

The logo features the word "rethink" in a large, white, lowercase sans-serif font. Below it, the words "YOUR" and "DRINK" are written in a smaller, white, uppercase sans-serif font, separated by a white crescent moon shape.

## Consumption of Sugar-sweetened Beverages

### YOUTH AND SUGAR-SWEETENED BEVERAGES (SSB)

- The leading contributor of empty calories consumed by children and teens aged 2-18 years is calories from SSBs.<sup>1</sup>
- In California, 21% of children and adolescents (2–17 years) report drinking at least one glass of soda per day, and 23% report drinking at least one glass of other sugary beverage (sweetened fruit, sport, and energy drinks) per day.<sup>2</sup>
- Consumption of regular soda among adolescents has decreased in recent years, however, adolescent consumption of sports and energy drinks tripled between 1999–2000 and 2007–2008.<sup>3</sup>
- Children and adolescents from low socio-economic status households are more likely to be heavy consumers ( $\geq 500$  kcal/day) of SSBs.<sup>4</sup>

### YOUTH AND ENERGY DRINKS

- The American Academy of Pediatrics advises that children and adolescents should never consume energy drinks because of the potential health risks associated with the stimulants that they contain.<sup>5</sup>
- The Rudd Center for Food Policy and Obesity found that sugar-sweetened energy drinks contain nearly the same amount of calories from sugar and three times the

amount of sodium as sodas and juice drinks, as well as the same amount of, or more, caffeine than the average cup of coffee.<sup>6</sup>

- The majority of energy drink brands label their products as dietary supplements as opposed to beverages, thereby exempting ingredients such as herbs or botanicals from being approved by the Food and Drug Administration.<sup>7</sup>

### YOUTH AND SPORTS DRINKS

- The American Academy of Pediatrics recommends that children and adolescents should avoid or restrict consumption of sports drinks because they may lead to overweight and obesity, as well as dental erosion.<sup>8</sup>
- The American Academy of Pediatrics recommends that children and adolescents should drink water instead of sports drinks to keep hydrated. Sports drinks should only be consumed by youth athletes in combination with water during prolonged, vigorous physical activity.<sup>9</sup>

### YOUTH AND FLAVORED, ENHANCED, OR VITAMIN WATER

- Many popular brands of flavored, enhanced, or vitamin water beverages have between 6–8 teaspoons of sugar (90–120 calories) per 20 ounce bottle.<sup>10</sup>

- There is little evidence of the health benefits of vitamin-fortified water beverages.<sup>11</sup>

## ADULTS

- Fourteen percent of adults aged 18–34 report consuming, on average, regular soda one or more times per day.<sup>12</sup>
- Seventeen percent of Latinos and 15% of African Americans drink, on average, regular soda one or more times per day, compared to 9% of non-Hispanic Whites.<sup>13</sup>
- In California, 22.9% of adults consume regular soda, fruits drinks, or both, one or more times per day (13.2% consume soda one or more times per day and 10% consume fruit drinks one or more times per day).<sup>14</sup>
- The odds of drinking SSBs one or more times per day are significantly greater among:
  - » Younger adults
  - » Males
  - » Non-Hispanic blacks
  - » Adults with lower education
  - » Low-income adults or adults with missing income data
  - » Adults with fruit intake of less than 1 time a day versus 1 or more times a day
  - » Adults who are physically inactive versus highly active adults<sup>15</sup>
- The United States Department of Agriculture’s (USDA) National Health and Nutrition Examination Survey data also supports significant associations between heavy total SSB consumption (>500 kcal/day) and being non-Hispanic black, having low-education, or having a low-income.<sup>16</sup>
- Although adults have decreased their overall calorie consumption from SSBs, between 1999–2000 and 2007–2008, their consumption of sports and energy drinks

increased, particularly among young adults (20–34 years).<sup>17</sup>

## HEALTH CONSEQUENCES AND DIET

- The overall diet quality of people who consume SSBs is lower than those who consume none or few.<sup>18</sup>
- Consumption of SSBs may lead to excess weight gain, type 2 diabetes, and cardiovascular issues.<sup>19</sup>
- Higher consumption of added sugars is associated with increased dental caries in children, which can affect levels of dental caries into adulthood.<sup>20</sup>
- People may not compensate for the extra calories consumed in SSBs by subsequently eating less calories because sugar consumed in beverage form is less filling than when consumed in solid food.<sup>21</sup>
- Emergency department visits involving energy drinks doubled from 2007 to 2011 – from 10,068 visits to 20,783 visits. Energy drink-related emergency department visits occurred more for males than females and more for people aged 18 to 39 years than other age groups.<sup>22</sup>
- Consuming large amounts of caffeine in energy drinks can cause adverse effects such as insomnia, nervousness, headache, fast heartbeat, and seizures.<sup>23</sup>

## ADVERTISING, MARKETING, AND SALES

- In 2013, an analysis of available data showed that beverage companies spent \$866 million in advertisements promoting SSBs and energy drinks.<sup>24</sup>
- Beverage companies market SSBs including soda, fruit drinks, sports drinks, iced tea, and flavored water, as well as energy drinks and shots in many different marketing venues, exposing children and teens to these messages daily.<sup>25</sup>

- Americans spend more money on SSBs than other types of beverages—in 2013, U.S. households spent \$14.3 billion on SSBs, compared with \$10.7 billion spent on 100% juice, plain bottled water, diet soda, and other diet drinks.<sup>26</sup>
- Americans purchased less soda (regular and diet) and fruit drinks from 2010 to 2013, but increased their purchase of other SSBs such as flavored water, sports drinks, and energy drinks. The volume of energy drinks sold from 2010 to 2013 increased 41 percent.<sup>27</sup>
- Beverage companies specifically target Hispanic populations—in 2013, seven beverage companies spent \$83 million in advertisements for SSBs and energy shots on Spanish-language television programs, in comparison to a combined total of \$9 million in advertisements for diet drinks, 100 percent juice, and water.<sup>28</sup>
- Beverage companies specifically target African American populations—in 2013, black children and teens were exposed to more than twice as many SSB and energy drink advertisements in comparison with white children and teens.<sup>29</sup>
- Beverage companies specifically target youth, spending more money on promotions and sponsorships aimed at youth than any other food category.<sup>30</sup>
- Most beverages aimed at children are high in sugar and have nutrition-related messages on their packaging that could mislead parents into believing these beverages are healthier choices than other types.<sup>31</sup>
- From 2010 to 2013, many beverage companies increased non-traditional marketing directed at youth, including brand appearances in prime-time television, marketing in social media, and mobile marketing. These types of marketing are more difficult for youth to distinguish as advertisements and for parents to monitor.<sup>32</sup>

- Research has shown that high school-aged youth who have high exposure to electronic media, including television, computers, and video games, are more likely to drink SSBs and less likely to drink water and milk.<sup>33</sup>

## GENERAL RECOMMENDATIONS

- The 2015 Dietary Guidelines for Americans state that the major source of added sugars in typical U.S. diets is beverages, which include soft drinks, fruit drinks, sweetened coffee and tea, energy drinks, alcoholic beverages, and flavored waters.<sup>34</sup>
- The 2015 Dietary Guidelines for Americans state that SSBs, such as soft drinks, sports drinks, and fruit drinks that are less than 100% juice, can contribute excess calories while providing few or no key nutrients. Beverages that are calorie-free—especially water—or that contribute beneficial nutrients, such as fat-free and low-fat milk and 100% juice, should be the primary beverages consumed.<sup>35</sup>
- The 2015 Dietary Guidelines for Americans recommends that added sugars be limited to less than 10% of calories per day.<sup>36</sup>

## REFERENCES

1. Reedy J, Krebs-Smith SM. Dietary sources of energy, solid fats, and added sugars among children and adolescents in the United States. *J Am Diet Assoc.* 2010;110(10):1477-84.
2. University of California Los Angeles, Center for Healthy Policy Research. California Health Interview Survey 2015. <http://ask.chis.ucla.edu>. Accessed January 24, 2017.
3. Han E, Powell LM. Consumption patterns of sugar-sweetened beverages in the United States. *J Acad Nutr Diet.* 2013;113:43-53.
4. Han E, Powell LM. Consumption patterns of sugar-sweetened beverages in the United States. *J Acad Nutr Diet.* 2013;113:43-53.
5. Committee on Nutrition and the Council on Sports Medicine and Fitness. Sports drinks and energy drinks for children and adolescents: Are they appropriate? *Pediatrics.* 2011; 127(6): 1182-1189.
6. Energy drinks fact sheet, November 2011. Yale Rudd Center for Food Policy & Obesity Web site. [http://www.yaleruddcenter.org/resources/upload/docs/what/policy/SSBTaxes/SSB\\_EnergyDrinks.pdf](http://www.yaleruddcenter.org/resources/upload/docs/what/policy/SSBTaxes/SSB_EnergyDrinks.pdf). November 2011.
7. Energy drinks fact sheet, November 2011. Yale Rudd Center for Food Policy & Obesity Web site. [http://www.yaleruddcenter.org/resources/upload/docs/what/policy/SSBTaxes/SSB\\_EnergyDrinks.pdf](http://www.yaleruddcenter.org/resources/upload/docs/what/policy/SSBTaxes/SSB_EnergyDrinks.pdf). November 2011.
8. Committee on Nutrition and the Council on Sports Medicine and Fitness. Sports drinks and energy drinks for children and adolescents: Are they appropriate? *Pediatrics.* 2011; 127(6): 1182-1189.
9. Committee on Nutrition and the Council on Sports Medicine and Fitness. Sports drinks and energy drinks for children and adolescents: Are they appropriate? *Pediatrics.* 2011; 127(6):1182-1189.
10. Sugar-sweetened beverages fact sheet: Flavored or enhanced waters. Yale Rudd Center for Food Policy & Obesity Web site. [http://www.kickthecan.info/files/documents/Rudd\\_SSB\\_EnhancedWater\\_Fall2010.pdf](http://www.kickthecan.info/files/documents/Rudd_SSB_EnhancedWater_Fall2010.pdf). 2010.
11. Kalman, D.S. et al. A pilot trial comparing the availability of vitamins C, B6, and B12 from a vitamin-fortified water and food source in humans. *Intl J Food Sci & Nut.* 2009; 60, 114-124.
12. University of California Los Angeles, Center for Healthy Policy Research. California Health Interview Survey 2015. <http://ask.chis.ucla.edu>. Accessed January 24, 2017.
13. University of California Los Angeles, Center for Health Policy Research. California Health Interview Survey 2015. <http://ask.chis.ucla.edu>. Accessed January 24, 2017.
14. Kumar GS, Pan L, Park S, Lee-Kwan SH, Onufrak S, Blanck HM. Sugar-sweetened beverage consumption among adults—18 States, 2012. *MMWR.* 2014; 63(32):686-690.
15. Park S, Pan L, Sherry B, Blanck HM. Consumption of sugar-sweetened beverages among US adults in 6 states: Behavioral Risk Factor Surveillance System, 2011. *Prev Chronic Dis.* 2014; 11:E65.
16. Han E, Powell LM. Consumption patterns of sugar-sweetened beverages in the United States. *J Acad Nutr Diet.* 2013; 113:43-53.
17. Han E, Powell LM. Consumption patterns of sugar-sweetened beverages in the United States. *J Acad Nutr Diet.* 2013; 113:43-53.
18. Piernas C, Mendez MA, Ng SW, Gordon-Larsen P, Popkin BM. Low-calorie- and calorie-sweetened beverages: diet quality, food intake, and purchase patterns of US household consumers. *Am J Clin Nutr.* 2014 Mar; 99(3):567-77.
19. Malik VS, Popkin BM, Bray GA, Despres JP, Hu FB. Sugar-sweetened beverages, obesity, type 2 diabetes mellitus, and cardiovascular disease risk. *Circulation.* 2011; 121:1356-64.
20. Moynihan PJ, Kelly SA. Effect on caries of restricting sugars intake: systematic review to inform WHO guidelines. *J Dent Res.* 2014; 93:8-18.
21. Mourao DM, Bressan J, Campbell WW, and Mattes RD. Effects of food form on appetite and energy intake in lean and obese young adults. *International Journal of Obesity.* 2007; 31(11), 1688-1695.
22. The DAWN Report: Update on emergency department visits involving energy drinks: A continuing public health concern. Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. Rockville, MD. <http://www.samhsa.gov/data/2k13/DAWN126/sr126-energy-drinks-use.htm>. January 10, 2013.
23. Clauson KA, Shields KM, McQueen CE, Persad N. Safety issues associated with commercially available energy drinks. *Journal of the American Pharmacists Association: JAPhA.* May-Jun 2008; 48(3):e55-63; quiz e64-57.
24. Harris JL, Schwartz MB, LoDolce M, et al. *Sugary Drink FACTS 2014: Some progress but much room for improvement in marketing to youth.* Rudd Center for Food Policy and Obesity;2014.
25. Harris JL, Schwartz MB, LoDolce M, et al. *Sugary Drink FACTS 2014: Some progress but much room for improvement in marketing to youth.* Rudd Center for Food Policy and Obesity;2014.
26. Harris JL, Schwartz MB, LoDolce M, et al. *Sugary Drink FACTS 2014: Some progress but much room for improvement in marketing to youth.* Rudd Center for Food Policy and Obesity;2014.
27. Harris JL, Schwartz MB, LoDolce M, et al. *Sugary Drink FACTS 2014: Some progress but much room for improvement in marketing to youth.* Rudd Center for Food Policy and Obesity;2014.
28. Harris JL, Schwartz MB, LoDolce M, et al. *Sugary Drink FACTS 2014: Some progress but much room for improvement in marketing to youth.* Rudd Center for Food Policy and Obesity;2014.
29. Harris JL, Schwartz MB, LoDolce M, et al. *Sugary Drink FACTS 2014: Some progress but much room for improvement in marketing to youth.* Rudd Center for Food Policy and Obesity;2014.
30. Federal Trade Commission. A review of food marketing to children and adolescents: Follow-up report <https://www.ftc.gov/sites/default/files/documents/reports/review-food-marketing-children-and-adolescents-follow-report/121221foodmarketingreport.pdf>.
31. Harris JL, Schwartz MB, LoDolce M, et al. *Sugary Drink FACTS 2014: Some progress but much room for improvement in marketing to youth.* Rudd Center for Food Policy and Obesity;2014.
32. Harris JL, Schwartz MB, LoDolce M, et al. *Sugary Drink FACTS 2014: Some progress but much room for improvement in marketing to youth.* Rudd Center for Food Policy and Obesity;2014.
33. Demissie, Z., Lowry, R., Eaton, D.K., Park, S., Kann, L. Electronic media and beverage intake among United States high school students - 2010. *J Nutr Educ Behav.* 2013;45.6, 756 - 760.
34. U.S. Department of Health and Human Services and U.S. Department of Agriculture. *2015-2020 Dietary Guidelines for Americans.* 8th Edition. December 2015. Available at <http://health.gov/dietaryguidelines/2015/guidelines>.
35. U.S. Department of Health and Human Services and U.S. Department of Agriculture. *2015-2020 Dietary Guidelines for Americans.* 8th Edition. December 2015. Available at <http://health.gov/dietaryguidelines/2015/guidelines>.
36. U.S. Department of Health and Human Services and U.S. Department of Agriculture. *2015-2020 Dietary Guidelines for Americans.* 8th Edition. December 2015. Available at <http://health.gov/dietaryguidelines/2015/guidelines>.