHA uses tools of public health—epidemiological research, grassroots organizing, public and policymaker education, and partnership building—to design policy solutions that address public health challenges facing California. CCPHA is currently focused on reversing the growing childhood obesity epidemic by expanding access to healthy food in communities, improving the quality of physical education in public schools and assuring implementation of school nutrition standards.

CCPHA has received funding from the California Vitamin Cases Consumer Settlement Fund, The California Endowment, The Robert Wood Johnson Foundation, The California Nutrition Network, The California Wellness Foundation, Kaiser Permanente, the William Randolph Hearst Foundations, and donations from individuals and organizations that support their mission.

PUBLICATIONS

Dropping the Ball: Schools Fail to Meet Physical Education Mandates (2006)

In the midst of California's growing childhood obesity crisis, ensuring that our children have quality physical education in school must be a top priority. Sadly, however, CCPHA found that more than half the state's schools assessed in the last two years are failing to meet even minimum P.E. standards.

The Growing Epidemic: Child Overweight Rates on the Rise in California Assembly Districts (2005)

Despite widespread recognition of the childhood obesity crisis, this study showed that the epidemic of overweight children in California continues to grow.

An Early Warning Sign: Diabetes Deaths in California Legislative Districts (2004)

To understand the burden of diabetes in California communities, CCPHA analyzed diabetes-related deaths by state legislative district.

An Epidemic: Overweight and Unfit Children in California Assembly Districts (2002)

To understand the extent of the epidemic among California's children, CCPHA analyzed data from the California Department of Education's 2001 California Physical Fitness Test by state legislative district.