

The Impacts of Sugary Drinks on Ethnic or Low Income San Francisco Residents

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POPULATION HEALTH DIVISION

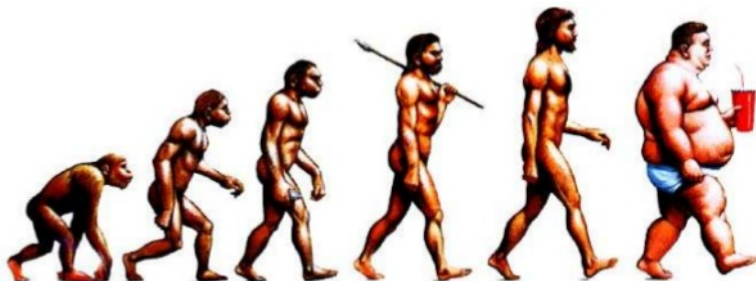
SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH



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Overview



- 1 Background
- 2 Sugar MADNESS
- 3 Summary Review

UN expert urges global regulatory regime to battle artery-clogging junk foods (UN News, May 19, 2014)



Olivier De Schutter, UN Food Expert

“Unhealthy diets are now a greater threat to global health than tobacco. Just as the world came together to regulate the risks of tobacco, a bold framework convention on adequate diets must now be agreed. . . .”

UN Recommendations (2012)

- 1 Taxing unhealthy products
- 2 Regulating foods high in saturated fats, salt and sugar
- 3 Cracking down on junk food advertising
- 4 Overhauling misguided agricultural subsidies that make certain ingredients cheaper than others
- 5 Supporting local food production so that consumers have access to healthy, fresh and nutritious foods

San Francisco leaders' strong support of campaigns to decrease sugary beverage consumption (SSB), 2008–2014

2007 Alameda County launches Soda Free Summer

2009

- SFS in San Francisco.
- 25,000 "Drink Water!" Said the Otter books distributed to pre-k and kindergarten classes throughout SF.
- American Heart Association releases guidelines on sugar intake limits.
- CCPHA releases *Bubbling Over* report that scientifically links soda consumption to overweight and obesity.
- SFDPH releases nexus study examining feasibility of SSB legislation in SF.
- Organizations implementing Soda Free Policies: Boys and Girls Club, Junior Giants, Sunday Streets



2011

- SFS in San Francisco.
- Potter the Otter launches.



2013

- Senator Monning introduces SB-622 to establish statewide soda tax and create a Children's Health Promotion fund. SB-622 is first soda tax to ever clear two committees.
- SFS in San Francisco.
- SUSF convenes Rethink Your Drink Workgroup
- SF Public Utilities Commission convenes Water
- Mayor Lee and 17 other mayors urge congressional leaders to ban use of food stamps to buy SSB.
- Organizations implementing Soda Free Policies: YMCA of SF, Bayview Hunters Point Foundation, Children's Council of SF



2008

- Shape Up SF (SUSF) leads regional SFS campaign through BANPAC.
- SF declares a Soda Free Summer.
- 40,000 SFS brochures distributed through SF Unified School District, summer lunch sites, worksites, clinics, and community partners throughout SF.
- SFDPH implements food policy.
- Mayor Newsom calls for a nexus study to assess feasibility of local SSB legislation.



2010

- SFS in San Francisco.
- SFDPH runs NYC's Pouring on the Pounds campaign on MUNI buses.
- Mayor Newsom signs Executive Directives on Healthy and Sustainable Foods and Healthy Vending.
- Healthy Meals Ordinance passes.
- Organizations implementing Soda Free Policies: SF Recreation and Parks, Bay Area SCORES, Kai Ming Head Start



2012

- SFS in San Francisco.
- SUSF provides technical assistance to youth-serving organizations to develop and implement healthy beverage policies.
- Paper in *Nature* argues sugar is physically addictive and linked to diseases associated with metabolic syndrome.
- Mother Jones* publishes exposé on sugar industry and its parallels to big tobacco.



2013

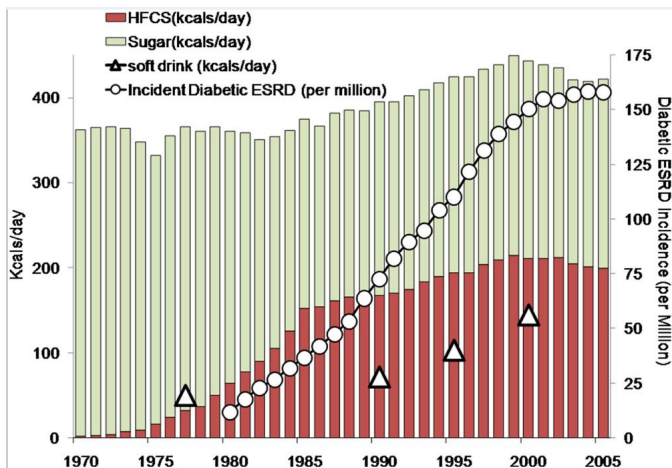
- SUSF secures \$250K to run awareness LA's sugar packs campaign.
- SUSF funds The Bigger Picture to develop PSAs about sugary drinks.
- SF Board of Supervisors unanimously pass resolution in support of SB-622.
- California hosts its 1st Healthy Beverage Summit



2014

- SUSF launches Choose Healthy Drinks Campaign in collaboration with Alameda, Sonoma, and San Mateo counties.

US trends in sugar and HFCS availability, soft drink consumption, and incident diabetic end-stage renal disease



Source: doi:10.1371/journal.pone.0003431.g004

Harvard School of Public Health Fact Sheet (2012)

The Problem: Sugary drinks are a major contributor to metabolic dysfunction, diabetes, heart disease, and obesity

The Evidence: Soft drink consumption is rising and harms health.

- 1 Sugary drink portion sizes have risen dramatically over the past 40 years, and children and adults are drinking more soft drinks than ever.
- 2 Sugary drinks increase the risk of metabolic dysfunction, diabetes, heart disease, and obesity.
- 3 Cutting back on sugary drinks can help people control their weight.

There's more: Black/African Americans, Latinos, and Asians have higher risk profiles.

Higher sugary drink consumption and disease in Blacks and Latinos, higher risk of diabetes for Asian at lower body weights.

Sugary drinks impact our health (“calorie is not a calorie”)

Liquid calories not counted

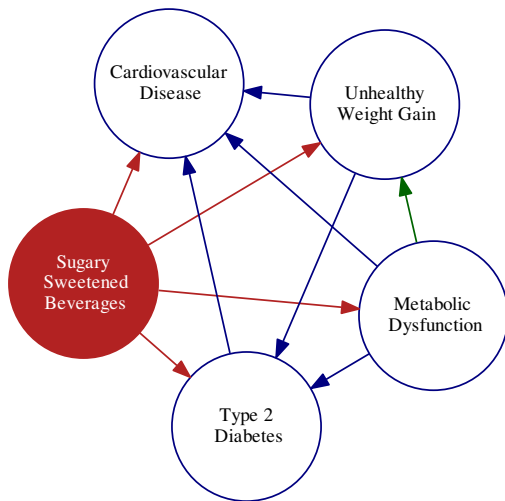
- Not full after sugary drink
- Not eating less later

Glycemic metabolic effects

- ↑ glucose/insulin spikes
- ↑ hunger & fat storage

Fructose liver metabolism

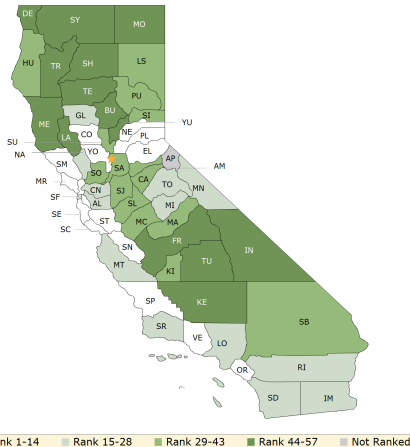
- ↑ liver/visceral fat
- Insulin resistance
- Metabolic syndrome



How does San Francisco compare to CA Counties?

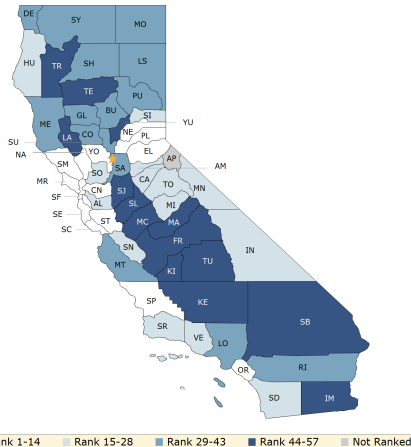
Health outcomes (no. 22) vs. Health factors (no. 5), County Health Rankings, 2014

2014 Health Outcomes - California



County Health
Rankings & Roadmaps
Ranking a County's Health by County
© 2014 United States Department of Health & Human Services

2014 Health Factors - California



County Health
Rankings & Roadmaps
Ranking a County's Health by County
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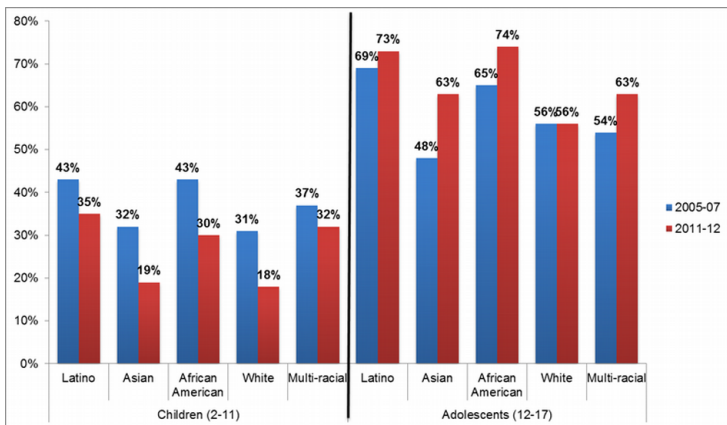
San Francisco Population by Race/Ethnicity, 1990–2010

Figure 1: San Francisco Population by Race and Latino Ethnicity, 1990 - 2010

Race/ethnicity	1990	2000	2010	Change	% Change	% 2010 Pop.
American Indian and Alaska Native	3,354	3,458	4,071	717	21.4%	0.5%
Asian	207,901	239,565	266,398	58,497	28.1%	33.1%
Black/African American	78,931	60,515	50,768	-28,163	-35.7%	6.3%
Native Hawaiian and Pacific Islander	3,099	3,844	3,365	266	8.6%	0.4%
White	388,341	385,731	417,913	29,572	7.6%	51.9%
Other ¹	42,333	83,620	62,720	20,387	48.2%	7.8%
Total	723,959	776,773	805,235	81,276	11.2%	100.0%
Latino (subset of races above) ³	94,377	102,078	121,744	27,367	29.0%	15.1%

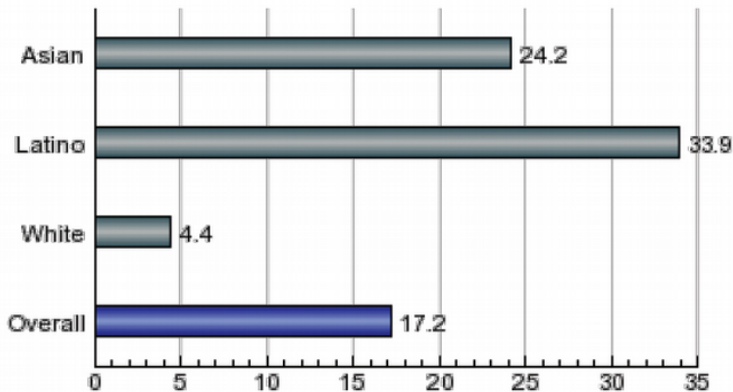
Source: Calculated by the Budget and Legislative Analyst from U.S. Census Bureau, Census 1990, 2000, 2010 data provided by the San Francisco Planning Department

Percent of children and adolescents drinking at least one sugary drink per day in 2005–2007 and 2011–2012



Source: Bubbling Over: California Adolescents Drinking More Soda and Other Sugar-Sweetened Beverages. UCLA Center for Health Policy Research and California Center for Public Health

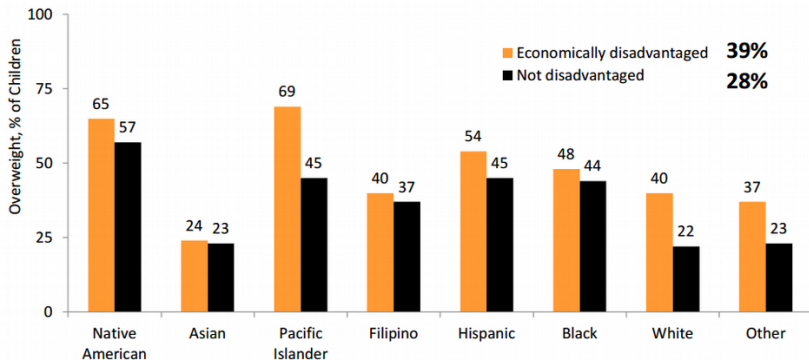
SF Children and adolescents who consumed 2 or more glasses of soda or sugary drink yesterday by Ethnicity



Source: California Health Interview Survey, 2009

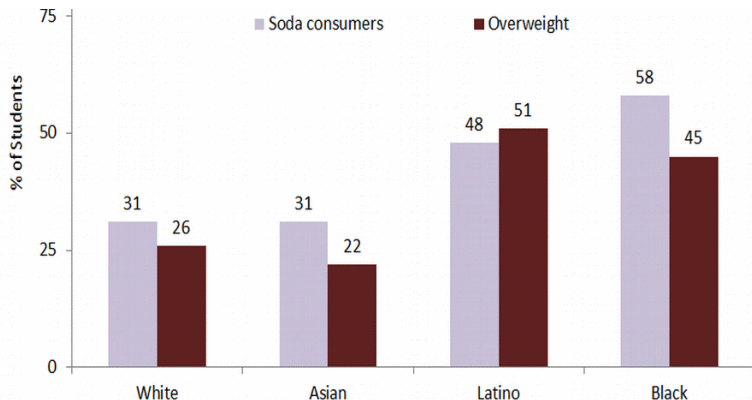
Prevalence of overweight in SFUSD 5th, 7th, and 9th graders by socioeconomic status, 2011-2012

Lower income children are 60% more likely to be overweight than higher income children



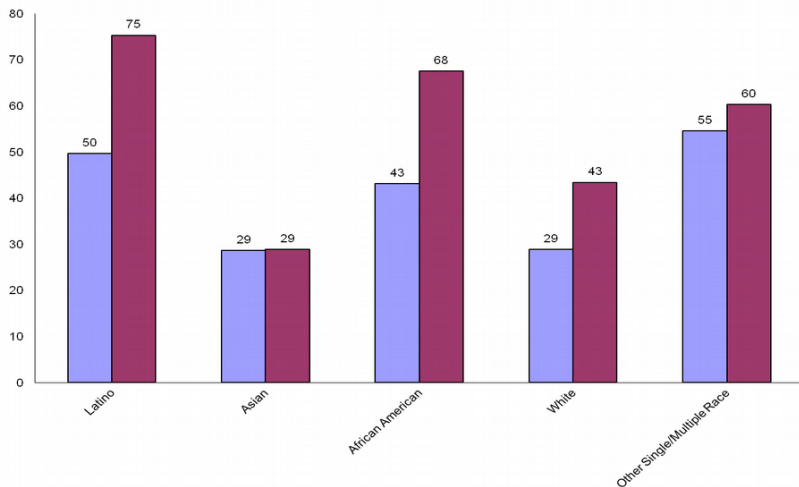
Data source: CDE Fitnessgram, 2011-2012 for 9,749 students ages 10-18y. Data analyzed by SFPDPH MCAH Epidemiology
Overweight: BMI percentiles from measured weight and height $\geq 85\%$

Soda consumers are overweight, San Francisco 9th graders

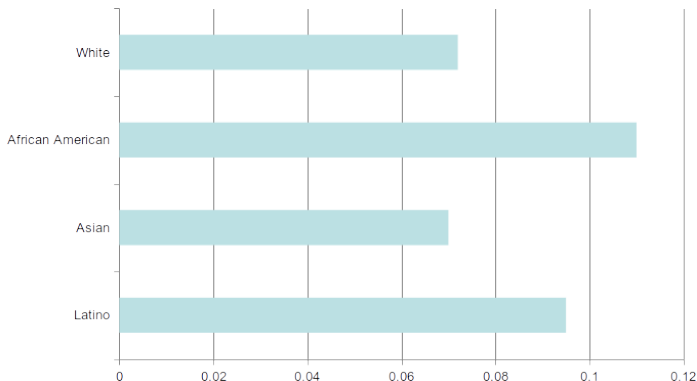


Data sources: The proportion of soda consumers was estimated from the California Healthy Kids Survey, 2010-2011. Students were asked "Yesterday, how many times did you drink a can, bottle, or glass of soda or pop, such as Coke, Pepsi, or Sprite?". Soda consumers reported drinking soda one or more times yesterday. California Department of Education Fitnessgram Data, 2010-2011, were used to estimate the prevalence of overweight, defined as measured BMI percentile $\geq 85\%$ based on CDC growth curves. Data analyzed by SFPD/MCAH Epidemiology, Sept. 2013.

Soda consumers are overweight, San Francisco Adults

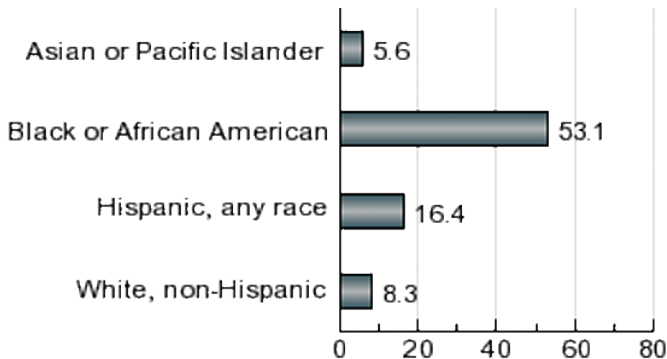


California adults ever diagnosed with diabetes, by ethnicity



Source: California Health Interview Survey, 2011–2012

Adult hospitalization rate due to diabetes by ethnicity, San Francisco 2010–2012



Age-adjusted hospitalizations/10,000 population

Use **Sugar MADNESS** to remember the *cause* (sugar), the *diagnosis* (MAD), and the *treatment* (NESS)

Diagnosis

M etabolic dysfunction
A dipose (fat) deposition
D iseases (diabetes, heart)

Treatment

N utrition
E nvironments
S tress reduction
S leep and exercise



Nutrition *is* key to better metabolic health

Avoid added sugars (i.e., fructose)

- Sodas
- Fruit juices
- Sports drinks
- Energy drinks
- Chocolate milk, etc.

Add back real (unprocessed) food

Fiber, omega-3 fatty acids, and micronutrients

Hu FB. Resolved: There is sufficient scientific evidence that decreasing sugar-sweetened beverage consumption will reduce the prevalence of obesity and obesity-related diseases. *Obes Rev.* 2013;14(8):606-19.

YOU WOULDN'T EAT 22 PACKS OF SUGAR*. WHY ARE YOU DRINKING THEM?

Drinking even one sugary drink a day may lead to cavities, obesity and diabetes. Choose healthy drinks like tap water.

ChooseHealthyDrinks.org
#choosehealthydrinks

SHAPE UP
END OBESITY

*Based on a 12 oz can of soda. Contains 22 packets of sugar. A packet of sugar is 4 grams. 22 packets = 88 grams of sugar. 88 grams of sugar is equivalent to 22 packets of sugar. ©2014 American Heart Association. All rights reserved.

Environments—*make healthy choices easy everywhere*

Current state

- Fast food available 24/7
- Soda vending machines
- Targeted advertising (see billboard)
- Processed foods with added sugar and removed fiber

Future state

- Water instead of sugary drinks
- Portion sizes reduced
- Fresh food affordable and available
- Healthy food policies and systems



Thank you! Any questions?



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Resources

- *Choose Healthy Drinks*
<http://www.choosehealthydrinks.org/>
- *Shape UP San Francisco*
<http://shapeupsfcoalition.org/>
- *The Skinny on Obesity*—UCTV Prime
<http://www.uctv.tv/skinny-on-obesity/>
- Robert H. Lustig. *Fat Chance: Beating the Odds Against Sugar, Processed Food, Obesity, and Disease*. Plume Publishing 2012
- HBO's *The Weight of the Nation*
<http://theweightofthenation.hbo.com/>
- CDC. *Overweight and Obesity*: <http://www.cdc.gov/obesity/>