The Impact of Sugar-Sweetened Beverage Consumption on the Health of Richmond Residents

A report prepared by Contra Costa Health Services for the Richmond City Council

CONTRA COSTA
HEALTH SERVICES

December 12, 2011

Corrected from December 6, 2011 Richmond City Council version

Authors

Wendel Brunner, PhD, MD

Abigail Kroch, PhD, MPH

Coire Reilly, BA

Tracey Rattray, MSW, MPH

Table of Contents

The Impact of Sugar Sweetened Beverage Consumption on the Health of Richmond 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.[1] The residents of the City of Richmond 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 Richmond, are more likely to be obese than children in other County school districts.[2]

Obesity results from a person eating and drinking 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.[3] 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."[4]

Richmond has demonstrated a commitment to improving the health of its citizens through the recent adoption of a new General Plan in 2011, includes a comprehensive Health Element, as well as other recent General Plan implementation planning efforts aimed at improving health such as the Parks Master Plan, the Bicycle and Pedestrian Plans, the Urban Agriculture Assessment, and supporting a burgeoning Food Policy Council.

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 Richmond

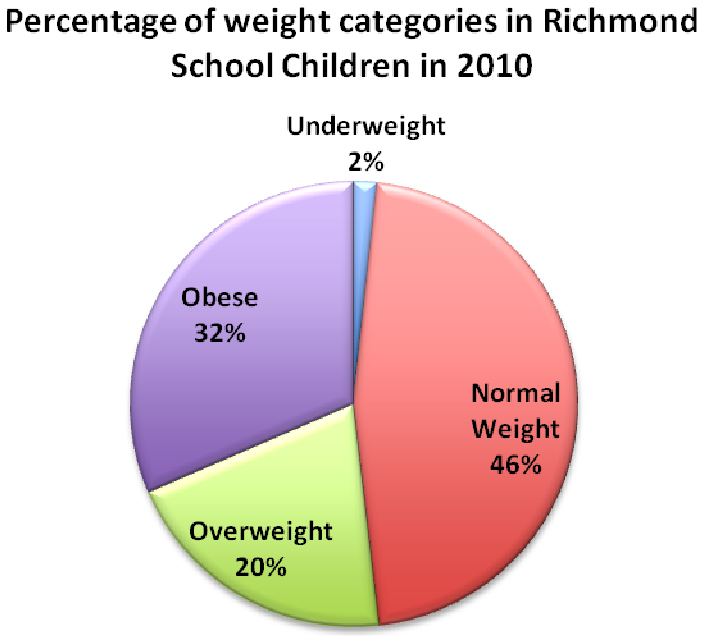
The City of Richmond is home to a diverse community, the members of which are largely Latino and African American. Many individuals in Richmond live below the federal poverty level and have less than a high school diploma. These social factors and other environmental factors have an impact on the health outcomes of the community. Vulnerable populations have a greater risk of obesity and increased rates of chronic diseases with which obesity is associated.

Selected Demographics for the City of Richmond	
Total population	103,701
Race and Ethnicity	
Hispanic or Latino	39%
White	15%
African American	28%
Asian	15%
Household Characteristics	
Median household income	$55,146
People of all ages in poverty	15%
Educational Attainment	
Percent less than high school diploma	21%

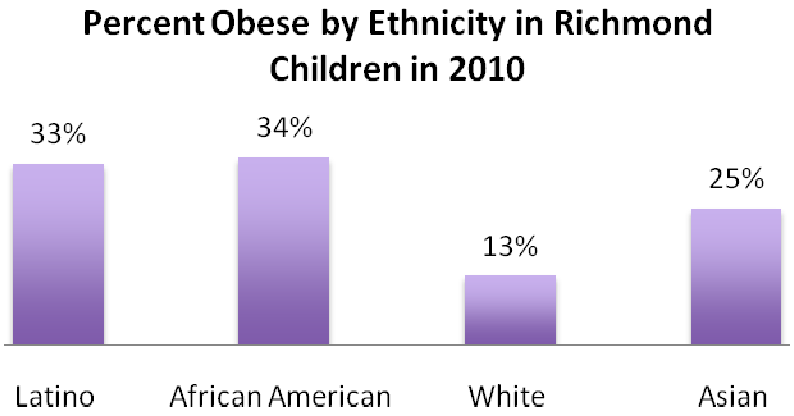
Sources: 2010 Census and American Community Survey, 2010 and 2005-2009

Obesity Prevalence Among Richmond Children

Maintaining a healthy weight throughout the lifetime helps to avoid obesity related illness and premature death. At public schools in California, students are tested yearly on physical activity using the Fitnessgram test, which includes a measurement of height and weight measured by the test administrator. The analysis below on childhood obesity for Richmond was obtained from the 2010 Fitnessgram data carried out in the all schools located within the boundaries of Richmond as well schools in neighboring jurisdictions whose student population includes a large percentage of children who reside in Richmond. A total of 2594 students were included in this analysis.



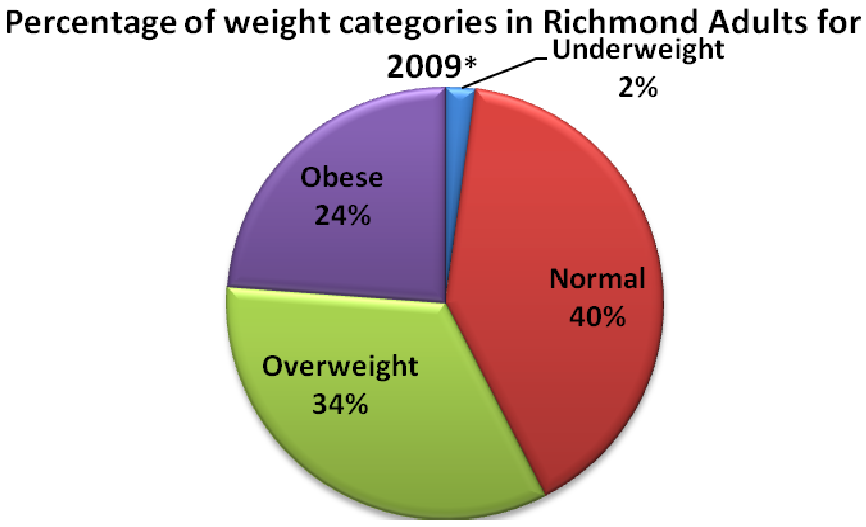
The 2010 Fitnessgram data shows that the burden of obesity in Richmond school children is significant. Greater than 50% of children are overweight or obese.



Among school children in Richmond, Latinos and African Americans have a higher prevalence of obesity than Whites and Asians. Children who are overweight or obese are at a greater risk of becoming obese as adults and suffering the health consequences of a lifetime of obesity. The obesity epidemic in Richmond is contributing to the existing health disparity in minority populations.

Obesity Prevalence among Richmond Adults

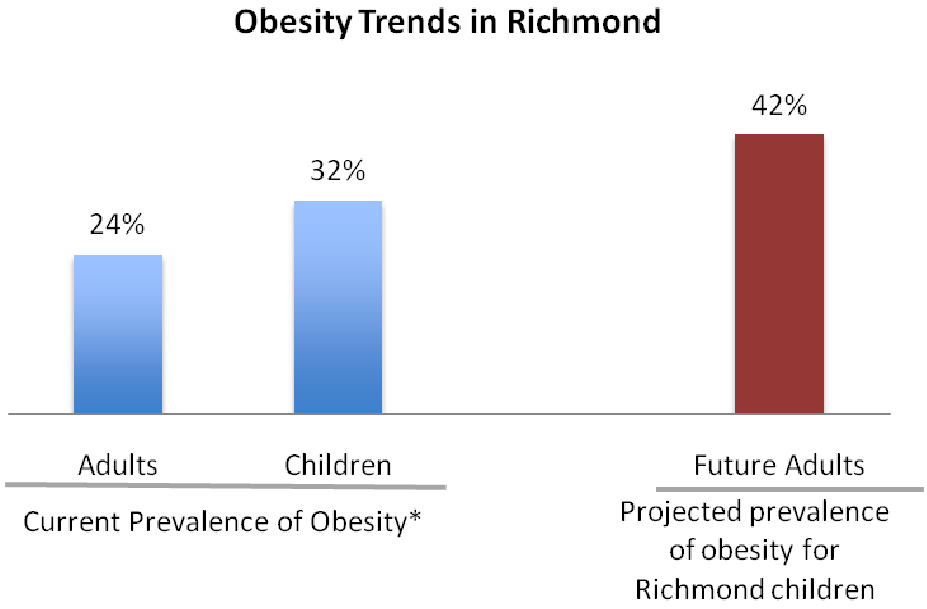
Obesity prevalence for Richmond adults was estimated using the 2009 California Health Interview Survey. In Richmond residents, we estimate that 58% of adults are overweight or obese. The percentage of obese adults in this estimate is 24%.



*Small Area Analysis was used to calculate prevalence using the demography of Richmond.

Projected Adult Obesity in Richmond

Due to the current prevalence of obesity among Richmond 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[5], we predict that as adults, children currently residing in Richmond will have an obesity prevalence of 42% (almost double the current adult obesity prevalence of 24%). This prevalence excludes individuals who are overweight, but not obese.



*Adult prevalnce from small area analysis of 2009 CHIS data, child obesity prevalence from 2010 Fitnessgram

Obesity related disease and mortality in Richmond

Morbidity rates

The current prevalence of obesity among Richmond adults contributes to increased rates of disease and death due to cardiovascular disease, cancer, diabetes, and all cause mortality. The California Health Interview Survey was used to estimate the prevalence of obesity related disease Richmond. Using empirical studies relating obesity to specific diseases, the number of excess cases of people diagnosed with chronic diseases in Richmond due to obesity was calculated. The number of future cases among Richmond 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 disease (morbidities) due to the projected rising obesity rate among adults.

Diagnosis of obesity related chronic disease in Richmond

	Prevalence of diagnosis	Excess diagnoses due to current obesity prevalence of 24%	Excess diagnoses due to future obesity prevalence of 42%
Hypertension	28%	8092	11111
Diabetes	8.2%	2354	3243
Cardiovascular Disease	5.3%	345	572
Cancer	5.7%	164	281
Stroke	2.5%	204	332

*Small Area Analysis with CHIS was used to calculate prevalence using the demography of Richmond. 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[6, 7, 8, 9]

Mortality Rates

The excess deaths due to obesity in Richmond were calculated using results of previous studies that estimated the relative risk of mortality among obese individuals. The annual death rate in Richmond is approximately 764 residents, of which 11% 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, estimated at 18%. These excess deaths are premature deaths with an estimated loss of 3 years of life per person due to cardiovascular disease, 9 years of life due to cancer and 7 years of life due to diabetes.

Excess deaths due to obesity per year in Richmond

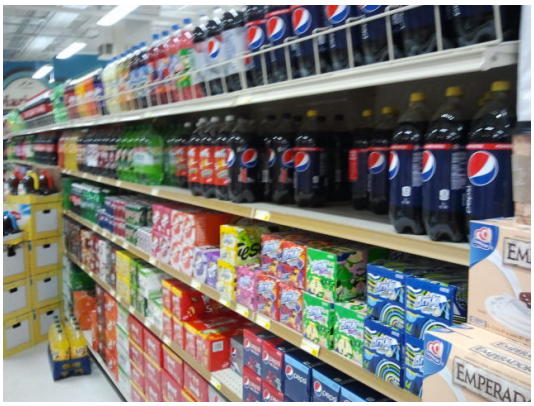
	Deaths per year in Richmond	Percent of current deaths caused by obesity prevalence of 24%	Percent of future deaths caused by obesity prevalence of 42%
Cardiovascular Disease	199	15%	23%
Cancer	170	6.9%	11%
Diabetes	28	37%	51%
All Causes	764	**11%**	**18%**

Deaths per year calculated by average number of deaths of Richmond residents in the Death Statistical Master Files from 2000-2009. Population attributable fraction of death was calculated using empirical relationships between obesity and mortality. [10, 11, 9]

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.[20]

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.

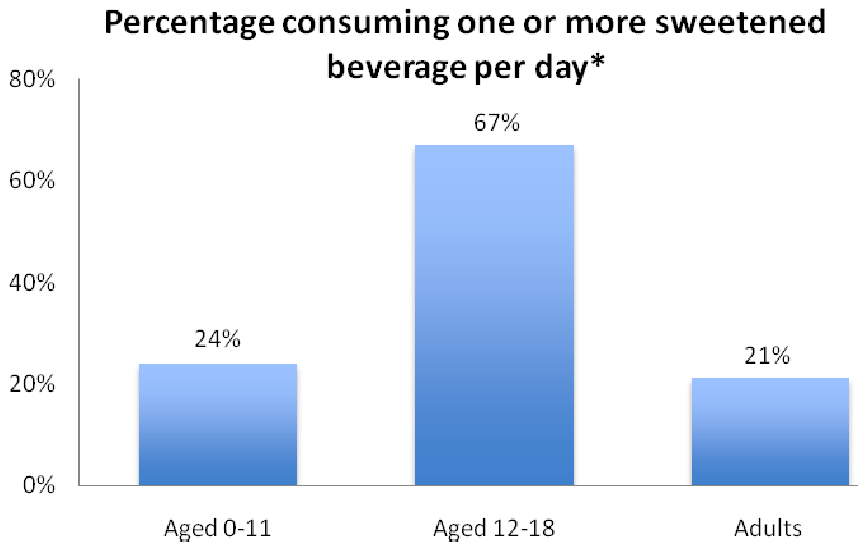
Flavoring syrup and concentrate manufacturing is an $8 billion dollar industry with an annual profit of around $1.4 billion. Soft drink manufacturing is a $47.2 billion industry and generates annual profits of around $1.7 billion.

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.[12]

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.[13]

Richmond Sugar-Sweetened Beverage Consumption

Sweetened beverage consumption was estimated for Richmond, using the 2009 California Health Interview Survey. Beverage consumption was highest among teens, with 67% 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).[14] 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 42% 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 21%.



*Small Area Analysis was used to calculate rates using the demography of Richmond.

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 21% of adults who consume one or more sugar-sweetened beverages per day, the average number of servings (120 calories/adult serving[14]) is 2.2 with an estimated caloric content of 258 calories. For adolescents the excess calorie consumption is much greater. Among the estimated 67% of Richmond adolescents who consume one or more SSBs per day, the average number of servings (242 calories/teen serving[15,16]) 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.[17]

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.[3] 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."[4]

Relationship between Sugar-Sweetened Beverage Consumption and Dental Caries

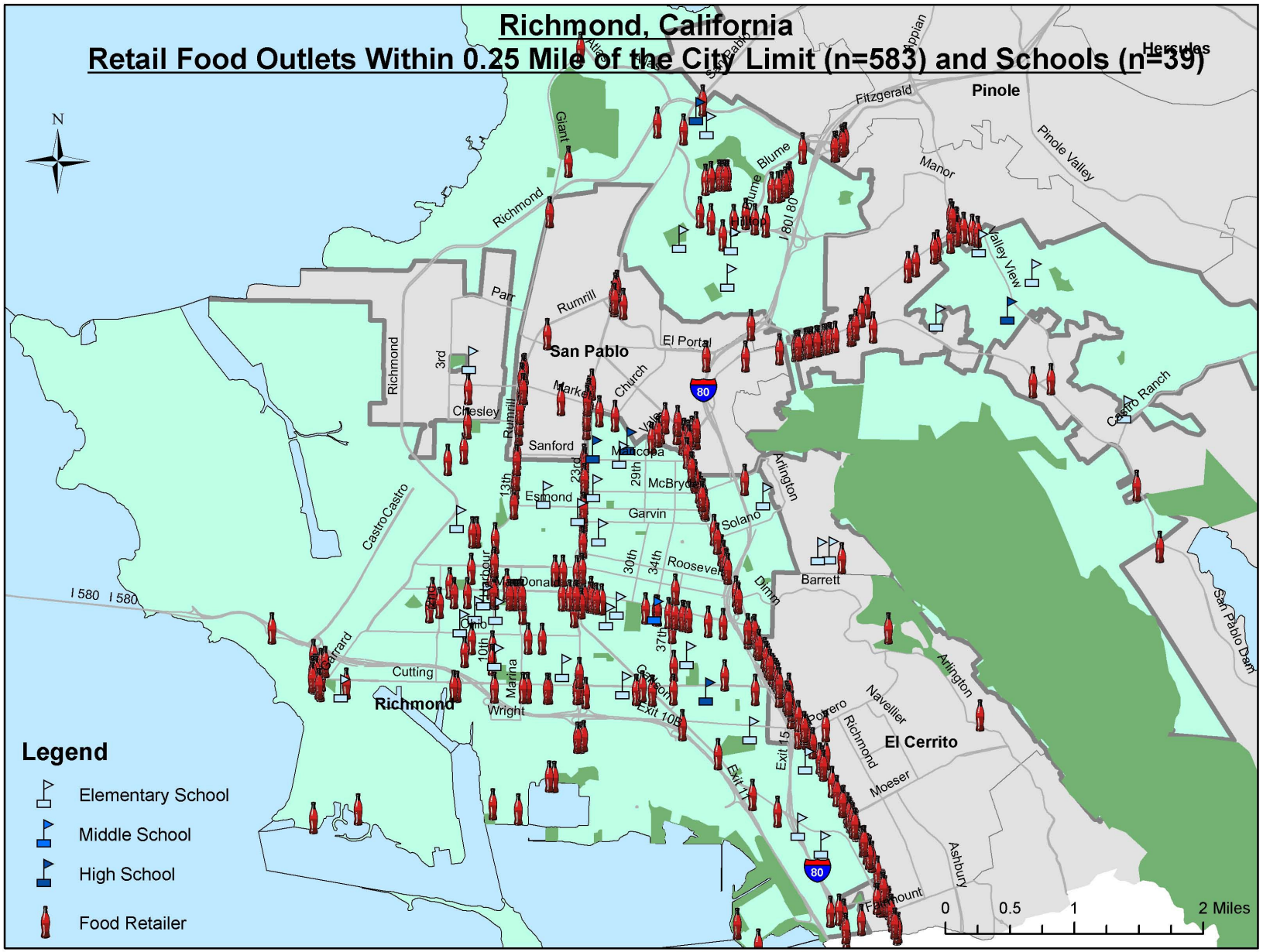
Because children's oral health in California is ranked the third worst state in the nation after Arizona and Texas[18], reducing or preventing children from consuming sugar-laden drinks becomes even more important as a preventative measure. Sugar consumption is the primary cause of dental caries in children. **[19]** During the 2010-2011 school year, among students in Richmond 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 28%.

Sugar-Sweetened Beverage Environment in Richmond

Richmond citizens are saturated with food vendors supplying sugar-sweetened beverages. There are 323 retail food outlets within the city of Richmond. Including retail food outlets outside of the city limits, but within a quarter mile of city limits, there are a total of 583 retail food outlets easily accessible to Richmond residents. Using population estimates from the 2010 Census, it was estimated that 74% of the population resides within walking distance (1/4 mile) of a retailer or vendor (76,739 of a total population of 103,701). Additionally, 198 outlets are within a quarter mile of a school. The average number of outlets within a quarter mile of a school is 5 (minimum = 0, maximum = 19). 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 Richmond as well as the locations of schools.

Richmond, California

Retail Food Outlets Within 0.25 Mile of the City Limit (n=583) and Schools (n=39)



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

Programs Richmond can Enact to Combat Obesity

Richmond 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 Richmond's General Plan (Chapter11: www.cityofrichmondgeneralplan.org/docs.php?oid=1000000919&ogid=1000000647) 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 Richmond.), 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).

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 Richmond 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 Richmond 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 Richmond.

Acknowledgements

The following individuals should be acknowledged for their contribution to this report: Martin Lynch for GIS and spatial analysis; the Contra Costa Health Services Children's Oral Health Program for access to data relevant to oral health of Richmond children, and Lisa Diemoz for analysis of oral health data; California Center for Public Health Advocacy and Public Health Law and Policy for SSB data analysis and legal assistance.

References

1 – Khan, Laura Kettel, PhD, Kathleen Sobush, MS, MPH, et al. (2009) Recommended Community Strategies and Measurements to Prevent Obesity in the United States
http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5807a1.htm

2 – Contra Costa Health Services (2010) Community Health Indicators for Contra Costa County.
http://cchealth.org/health_data/hospital_council/2010/pdf/2010_community_health_indicators_report_complete.pdf

3 – Woodward-Lopez, Gail, Janice Kao, and Lorrene Ritchie. 2010. To what extent have sweetened beverages contributed to the obesity epidemic? Public Health Nutrition p. 3.
http://www.foodpolitics.com/wp-content/uploads/Woodward-Impact-of-SSBs.PubHlthNutr-2011.pdf

4 – Babey, Susan H., Malia Jones, Hongjian Yu, and Harold Goldstein. Bubbling Over: Soda Consumption and Its link to Obesity in California. 2009. UCLA Center for Health Policy Research.
http://www.healthpolicy.ucla.edu/pubs/Publication.aspx?pubID=375 p. 1

5 – Janssen I, Katzmarzyk PT, Srinivasan SR, Chen W, Malina RM, Bouchard C, et al. Utility of childhood BMI in the prediction of adulthood disease: comparison of national and international references. Obesity research. 2005 Jun;13(6):1106-15.

6 – Guh DP, Zhang W, Bansback N, Amarsi Z, Birmingham CL, Anis AH. The incidence of co-morbidities related to obesity and overweight: a systematic review and meta-analysis. BMC public health. 2009 Jan;9(88).

7 – Rapp K, Schroeder J, Klenk J, Stoehr S, Ulmer H, Concin H, et al. Obesity and incidence of cancer: a large cohort study of over 145,000 adults in Austria. British journal of cancer. 2005 Oct;93(9):1062-7.

8 – Wilson PWF, D'Agostino RB, Sullivan L, Parise H, Kannel WB. Overweight and obesity as determinants of cardiovascular risk: the Framingham experience. Archives of internal medicine. 2002 Sep;162(16):1867-72.

9 – Mokdad AH, Ford ES, Bowman B a, Dietz WH, Vinicor F, Bales VS, et al. Prevalence of obesity, diabetes, and obesity-related health risk factors, 2001. JAMA. 2003 Jan 1;289(1):76-9.

10 – Allison DB, Fontaine KR, Manson JE, Stevens J, VanItallie TB. Annual deaths attributable to obesity in the United States. JAMA.1999 Oct;282(16):1530-8.

11 – Banegas J, Lopez-Garcia E, Gutierrez-Fisac J, Guallar-Castillon P, Rodriguez-Artalejo F. A simple estimate of mortality attributable to excess weight in the European Union. European Journal of Clinical Nutrition. 2003;57:201-208.

12 – Fry, Christine, Carrie spector, Kim Arroyo Williamson, and Ayela Mujeeb. Breaking Down the Chain: A Guide to the Soft Drink Industry. 2011. Public Health Law & Policy and National Policy & Legal Analysis Network. http://www.nplanonline.org/nplan/products/soda-industry-report pgs. 12-26.

13 – Harris, Jennifer, PhD, MBA, et al., Sugary Drink FACTS: Evaluating Sugary Drink Nutrition and Marketing to Youth. Yale Rudd Center for Food Policy & Obesity. http://www.sugarydrinkfacts.org/resources/SugaryDrinkFACTS_Report.pdf pg. Xi

14 - Centers for Disease Control and Prevention (CDC). National Center for Health Statistics (NCHS). National Health and Nutrition Examination Survey Data. Hyattsville, MD: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. 2003-2006

15 – Hastert, T.A., Babey, S. H., Diamant, A.L., Brown, E.R., More California Teens Consume Soda and Fast Food Each Day Than Five Servings of Fruits and Vegetables. UCLA Health Policy Research Brief, Sept. 2005.

16-United States Department of Agriculture, Agriculture Research Service. Continuing Survey of Food Intakes by Individuals. 1994-96

17 – Sugar Stacks Website. http://www.sugarstacks.com/beverages.htm Accessed November 14, 2011.

18 – Ch1ldren Now, Oral Health Council Childhood Obesity & Dental Disease: Common Causes, Common Solutions. February 2011. http://www.childrennow.org/uploads/documents/oral_health_brief_022011.pdf pg. 2

19 – Bruce A. Dye et al., "The relationship between healthful eating practices and dental caries in children aged 2–5 years in the United States, 1988–1994," Journal of the American Dental Association 135 (1) 2004: pgs. 55-66.

20 – California Center for Public Health Advocacy, The Economic Costs of Overweight, Obesity, and Physical Activity Among California Adults. September 2009. http://publichealthadvocacy.org/_PDFs/Costofobesity_BRIEF.pdfpg. 4.

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

Bubbling Over: Soda Consumption and Its link to Obesity in California. Susan H. Babey, Malia Jones, Hongjian Yu, and Harold Goldstein. 2009
http://www.healthpolicy.ucla.edu/pubs/Publication.aspx?pubID=375

Breaking Down the Chain: A Guide to the Soft Drink Industry. Fry, Christine, Carrie spector, Kim Arroyo Williamson, and Ayela Mujeeb. 2011. Public Health Law & Policy and National Policy & Legal Analysis Network. http://www.nplanonline.org/nplan/products/soda-industry-report

Example of a Sugar-Sweetened Beverage Regulatory Fee Justification Study in California. December 2009. Public Health Law & Policy.

CA Campaign for Healthy Beverages. Harvey, Stefan, Kumar Chandran, Ellen Braff-Guajardo. November 2010. California Center for Public Health Advocacy.
http://www.publichealthadvocacy.org/_PDFs/beverage_policies/LocalPolicies_WaterSoda_Nov2010.pdf

Local Beverage Policies adopted by California Cities and Counties. May 2011. California Center for Public Health Advocacy.

http://www.publichealthadvocacy.org/_PDFs/beverage_policies/CABeveragePolicies_Cities_Counties.pdf

Appendix

Body Weight and Health:

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^{th} percentile is considered underweight, 5^{th}-85^{th} percentile is normal weight, 85^{th}-95^{th} percentile is overweight, and greater than 95^{th} 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).

Schools Included in Fitnessgram Analysis

- Cesar E. Chavez Elementary
- Coronado Elementary
- De Anza Senior High
- Fairmont Elementary
- Grant Elementary
- Helms Middle
- Highland Elementary
- Kennedy High
- King Elementary
- Leadership Public Schools: Richmond
- Lincoln Elementary
- Lavonya DeJean Middle
- Manzanita Middle
- Mira Vista Elementary
- Nystrom Elementary
- Peres Elementary

- Richmond High
- Riverside Elementary
- Sheldon Elementary
- Stege Elementary
- Valley View Elementary
- Verde Elementary
- WCCUSD Community Day School Program
- Washington Elementary
- Wilson Elementary

Programs Richmond can Enact to Combat Obesity

Richmond 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 Richmond's General Plan (Chapter11: www.cityofrichmondgeneralplan.org/docs.php?oid=1000000919&ogid=1000000647) 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 Richmond.), 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).

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.

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

Richmond General Plan Health Element Goals

- Improved Access to Parks and Open Space
- Expanded access to Healthy food and nutrition Choices
- Improved Access to Medical Services
- Safe and Convenient Public Transit and Active Circulation Options
- A Range of Quality and Affordable Housing
- Expanded Economic Opportunity
- Complete Neighborhoods
- Improved Safety in Neighborhoods and Public Spaces
- Improved Environmental Quality
- Green and Sustainable Development and Practices
- Leadership in Bui9lding Healthy Communities

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.