

FACTS

Decreasing Sugar-Sweetened Beverage Consumption

Policy Approaches to Address Obesity



OVERVIEW

America is in the midst of an obesity epidemic. Currently, 69% of U.S. adults are overweight while more than one-third (35%) are obese. Children are not untouched by this frightening reality as 32% are overweight, 17% of whom are

obese.¹ The American Heart Association supports a multipronged approach to address this problem including creating and implementing policies designed to improve access to affordable, nutritious foods and beverages, thereby making it easier for Americans to choose healthier foods consistent with the *Dietary Guidelines for Americans*.² The association also supports examining whether policies such as taxing sugar-sweetened beverages (SSB), regulating consumption of SSBs in federal nutrition programs [e.g. Supplemental Nutrition Assistance Program (SNAP), Child and Adult Care Feeding Program (CACFP)], and increasing access to water can curb the consumption of sugary drinks, consequently improving the health of all Americans.

THE CURRENT LANDSCAPE

The single largest source of calories in the American diet is carbonated soft drinks, providing over 5% of overall caloric intake.³ The average American consumes the equivalent of 39 pounds of sugar each year from soda and other sweetened beverages.⁴ These consumption levels are concerning since several scientific studies have provided evidence linking increased intake of soft drinks to weight gain and an increased body mass index (BMI).^{5,6} These beverages have a high sugar content, produce low satiety levels, and provide incomplete compensation for total energy.¹¹ Along with weight gain, research also suggests that higher consumption of SSBs is associated with the development of metabolic syndrome and type 2 diabetes.⁶

In 2006, the Alliance for a Healthier Generation, a joint initiative founded by the American Heart Association and the Clinton Foundation, joined forces with leaders of the beverage industry to remove full-calorie soft drinks in schools across the country and replace them with smaller, lower-calorie options. The initiative was successful, resulting in 88% fewer beverage calories shipped to schools across the U.S.⁷ Because children have access to SSBs outside of the school setting, interventions and education reinforcing the need to mitigate consumption both inside and outside the school environment is a necessity.⁸

ALARMING FACTS

- Children who consume higher amounts of SSBs have a 55% greater chance of being overweight or obese compared to those who consume less SSBs.⁹
- A 20-ounce bottle of soda contains the equivalent of approximately 17 teaspoons of sugar.¹⁰ The American Heart Association recommends that adults consume no more than five to nine teaspoons of added sugar per day.¹¹
- Adults who drink one soda or more daily are 27% more likely to be overweight or obese than adults who do not, even after accounting for poverty status and race/ethnicity.⁴
- Full-calorie beverage consumption is on the decline; however, beverage consumption as a whole is increasing, especially with the mid-calorie drinks (e.g. sports drinks, teas, and energy drinks).¹² Even though these mid-calorie drinks may not be as high in sugar, they provide a lot of “empty calories.” Compounding this problem is the fact that energy drinks often do not qualify as beverages, but rather as dietary supplements, which gives the Food and Drug Administration less premarket regulatory control over them.¹³

POTENTIAL FOR POSITIVE CHANGE

Studies have shown that diet is linked to economic incentives. For example, for food eaten away from home, soft drinks, juice, and meats are the most responsive to price changes.¹⁴

- A 10% price increase might decrease consumption of less healthy foods and beverages by 8%.¹⁷
- Preliminary data from Mexico’s one peso/liter excise tax on SSBs shows an approximate 10% decline in purchases of these taxed beverages while demonstrating a 13% increase in plain water purchases during the same time period.¹⁵
- Vulnerable populations, especially low-income and less educated, as well as children and adolescents, are especially price-sensitive.^{16,17,18} They also represent population groups that have the greatest health disparities and would most likely benefit most from lower consumption of sugary beverages.¹⁹
- One study found that the imposition of a 20% tax on SSBs could result in a state level net job employment increase.²⁰
- Healthcare costs attributable to obesity could reach between \$861 and \$957 billion by 2030.²¹ Funding for obesity prevention programs could be

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obtained from taxing SSBs. If a 20 ounce bottle costs \$1.50 and carries a one cent tax/ounce, the new cost per bottle would be \$1.70, resulting in over **\$13.3 billion** in total tax revenue.²²

- In 2014, the nation's first soda tax on SSBs passed in Berkeley, CA. The measure imposes a one cent/ounce general tax on SSBs and sweeteners used to flavor drinks. It provides exemptions for diet drinks, milk products, 100% juice, baby formula, alcoholic drinks, and drinks taken for medical reasons.²³

THE ASSOCIATION ADVOCATES

Reducing the consumption of SSBs is an important way to improve the health of all Americans. The American Heart Association advocates for:

- Robust nutrition standards in schools and government nutrition programs for meals and snacks that promote healthier offerings (e.g. beverages that are higher in nutrients and without added sugars) and setting limitations on empty calories.
- Comprehensive procurement standards for foods and beverages purchased by employers and governments offered in the workplace, meetings, or conferences.
- Impact assessments of beverage sales taxes or excise taxes on consumption rates and shifts in consumer choice with special attention on vulnerable populations by supporting tax initiatives in some states and localities. Key criteria for the association's support are that: (1) at least a portion of the money is dedicated for heart disease and stroke prevention and/or obesity prevention; (2) the tax is structured so as to result in an increase in price for SSBs (e.g., imposed at the time of sale as opposed to the manufacturer that can spread the cost of the tax among all products); (3) the amount of tax is anticipated to be sufficient to result in a reduction in consumption of sugar-sweetened beverages (at least one cent/ounce); (4) there are funds dedicated for evaluation with guidance that ensure rigorous evaluation including health outcome; (5) there is a standard definition of "sugar-sweetened beverage;" and (6) there is no sunset on the tax.
- Major supermarket chains to address the cooperative marketing agreements with beverage companies to prioritize the prime placement of healthier beverages in stores.
- Pilot states and/or municipalities to determine the impact of limiting the purchase of full-calorie soda in the SNAP.
- Elimination of marketing SSBs to children.

CONCLUSION

The American Heart Association also supports additional research to determine how pricing, taxation, and agricultural subsidies on food and beverage consumption patterns could improve the health of Americans, particularly as it relates to the obesity epidemic and related chronic diseases, such as cardiovascular disease, diabetes, and cancer.

The association advises that low- and no calorie beverages like water, diet soft drinks, and fat-free or low-fat milk are better choices than full-calorie soft drinks^{24 25} and Americans should try to limit the amount of added sugars in all the foods they eat.²⁶

The association further advocates that state and local governments that generate revenue from beverage tax initiatives direct these funds toward public health and obesity education and prevention efforts. Thorough evaluation efforts should also be implemented to determine the efficacy of such programs.

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³ Huth, PJ, et al. Major food sources of calories, added sugars, and saturated fat and their contribution to essential nutrient intakes in the US diet: data from the national health and nutrition examination survey (2003-2006). Nutrition Journal. 2013.12(1), 116-125.

⁴ Babey, SH, et al. Bubbling over: Soda consumption and its link to obesity in California. UCLA Center for Health Policy Research.2009. Retrieved from http://www.publichealthadvocacy.org/PDFs/Bubbling_PolicyBrief.pdf.

⁵ Wang, H, et al. Consistency between increasing trends in added-sugar intake and body mass index among adults: The Minnesota Heart Survey, 1980-1982 to 2007-2009. American Journal of Public Health.2013. 103(3), 501-507.

⁶ Malik, VS, et al. Sugar-sweetened beverages and risk of Metabolic Syndrome and Type 2 Diabetes a meta-analysis. Diabetes Care 2010. 33(11), 2477-2483.

⁷ American Beverage Association. News Releases & Statements. 2010. Retrieved from <http://www.ameribeve.org/news-media/news-releases-statements/more/183/>.

⁸ Taber, DR, et al. Banning all sugar-sweetened beverages in middle schools: Reduction of in-school access and purchasing but not overall consumption. Archives of Pediatrics & Adolescent Medicine. 2012. 166(3), 256-262.

⁹ Te Morenga, L, et al. Dietary sugars and body weight: Systematic review and meta-analyses of randomised controlled trials and cohort studies. British Medical Journal. 2013.346.

¹⁰ Wang, YC, et al. A penny-per-ounce tax on sugar-sweetened beverages would cut health and cost burdens of diabetes. Health Affairs. 2012. 31(1), 199-207.

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¹² Pomeranz, JL, et al. Energy drinks: An emerging public health hazard for youth. Journal of Public Health policy. 2013. 34(2), 254-271.

¹³ US Food and Drug Administration. Energy "Drinks" and Supplements: Investigations of Adverse Event Reports. Washington, DC: US Food and Drug Administration (FDA). 2012. Retrieved from <http://www.fda.gov/Food/NewsEvents/ucm328536.htm>.

¹⁴ Andreyeva, T, et al. The impact of food prices on consumption: a systematic review of research on the price elasticity of demand for food. American Journal of Public Health.2010. 100(2), 216.

¹⁵ Salud. Resultados preliminares sobre los efectos del impuesto de un peso a las bebidas azucaradas en México. 2014. Retrieved from <http://www.insp.mx/epppo/blog/preliminares-bebidas-azucaradas.html>.

¹⁶ Powell, LM, et al. Food prices and fruit and vegetable consumption among young American adults. Health & Place. 2009. 15(4), 1064-1070.

¹⁷ Powell, LM, et al. Assessing the potential effectiveness of food and beverage taxes and subsidies for improving public health: a systematic review of prices, demand and body weight outcomes. Obesity Reviews. 2013.14(2), 110-128.

¹⁸ Talukdar, D, et al. To buy or not to buy: consumers' demand response patterns for healthy versus unhealthy food. Journal of Marketing. 2013.77(2), 124-138.

¹⁹ Storey, ML, et al. Beverage consumption in the US population. Journal of the American Dietetic Association. 2006. 106(12), 1992-2000.

²⁰ Powell, LM, et al. Employment impact of sugar-sweetened beverage taxes. American Journal of Public Health. 2014. 104(4), 672-677.

²¹ Mozaffarian D, et al. on behalf of the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics—2015 update: A report from the American Heart Association. Circulation. 2015.131, e01-e294.

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²³ Ordinance. Imposing a general tax on the distribution of sugar-sweetened beverage products. Retrieved from <http://www.cityofberkeley.info/uploadedFiles/Clerk/Elections/Sugar%20Sweetened%20Beverage%20Tax%20-%20-%20Full%20Text.pdf>.

²⁴ Gidding, SS, et al. Dietary recommendations for children and adolescents: a guide for practitioners: Consensus statement from the American Heart Association. Circulation. 2005. 112(13), 2061-2075.

²⁵ Lichtenstein, AH, et al. Diet and lifestyle recommendations revision 2006. A scientific statement from the American Heart Association nutrition committee. Circulation. 2006.114(1), 82-96

²⁶ Jakicic, JM, et al. 2013 AHA/ACC Guideline on Lifestyle Management to Reduce Cardiovascular Risk. 2013 Retrieved from <http://circ.ahajournals.org/content/early/2013/11/11/01.cir.0000437740.48606.d1.full.pdf>.