

# **The Impact of Sugar-Sweetened Beverage Consumption on the Health of San Pablo Residents**

**A report prepared by Contra Costa Health Services for the San Pablo City Council**



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# The Impact of Sugar Sweetened Beverage Consumption on the Health of San Pablo Residents

## A Report from Contra Costa Health Services

### Introduction

Obesity is a critical public health epidemic and is a leading risk factor for premature deaths and chronic illness due to heart disease, stroke, diabetes, cancer and other conditions.<sup>1</sup> The residents of the City of San Pablo face higher rates of deaths and illness from these causes than the average citizen in Contra Costa County, and children in West Contra Costa Unified School District, which includes San Pablo, are more likely to be obese than children in other County school districts.<sup>2</sup>

Obesity results from when a person eats and drinks more calories than he or she expends during normal metabolic processes and physical activity. The largest single source of excess, non-nutritional calories in the American diet is from soda and other sugar-sweetened beverages (SSBs) and evidence shows a strong correlation between obesity and consumption of SSBs.<sup>3</sup> According to the report *Bubbling Over: Soda Consumption and Its link to Obesity in California*, “Adults who drink soda occasionally (less than one a day) are 15% more likely to be overweight or obese, and adults who drink one or more sodas per day are 27% more likely to be overweight or obese than adults who do not drink soda, even when adjusting for poverty status and race/ethnicity.”<sup>4</sup>

San Pablo has demonstrated a commitment to improving the health of its citizens through the recent adoption of a new General Plan in 2011, which includes a comprehensive Health Element, and by passing a resolution to be a Health Eating Active Living city.

Working to reduce the consumption of sugar-sweetened beverages is a key strategy to reducing calorie consumption and obesity, preventing tooth decay, and creating a healthier city.

### Definition of Sugar-Sweetened Beverage

For the purposes of this report, a SSB is defined as a non-alcoholic beverage, carbonated or non-carbonated, that contains added caloric sweeteners. Included in this definition are traditional sodas (e.g. Coca-Cola, Sprite) sports drinks (e.g. Gatorade), energy drinks (e.g. Rockstar, Red Bull), fruit-flavored (not 100% fruit juice) drinks (i.e. juice cocktails and nectars).

“Diet” drinks, those that contain non-caloric sweeteners such as aspartame, are not included in this definition, nor are coffee and tea drinks.

### **Demographic Characteristics of San Pablo**

The City of San Pablo is home to a diverse community, the members of which are largely Latino and other minority groups. Many families in San Pablo live below the federal poverty level and have only a single parent. These social factors and other environmental factors have an impact on the health outcomes of the community. Vulnerable populations have a greater risk of obesity and increased rates of chronic diseases with which obesity is associated.

## Selected Demographic Characteristics of the City of San Pablo

<b>Total population</b>	<b>30,566</b>	
<b>Age and Sex</b>		
Male	15,716	51%
Female	14,850	49%
0 to 19 years	9461	31%
19 to 65 years	17678	58%
65 years and over	3,427	11%
<b>Race and Ethnicity</b>		
Hispanic or Latino	16656	54%
Not Hispanic or Latino		
White	3,797	12%
African American	4267	14%
Asian	5050	17%
American Indian or Alaska Native	212	1%
Pacific Islander	19	<0%
Two or More races	443	1%
Some Other Race	142	<0%
<b>Household Characteristics</b>		
Median household income (dollars)	46,007	
Families whose income is below federal poverty level		15%
Households with children under 18	3,653	40%
Female householder, no husband present, with children under 18	853	16%
<b>Educational Attainment</b>		
Percent high school graduate or higher		69%
Percent bachelor's degree or higher		15%
<b>Language Spoken At Home</b>		
English only	9,453	31%
Language other than English	18,442	60%

Source: American Community Survey 2005-2009

## **Body Weight and Health:**

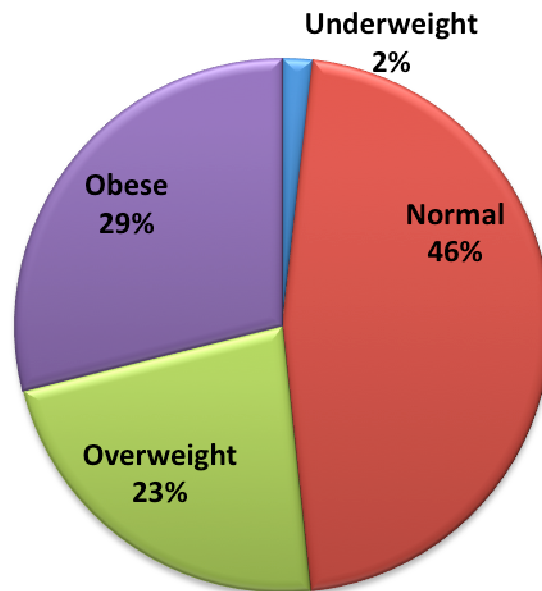
Maintaining a healthy weight throughout the lifetime helps to avoid obesity related illness and premature death. To estimate whether an individual is within a healthy weight range, a body mass index (BMI) is calculated using both height and weight. BMI is analyzed in 4 categories: underweight, normal weight, overweight, and obese. Among adults a BMI less than 20 is considered underweight, 20-25 is normal weight, 25-30 overweight, and greater than 30 is considered obese. Because children are growing, an age-based calculation is used that incorporates their height and weight and categorizes BMI ranges into percentiles. Less than 5<sup>th</sup> percentile is considered underweight, 5<sup>th</sup>-85<sup>th</sup> percentile is normal weight, 85<sup>th</sup> -95<sup>th</sup> percentile is overweight, and greater than 95<sup>th</sup> percentile is considered obese. The weight category of obese has the strongest association to negative health outcomes, and the majority of the findings in this report focus on negative consequences of obesity but not overweight. More information is available through the Centers for Disease Control and Prevention. (<http://www.cdc.gov/healthyweight/assessing/bmi/index.html>).

## **Obesity Prevalence among San Pablo Children:**

At public schools in California, students are tested yearly on physical activity using the Fitnessgram test, which includes a measurement of height and weight that is carried out by the test administrator. The data below on childhood obesity for San Pablo was obtained from the 2010 Fitnessgram carried out in the following schools: Bayview Elementary, Dover Elementary, Downer Elementary, Ford Elementary, Lake Elementary, Riverside Elementary, Helms Middle School, Middle College High School, and Richmond High School (which San Pablo high-school-aged students attend). These schools were chosen based on their location and their student population. A total of 1286 students were included in this analysis. The students who carried out the test were primarily Latino or Hispanic (74%).



## Percentage of weight categories in San Pablo School Children in 2010



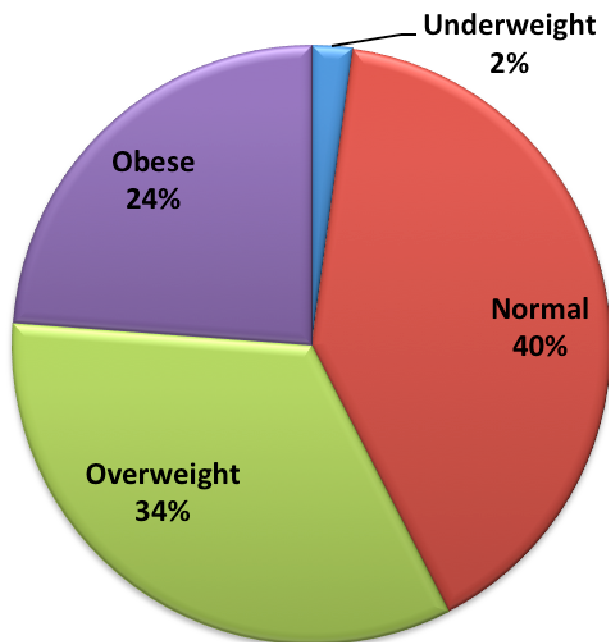
The 2010 Fitnessgram data shows that the burden of obesity in San Pablo school children is significant. Overall 29% of school children are obese and an additional 23% are overweight. More male students are obese than female students, a difference of 6%.

Due to the current prevalence of obesity among San Pablo youth, we project that the prevalence of obesity in adults will increase. Based on previous studies relating obesity in adults to their weight status as children, we predict that as adults, the cohort of children currently residing in San Pablo will have an obesity prevalence of 42% (almost double the current obesity prevalence of 24%) once they reach adulthood.<sup>5</sup> This prevalence excludes individuals who are overweight, but not obese.

### **Obesity Prevalence among San Pablo Adults:**

Obesity prevalence for San Pablo adults was estimated using the 2009 California Health Interview Survey. In San Pablo residents, we estimate that 58% of adults are overweight or obese. The percentage of obese adults in this estimate is 24%.

## Percentage of weight categories in San Pablo Adults for 2009\*



\*Small Area Analysis was used to calculate prevalence using the demography of San Pablo.

### Obesity Related Disease and Mortality in San Pablo

#### Morbidity rates

The current prevalence of obesity among San Pablo adults contributes to increased rates of disease and death due to cardiovascular disease, cancer, diabetes, as well as all cause mortality. The California Health Interview survey was used to estimate the prevalence of obesity related disease in San Pablo. Using empirical studies relating obesity to specific diseases, the number of excess cases of people diagnosed with chronic diseases in San Pablo due to obesity was calculated. The number of future cases among San Pablo children was calculated based on the projected obesity prevalence of 42%. It is expected that there will be a substantial increase in people living with chronic illness (morbidity) due to the projected rising obesity rate among adults.

### Diagnosis of obesity related chronic disease in San Pablo

	Prevalence of diagnosis	Excess diagnoses of chronic diseases due to current obesity prevalence (24%)	Excess diagnoses of chronic diseases due to future obesity prevalence (42%)
Cardiovascular Disease	4.9%	124	206
Cancer	4.8%	53	91
Diabetes	8%	909	1253
Hypertension	26%	2952	4053
Stroke	2%	65	105

\*Small Area Analysis with CHIS was used to calculate prevalence using the demography of San Pablo. Cancer and Stroke data were obtained from the 2005 CHIS survey. Cardiovascular disease, diabetes and hypertension data were obtained from the 2009 CHIS survey. Associations between disease and obesity were taken from empirical studies<sup>6, 7, 8, 9</sup>

### Mortality Rates

The excess deaths due to obesity in San Pablo were calculated using results of previous studies, which have estimated the relative risk of mortality among obese individuals. The annual death rate in San Pablo is around 305 residents, and it was found that 11% of all deaths in San Pablo could be attributed to obesity. The increased rate of obesity among this current generation of children when they become adults will lead to an increase in the number of excess deaths due to obesity. These excess deaths are premature deaths with an estimated loss of 2 years of life per person due to cardiovascular disease, 10 years of life due to cancer and 9 years of life due to diabetes.

### Excess deaths due to obesity per year in San Pablo

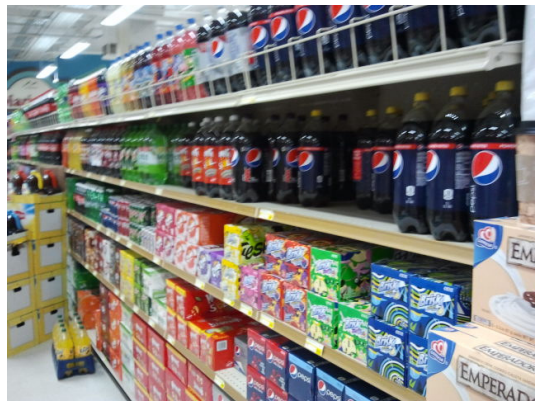
	Deaths per year in San Pablo	Obesity attributable percentage to current prevalence of 24%	Obesity attributable percentage to future prevalence of 42%
Cardiovascular Disease	82	15%	23%
Cancer	66	6.9%	11%
Diabetes	10	37%	51%
<b>All Causes</b>	<b>305</b>	<b>11%</b>	<b>18%</b>

Population attributable fraction of death was calculated using empirical relationships between obesity and mortality.<sup>10, 11, 9</sup>

## The Sugar-Sweetened Beverage Industry and Marketing Practices

According to *Breaking Down the Chain: A Guide to the Soft Drink Industry* prepared by National Policy & Legal Analysis Network to Prevent Childhood Obesity (NPLAN) and Public Health Law & Policy (PHLP), the soft drink industry is broken down into two main components of production – syrup (and concentrate) manufacturing and soft drink manufacturing (creation of the final, often carbonated, product and packaging it in bottles and cans). This industry is dominated by only a few companies. For syrup manufacturing, Coca-Cola (40% of the market) and PepsiCo, Inc (33% of the market) contribute 73% of the U.S. market. For soft drink manufacturing, Coca-Cola produces 28.6%, PepsiCo, Inc produces 26.8%, and Dr Pepper Snapple Group produces 8.6%. Other, much smaller companies make up the remainder in both manufacturing processes.

Flavoring syrup and concentrate manufacturing is an \$8 billion dollar industry with an annual profit of around \$1.4 billion. Soft drink manufacturing is a \$47.2 billion industry and generates annual profits of around \$1.7 billion.

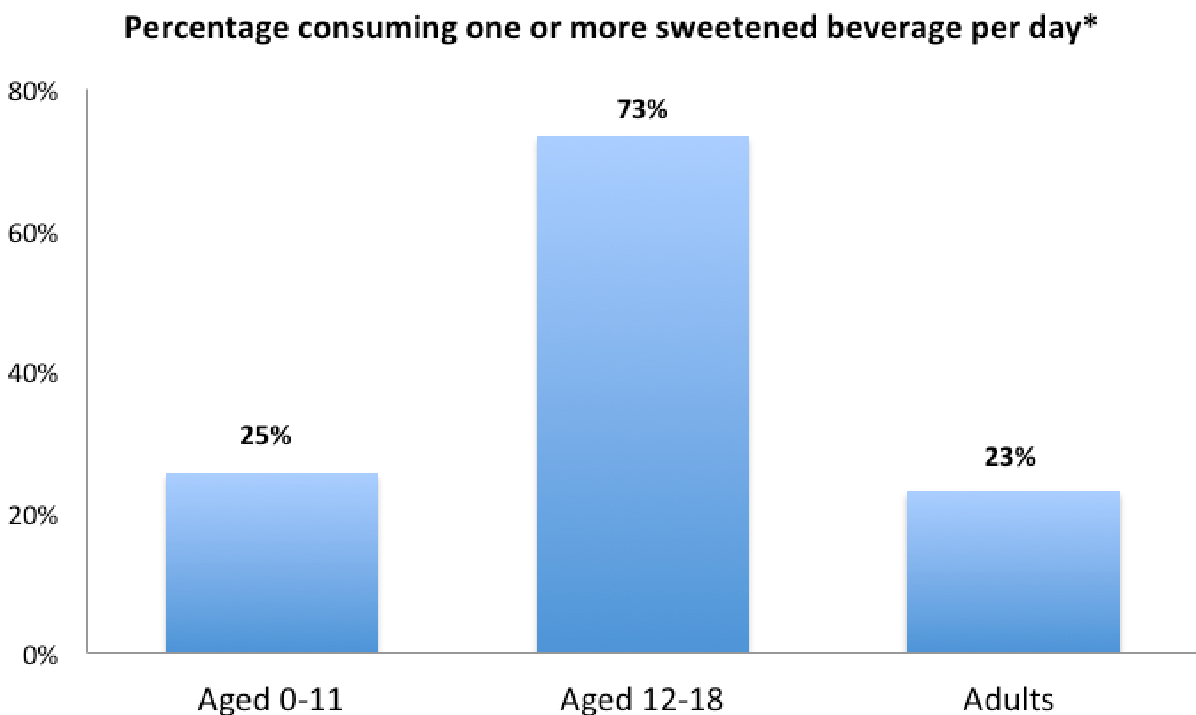


A 2008 Federal Trade Commission (FTC) study on food and beverage marketing to youth showed that in the year 2006 the manufacturers of carbonated soft drinks spent \$492 million marketing directly to youth, an overwhelming percentage of that (96% or \$474 million) was directed at adolescents in the 12-17 age range. Of that \$28.6 million were found to specifically target particular races, ethnicities, and genders with activities including sponsoring a Black History Month essay contest for elementary, middle, and high schools, sponsoring Latino events and festivals, and sponsoring various ethnicity-based sport teams.<sup>12</sup>

The overwhelming majority of SSB manufacturers increased their advertising budgets between the years 2008 to 2010. Teens watched an average of 406 SSB ads on television and African American teens were particularly targeted, viewing 80 to 90% more TV ads than white teens.<sup>13</sup>

## San Pablo Sugar-Sweetened Beverage Consumption:

Sweetened beverage consumption was estimated for San Pablo, using the 2009 California Health Interview Survey. Beverage consumption was highest among teens, with 73% of teens estimated to consume one or more sweetened beverage per day (this includes sodas, fruit drinks, sports drinks, energy drinks but not diet drinks).<sup>14</sup> The rate was lower among children aged 0-11; however, the rate of consumption was much greater in school-aged children than toddlers and infants (not shown). Among adults, the rate of sweetened beverage consumption was estimated at 44% when sweetened coffee and hot tea were included (this includes pre-sweetened coffee and tea as well as and restaurant coffee and tea drinks to which people add sugar). When coffee and hot tea were excluded, the rate was estimated to be 23%.



\*Small Area Analysis was used to calculate rates using the demography of San Pablo.

## Relationship between Sugar-Sweetened Beverage Consumption and Obesity

Using the California Health Interview Survey of adults from 2009, we calculated the approximate additional calories consumed through sugar-sweetened beverages. Among the

estimated 23% of adults who consume one or more sugar-sweetened beverages per day, the average number of servings (120 calories/adult serving<sup>3</sup>) is 2.2 with an estimated caloric content of 258 calories. For adolescents the excess calorie consumption is much greater. Among the estimated 73% of San Pablo adolescents who consume one or more SSBs per day, the average number of servings (242 calories/teen serving<sup>14</sup>) is 1.8 with an estimated caloric content of 429 calories. Sugar sweetened beverages contribute to the obesity epidemic by adding excess calories to the diet, without additional nutrition. The following are some examples of SSBs and their caloric content:

- A standard 12 oz. can of Coca Cola contains 140 calories and a 20 oz. bottle contains 240 calories.
- A 20 oz bottle of Minute Maid Lemonade contains 260 calories, more than the same size bottle of Coca Cola.
- The 32 oz. 7-11 Big Gulp contains 364 calories.
- A 16 oz. bottle of Nesquik chocolate milk contains 400 calories.<sup>15</sup>

Studies show that the calories in beverages are not as satiating as calories consumed by food (a person's body does not register the intake of calories by becoming less hungry), and therefore increase the overall number of calories consumed.<sup>3</sup> According to the report *Bubbling Over: Soda Consumption and Its link to Obesity in California*, "Adults who drink soda occasionally (less than one a day) are 15% more likely to be overweight or obese, and adults who drink one or more sodas per day are 27% more likely to be overweight or obese than adults who do not drink soda, even when adjusting for poverty status and race/ethnicity."<sup>4</sup>

## **Relationship between Sugar-Sweetened Beverage Consumption and Dental Caries**

Because children's oral health in California is ranked the third worst state in the nation after Arizona and Texas<sup>16</sup>, reducing or preventing children from consuming sugar-laden drinks becomes even more important as a preventative measure. Sugar consumption is the primary cause of dental caries in children.<sup>17</sup> During the 2010-2011 school year, among students in San Pablo elementary schools visited by the Contra Costa Health Services Children's Oral Health Program, the percentage of students with visible tooth decay ranged from 14% to 26%.

## Economic Costs of Obesity to Contra Costa County

According to *The Economic Costs of Overweight, Obesity, and Physical Activity Among California Adults* report prepared by California Center for Public Health Advocacy, the annual health care costs of overweight and obesity in Contra Costa County is over \$404,000,000. Additionally, each year obesity accounts for over \$272,000,000 in lost workplace productivity in Contra Costa County.<sup>18</sup>

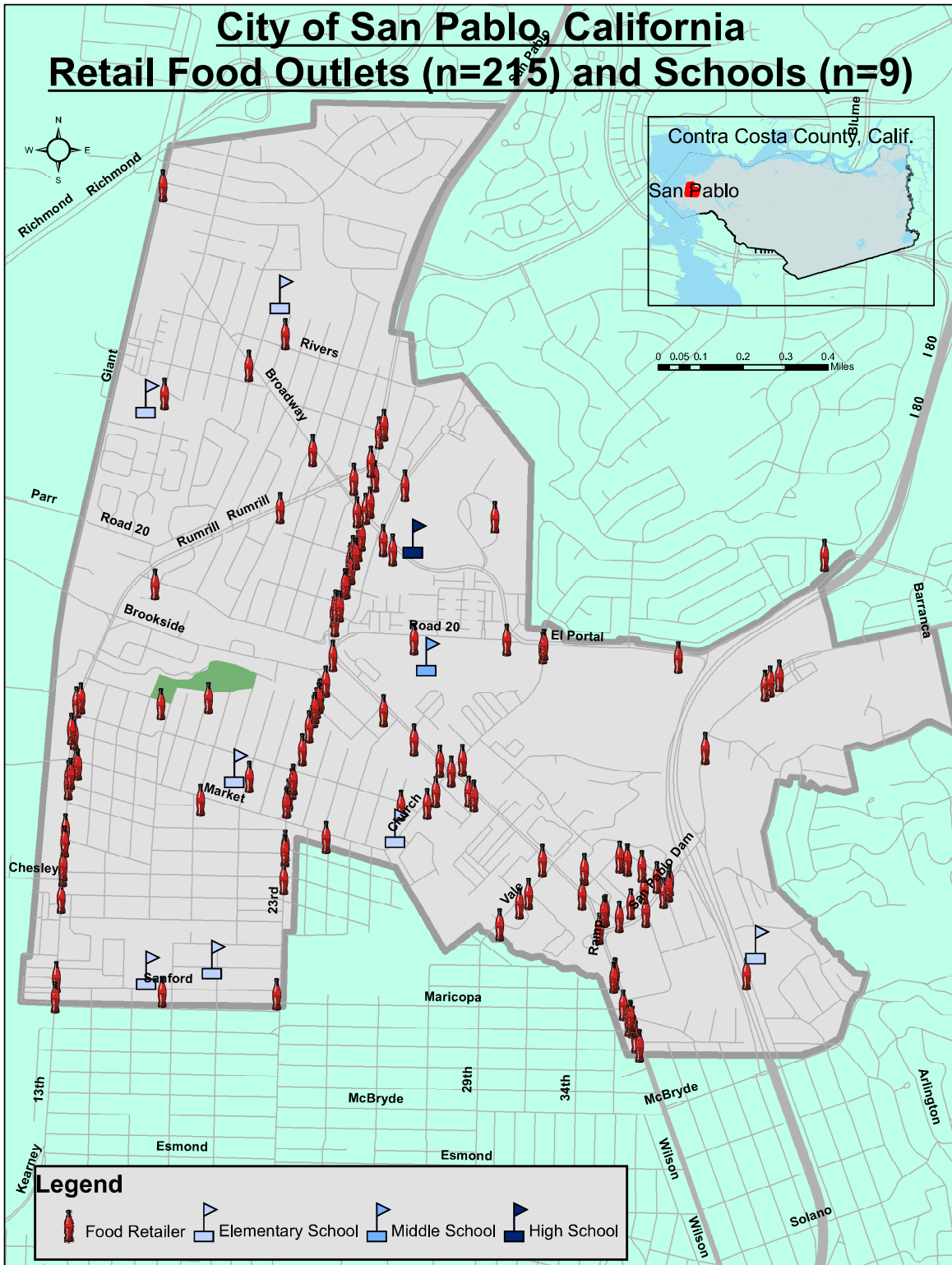
## Sugar-Sweetened Beverage Environment in San Pablo



San Pablo citizens are saturated with food vendors supplying sugar-sweetened beverages. There are 215 retail food outlets in the city of San Pablo, including mobile food prep vehicles (n=12), ice-cream pushcarts (n=14), retail food vehicles (n=8), restaurants (n=64), convenience stores (n=36), and grocery stores (n=28) with the rest being miscellaneous food retail outlets. Using population estimates from the 2010 Census, it was estimated that 90% of the population resides within walking distance (.25 mile) of a retailer or vendor (26,403 of a total population of 29,139). Additionally, 81 of 215 outlets are within 0.25 mile of a school. The average number of outlets within 0.25 mile of a school is 9.55 (minimum = 1, maximum = 30). Therefore, sugar sweetened beverages are readily accessible to citizens, and school children while in route to school or home. The following map plots the locations of all food vendors in the city of San Pablo as well as the locations of schools.

# City of San Pablo, California

## Retail Food Outlets (n=215) and Schools (n=9)



Contra Costa Public Health, Epidemiology, Planning and Evaluation, November 2011



## Survey of Retailers within .25 mile of Helms Middle School

In September 2011, CCHS surveyed 12 retail outlets that were within walking distance (.25 miles) of Helms Middle School in central San Pablo. CCHS counted the number of different kinds (flavors, brands) of SSB available for purchase and found a range of 35 (lowest) to 311 (highest) different kinds of SSB on the stores' shelves. The average was 106 different types of SSBs. In all retail outlets SSBs were the vast majority of beverages available for purchase (as opposed to water, diet drinks, and 100% fruit juice).

All three of the full-size groceries that were surveyed featured either an entire row (both sides of the aisle) dedicated to SSBs or large, prominent stacked displays of cases of SSBs. (Two groceries featured both.) CCHS did not see a significant number of outdoor advertising for SSBs either on store walls facing the street or on community advertising space.



## Programs San Pablo can Enact to Combat Obesity

San Pablo could implement a variety of local programs to increase healthy eating or promote regular physical activity that would counter the influence of SSBs. There are many sources for suggested policies and programs such as 1) The Health Element from San Pablo's General Plan (Chapter 8: <http://www.ci.san-pablo.ca.us/DocumentView.aspx?DID=669>), 2) the report, *Example of a Sugar-Sweetened Beverage Regulatory Fee Justification Study in California* prepared by Economic & Planning Systems, Inc for Public Health Law & Policy (These strategies were recommended as statewide mitigations for sugar-sweetened beverage consumption but could easily be modified for implementation in San Pablo.), and 3) a policy brief *CA Campaign for Healthy Beverages* prepared by California Center for Public Health Advocacy ([http://www.publichealthadvocacy.org/PDFs/beverage\\_policies/LocalPolicies\\_WaterSoda\\_No\\_v2010.pdf](http://www.publichealthadvocacy.org/PDFs/beverage_policies/LocalPolicies_WaterSoda_No_v2010.pdf)).

Common themes to decrease obesity in these documents include increasing and promoting the availability of healthy food and beverages, improving the environment (streets, parks, etc) to be more conducive to physical activity, improving food and increasing physical activity at schools, and educating residents about the importance of eating well and exercising. Refer to the appendix for a list of the suggested policies and programs and to the original documents (linked below in the Further Reading section) for the full texts.

## Conclusion

The City of San Pablo faces higher rates of obesity and obesity-related diseases than other cities in Contra Costa County, the effects of which result in a loss of life, well being and productivity to San Pablo citizens and incur large costs to the city and the state. Sugar sweetened beverage consumption is a significant source of excess, empty calories to the diets of the city's residents and is a major contributor to the obesity epidemic and to childhood dental caries. There are various programs that the city can undertake to mitigate these negative affects and help improve the lives of the citizens of San Pablo.

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## Further Reading

*To what extent have sweetened beverages contributed to the obesity epidemic?* Gail Woodward-Lopez, Janice Kao and Lorrene Ritchie. 2010 <http://www.foodpolitics.com/wp-content/uploads/Woodward-Impact-of-SSBs.PubHlthNutr-2011.pdf>

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## Appendix

### Programs San Pablo can Enact to Combat Obesity

San Pablo could implement a variety of local programs to increase healthy eating and promote regular physical activity that would counter act the influence of SSBs. There are many sources for suggested policies and programs such as 1) The Health Element from San Pablo's General Plan (Chapter 8: <http://www.ci.san-pablo.ca.us/DocumentView.aspx?DID=669>), 2) the report *Example of a Sugar-Sweetened Beverage Regulatory Fee Justification Study in California* prepared by Economic & Planning Systems, Inc for Public Health Law & Policy (These strategies were recommended as statewide mitigations for sugar-sweetened beverage consumption but could easily be modified for implementation in San Pablo.), and 3) a policy brief *CA Campaign for Healthy Beverages* prepared by California Center for Public Health Advocacy ([http://www.publichealthadvocacy.org/PDFs/beverage\\_policies/LocalPolicies\\_WaterSoda\\_Nov2010.pdf](http://www.publichealthadvocacy.org/PDFs/beverage_policies/LocalPolicies_WaterSoda_Nov2010.pdf)).

Common themes of these documents include increasing and promoting the availability of healthy food and beverages, improving the environment (streets, parks, etc) to be more conducive to physical activity, and educating the residents about the importance of eating well and exercising.

The following are summarized versions of the recommendations in these various documents. Please refer to the documents themselves for the complete text.

#### ***San Pablo General Plan Health Element***

##### **Topic 1: Healthy Transportation and Physical Activity**

- Implement street design features that facilitate walking and biking in both new and established areas. Require a minimum standard of these features for all new developments.
- Improve signage directing residents and visitors to public parks and recreational facilities from all parts of the community. Integrate parks signage with bikeway and pedestrian-oriented signage system throughout San Pablo.
- Implement Safe Routes to School to make active transportation to school safe.

- Implement transportation demand management programs to reduce single-occupant vehicle trips.
- Link park facility improvement priorities to a ranking system keyed to public health and recreational goals.
- Incentivize the development of new parkland.
- Develop exercise circuit that takes advantages of existing infrastructure.
- Update joint use agreements with schools to increase access to facilities.
- Encourage and support efforts by schools to develop new and improved curricula about the importance of exercise and good nutrition.
- Encourage businesses and non-profit organizations to offer indoor recreational facilities and programs.

## **Topic 2: Healthy Food Access and Equity**

- Use zoning and redevelopment programs to establish incentives for healthy food retailers.
- Establish a Health Commission to advise the City Council on issues relating to health and wellness.
- Support the formation of a West County Food Policy Council to identify innovative solutions to improve local food systems.
- Work to increase participation in existing federal food assistance programs such as Women, Infants, and Children (WIC) nutrition program and the Supplemental Nutrition Assistance Program (SNAP, formerly Food Stamps)
- Develop and implement a healthy food purchasing and vending policies for City facilities and operations that commits to healthy food in vending machines, at City-sponsored events, and in meetings.
- Assess feasibility of starting a certified farmer's market in San Pablo
- Seek ways to partner with regional Community Supported Agriculture (CSA) as an alternative for healthy food vending

- Implement community garden program.
- Work cooperatively with the school district and health department to improve food in schools: establish higher nutrition standards, incorporate culturally-sensitive options, remove unhealthy foods from vending machines, establish school gardens, and coordinate Farm to School programs.
- Support home gardening efforts.
- Adopt zoning controls to limit the number of fast food and drive-through restaurants.

### **Topic 3: Access to Services and Planning for People First**



- Collaborate with CCHS to monitor and maintain health data.
  - Explore health programs in neighborhood facilities.
  - Recruit medical services to San Pablo
  - Locate new outpatient medical facilities in underserved neighborhoods
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- Assist with conversion of liquor stores to healthier retail purposes
  - Increase public awareness of youth program opportunities in and around San Pablo.
  - Create a youth job development program
  - Incorporate universal, lifecycle design principles in new residential developments
  - Support year-round calendar of events in community parks.
  - Investigate programs for involving formerly-incarcerated residents in the community.
  - Encourage new businesses to give local residents preference in hiring decisions.

### **Topic 4: Crime Reduction and Perceptions of Safety**

- Incorporate Crime Prevention Through Environmental Design (CPTED) principles in zoning ordinance and project review.

- Enforce property maintenance and environmental design regulations for businesses, especially alcohol and tobacco outlets.
- Continue to enforce code to manage beverage sale locations and enforce owners on litter, graffiti, etc.
- Ensure San Pablo has minimum illumination standards for streetlights.
- Continue community policing and relationship-building programs
- Continue to involve residents in neighborhood improvement efforts.
- Enhance aesthetics and quality of housing stock and remove blight.

***Example of a Sugar-Sweetened Beverage Regulatory Fee Justification Study in California***

**Strategy 1: Increase Access to Healthy Foods**

- Expand the availability and improve the nutritional quality of school foods and beverages.
- Create a state incentive program to increase healthy food retailing in underserved neighborhoods
- Support local innovation by building infrastructure within local health departments to facilitate improved access to healthy foods

**Strategy 2: Increase Access to Opportunities for Physical Activity**

- Improve the quality and quantity of physical education in California public schools
- Improve the built environment in California communities to increase physical activity

**Strategy 3: Educate Californians About the Risks Associated with Sugar-Sweetened Beverage Consumption**

- Establish a statewide media campaign to educate Californians about the risks associated with sugar-sweetened beverage consumption.



#### **Strategy 4: Increase Access to Obesity-Related Health Care Services**

- Provide reimbursement for health care services to prevent, diagnose, and treat obesity and resulting conditions for Californians – particularly California children – enrolled in publicly funded health insurance programs.
- Provide health care services through school-based health centers.

#### ***CA Campaign for Healthy Beverages***

##### **Sugar Sweetened Beverage Strategies:**

**Vending machines:** Eliminate the sale of sweetened beverages in vending machines on city or county owned property.

**Public property:** Eliminate the sale of sweetened beverages in city or county owned property, or at any city or county sponsored event, meeting, or program.

**Schools:** Establish policies to eliminate electrolyte beverages in schools.

**Marketing and sponsorships:** Eliminate marketing of sweetened beverages, including sponsorships of and the presence of logos in schools and at city or county sponsored programs or events.

**Youth venues:** Eliminate the sale and marketing of sweetened beverages at zoos, museums, parks and other places frequented by children.

**Childcare, afterschool settings:** Eliminate the provision or sale of sweetened beverages in childcare and afterschool programs.

**Breastfeeding:** Ensure that breastfeeding is supported at workplaces and in public buildings/events.

**Public funds:** Eliminate the purchase of sweetened beverages by a city or county.

**Checkout lanes:** Enact a city or county resolution encouraging retailers to remove sweetened beverages from checkout lanes.

**Signage:** Strengthen city and county signage ordinances to limit the amount and type of signage on stores and buildings. (The ordinance must apply to all products and all signs because legally it cannot target a single product type.)

**Density of retailers:** Limit the number and/or density of sweetened beverage retailers near schools and playgrounds.

**Restaurant incentives:** Establish nutrition standards for meals that include toy-giveaways and other incentives.

**Taxes:** Establish a city or county tax on sweetened beverages and use the funds to support local nutrition and physical activity efforts.

**Corporate and organizations practices:** Eliminate the sale of sweetened beverages in vending machines. Ensure the availability of free good tasting water. Eliminate marketing of sweetened beverages, including sponsorships and the presence of logos. Eliminate the purchase of sweetened beverages. Ensure that breastfeeding employees are supported.

### **Water Promotion Strategies**

**Water availability:** Ensure the availability of free good tasting water in public schools (implementation of SB 1413, recently enacted legislation requiring water availability during school meals), on all property owned or leased by a city or county, and at all city/county sponsored events.

**Public property:** Ensure operable, clean drinking fountains when located in city or county owned property, and sell or provide water at city or county sponsored events, meetings, or programs.

**Youth venues:** Ensure operable, clean drinking fountains when located in zoos, museums, parks and other places frequented by children. If water is sold, ensure that prices are comparable or lower than prices for sweetened beverages.

**Childcare, afterschool settings:** Ensure free safe drinking water for children and staff.

**Public funds:** Promote tap water consumption through purchase of reusable water bottles, glasses, pitchers, filters, and other related items. Eliminate the purchase of bottled water in individual serving sizes by a city or county.

**Vending machines:** Ensure the sale of water at prices comparable to or below prices for sweetened drinks in vending machines on city or county owned property.

**Marketing and sponsorships:** Allow beverage companies to market only water, and eliminate sponsorships, logos in schools and at city or county sponsored programs or events.

**Density of retailers:** Limit the number and/or density of sweetened beverage retailers near schools and playgrounds factoring in an exemption for retailers who sell water at lower prices than sweetened beverages.

**Corporate and organizational policies:** Ensure the availability of free good tasting water in drinking fountains. Ensure the purchase of items, such as reusable bottles, filters, glasses, and pitchers, to promote tap water consumption. Ensure water sales in vending machines. Ensure marketing of only water via sponsorships and logos.