

Obesity

- The preponderance of scientific evidence shows that consumption of sugar drinks promotes weight gain.¹
- Caloric beverages contribute to weight gain more than solid foods, because the body doesn't compensate fully for beverage calories by reducing calorie intake later in the day.²
- An extra soft drink a day increases a child's risk of becoming obese by about 60 percent.³
- Adults who drink one sugar drink or more per day are 27 percent more likely to be overweight or obese than non-drinkers, regardless of income or ethnicity.⁴
- Obesity-related health care costs \$190 billion annually, representing five to ten percent of all medical spending. Roughly half of these costs are paid through public expenditures.^{5,6,7}
- The medical costs for people who are obese are dramatically higher (\$2,741 per year) than those of normal weight.⁸

Diabetes

- People who consume sugar drinks regularly—one to two cans a day or more—have a 26 percent greater risk of developing type 2 diabetes than people who rarely consume such drinks.⁹ The risks are even greater for young adults and Asians.¹⁰
- Diabetes is the seventh-leading cause of death in the United States.¹¹
- Diabetes is a major cause of heart disease and stroke.¹²
- According to the Centers for Disease Control and Prevention, costs from diabetes totaled \$245 billion in 2012, with direct medical costs totaling \$176 billion.¹³

Related Disease: Non-Alcoholic Fatty Liver Disease

• Daily consumption of sugar drinks for six months increases fat deposits in the liver by 150 percent, which directly contributes to both diabetes and heart disease.¹⁴

Tooth Decay

- Consumption of sugar drinks—especially more acidic carbonated drinks—promotes dental caries and erosion.^{15,16,17,18,19}
- Soda consumption is associated with nearly twice the risk of dental caries in children²⁰ and increases the likelihood of cavities in adults.²¹ Untreated caries can lead to pain, infection, and tooth loss.²²

Heart Disease

• Men who drink one can of a sugar drink per day have a 20 percent higher risk of having a heart attack or dying from a heart attack than men who rarely consume sugar drinks.²³ A related study in women found a similar sugar drink–heart disease link.²⁴

References

¹ Malik, V. S., Willett, W.C., & Hu, F.B. (2009). Sugar-sweetened beverages and BMI in children and adolescents: reanalyses of a meta-analysis. *Am J Clin Nutr*, 89:438-9; author reply 9-40.

² DellaValle, D. M., Roe, L. S., & Rolls, B. J. (2005). Does the consumption of caloric and non-caloric beverages with a meal affect energy intake?. *Appetite*, 44(2), 187-193.

³ Ludwig, D. S., Peterson, K. E., & Gortmaker, S.L. (2001). Relation between consumption of sugar-sweetened drinks and childhood obesity: a prospective, observational analysis. *Lancet*, 357, 505–508.

⁴ Babey, S.H. et al. (Sept. 2009) Bubbling over: Soda consumption and its link to obesity in California. Healthy Policy Brief: UCLA Center for Health Policy Research.

⁵ CMS. (2012). National Health Expenditures 2012 Highlights. Centers for Medicare and Medicaid Services.

http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-

Reports/National Health Expend Data/downloads/highlights.pdf

⁶ Cawley, J. & Meyerhoefer, C. (2012). The medical care costs of obesity: an instrumental variables approach. *J Health Econ*, 31, 219-30.

⁷ Finkelstein, E. A., Ruhm, C. J., & Kosa, K. M. (2005). Economic causes and consequences of obesity. Annu. Rev. Public Health, 26, 239-257.

⁸ Cawley & Meyerhoefer, 2012.

⁹ Malik, V. S. et al. (2010). Sugar-Sweetened Beverages and Risk of Metabolic Syndrome and Type 2 Diabetes. *Diabetes Care*, 33, 2477–2483.

¹⁰ Harvard School of Public Health. (2012). Fact Sheet: Sugary Drink Supersizing and the Obesity Epidemic. Harvard University. http://www.hsph.harvard.edu/wp-content/uploads/sites/30/2012/10/sugary-drinks-and-obesity-fact-sheet-june-2012-the-nutrition-source.pdf

¹¹ CDC. (2014). National Diabetes Statistics Report. http://www.cdc.gov/diabetes/pubs/statsreport14/national-diabetes-report-web.pdf

¹² Ibid.

13 Ibid.

¹⁴ Maersk, M. et al.. (2012). Sucrose-Sweetened Beverages Increase Fat Storage in the Liver, Muscle, and Visceral Fat Depot: A 6-Month Randomized Intervention Study. *American Journal of Clinical Nutrition*, 283. http://ajcn.nutrition.org/content/95/2/283.full

¹⁵ Sohn, W., Burt, B. A., & Sowers, M. R. (2006). Carbonated soft drinks and dental caries in the primary dentition. Journal of dental research, 85(3), 262-266.

¹⁶ Tahmassebi, J. F., Duggal, M. S., Malik-Kotru, G., & Curzon, M. E. J. (2006). Soft drinks and dental health: a review of the current literature. Journal of dentistry, 34(1), 2-11.

¹⁷ American Academy of Pediatrics Committee on School Health. (2004). Soft drinks in schools. Pediatrics, 113(1 Pt 1), 152.

¹⁸ Marshall, T. A., Levy, S. M., Broffitt, B., Warren, J. J., Eichenberger-Gilmore, J. M., Burns, T. L., & Stumbo, P. J. (2003). Dental caries and beverage consumption in young children. *Pediatrics*, *112*(3), e184-e191.

¹⁹ Vartanian, L. R., Schwartz, M. B., & Brownell, K. D. (2007). Effects of soft drink consumption on nutrition and health: a systematic review and meta-analysis. American journal of public health, 97(4), 667-675.

²⁰ Sohn, W., Burt, B. A., & Sowers, M. R. (2006). Carbonated soft drinks and dental caries in the primary dentition. *Journal of dental research*, 85(3), 262-6. http://search.proquest.com/docview/209474706?accountid=11243.

²¹ Heller, K. E., Burt, B. A., & Eklund, S.A. (2001). Sugared Soda Consumption and Dental Caries in the United States. *Journal of Dental Research*, 80, 1949.

²² Ibid.

²³ de Koning, L., Malik, V. S., Kellogg, M. D., Rimm, E. B., Willett, W. C., & Hu, F. B. (2012). Sweetened beverage consumption, incident coronary heart disease, and biomarkers of risk in men. *Circulation*, 125, 1735-41, S1.

²⁴ Fung, T. T., Malik, V., Rexrode, K. M., Manson, J. E., Willett, W. C., & Hu, F. B. (2009). Sweetened beverage consumption and risk of coronary heart disease in women. *Am J Clin Nutr*, 89, 1037-42.