



Energy drinks and substance use

A BC Adolescent Health Survey 2008 Fact Sheet



Energy drinks are highly caffeinated beverages, which often include high doses of sugar (or a sugar substitute) and herbal ingredients such as guarana (a naturally occurring form of caffeine).¹

With nearly three times more caffeine than a cup of coffee or a can of soda, energy drinks are designed to alleviate fatigue and increase alertness.² Their use has become increasingly popular among young people and this fact sheet examines the relationship between energy drink consumption and that of substances such as alcohol, marijuana, and other drugs.

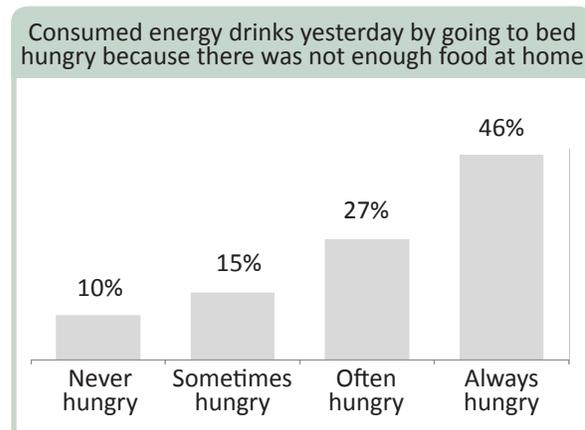
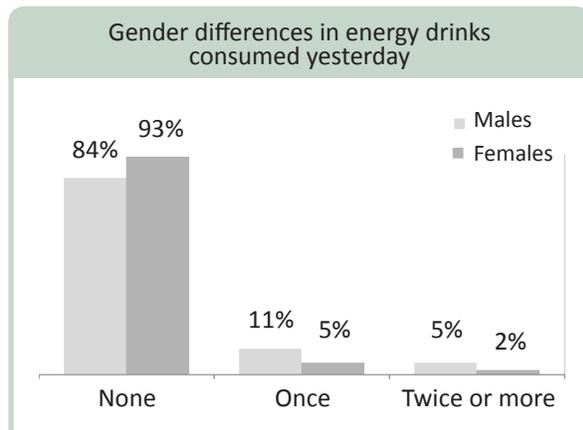
Energy Drink Consumption

In 2008, 11% of youth across Grades 7-12 had consumed energy drinks the day prior to completing the BC Adolescent Health Survey. While 8% of youth had energy drinks once that day, 3% consumed these drinks twice or more. Males were more than twice as likely to consume

Youth who consumed multiple energy drinks the previous day were more likely to rate their general health as poor or fair (29%), compared to youth who consumed energy drinks once (16%) or not at all (15%).

energy drinks as females. In addition, youth in rural areas were more likely to have energy drinks than those living in urban areas (15% vs. 10%).

Consumption of energy drinks was also more common among youth who went to bed hungry because there was not enough food at home. For example, youth who always went to bed hungry were more than four times as likely to have had at least one energy drink yesterday as those who never went to bed hungry. In fact, over a quarter of youth (26%) who always went to bed hungry had consumed energy drinks on two or more occasions the day before the survey.





Energy Drinks and Alcohol

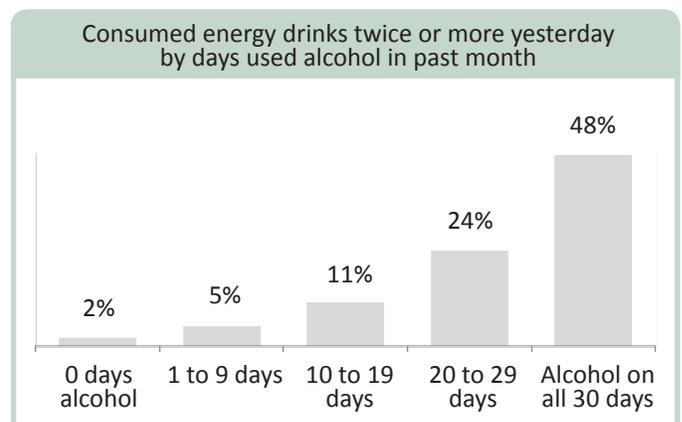
Youth who had tried alcohol were more likely than those who had not, to have consumed at least one energy drink the day before the survey (15% vs. 6%). The more frequently youth drank, the more likely they were to consume energy drinks. For example, among youth who had drunk alcohol on one or two days in the past month, 14% had also consumed one or more energy drinks yesterday. This compared to 28% of youth who had drunk alcohol on 10 to 19 days, and 62% of those who drank alcohol daily.

Youth who drank greater quantities of alcohol were also more likely to consume energy drinks. For example, 23% of those who consumed five or more drinks of alcohol last Saturday had also consumed energy drinks the day before taking the survey, compared to 15% who consumed one to four drinks and 8% who had no alcohol last

Saturday. In addition, 30% of youth who regularly binge drank (i.e., consumed five or more drinks of alcohol in a row, on six or more days in the past month) reported having one or more energy drinks yesterday (compared to 8% of youth who did not binge drink in the past month).

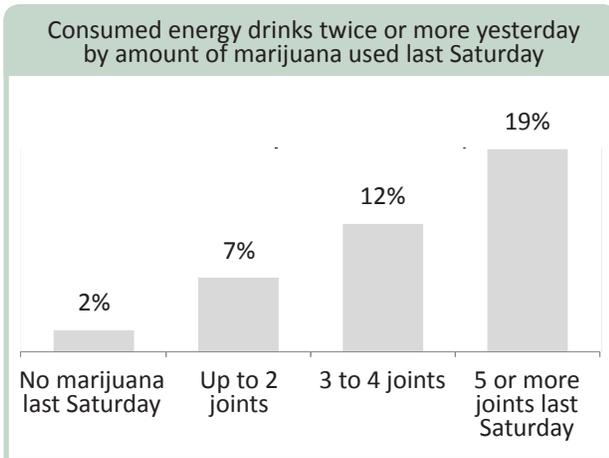
Energy Drinks and Marijuana

Compared to their peers who had never tried marijuana, those who had tried it were more likely to have consumed energy drinks once (12% vs. 6%) or multiple times (7% vs. 2%) the day before the survey. The more often youth used marijuana, the more likely they were to consume energy drinks. For example, 13% of youth who used marijuana six or more times in the past month had consumed multiple energy drinks the day before, compared to 5% of youth who had used marijuana up to five times and 2% who did not use marijuana in the past month.





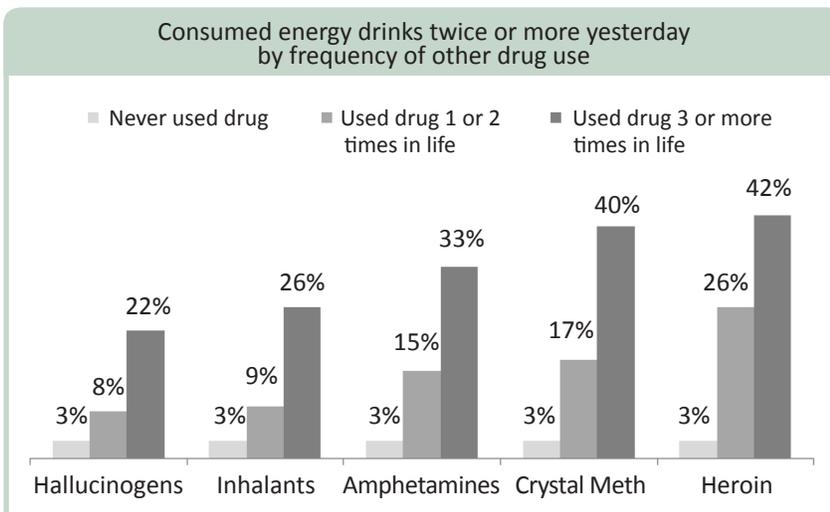
The amount of marijuana use was also associated with energy drink use. For example, among youth who had five or more joints the previous Saturday, 38% consumed energy drinks the day before the survey compared to 20% of youth who had two joints or less last Saturday.



Energy Drinks and Other Drugs

In addition to alcohol and marijuana, youth were also asked about their lifetime use of other drugs including prescription pills without a doctor's consent, cocaine, hallucinogens, ecstasy, mushrooms, inhalants, amphetamines, crystal meth, heroin, and steroids without a doctor's prescription. Youth who had tried any of these drugs were more likely than those who had never tried them to have consumed one or more energy drinks the previous day (19% vs. 8%).

In general, more frequent lifetime use of drugs was associated with an increased likelihood of multiple energy drink consumption. For example, 33% of youth who used amphetamines three or more times had consumed multiple energy drinks the day prior, compared to 15% who had used amphetamines once or twice, and to 3% who had never used amphetamines.





Conclusion

This fact sheet demonstrates a link between energy drink use and substance use among youth. In general, increased substance use was associated with increased energy drink consumption. This suggests that some youth who engage in substance use are also obtaining relatively high doses of caffeine through energy drinks, and raises concerns of potentially dangerous side effects, especially if youth are using these substances concurrently.

References

1. Brache, K., Thomas, G., & Stockwell, T. (2012). Caffeinated alcoholic beverages in Canada: Prevalence of use, risks and recommended policy responses. *Canadian Centre on Substance Abuse*, 1-32. Retrieved from <http://www.ccsa.ca/2012%20CCSA%20Documents/CCSA-Caffeinated-Alcoholic-Beverages-in-Canada-2012-en.pdf>
2. Attila, S., & Çakir, B. (2011). Energy drink consumption in college students and associated factors. *Nutrition*, 27(3), 316-322. doi: 10.1016/j.nut.2010.02.008

Data for this fact sheet comes from the 2008 BC Adolescent Health Survey (AHS), a 146-item survey completed by nearly 30,000 students in Grades 7 to 12 in schools across BC. In all, 50 of 59 school districts took part in the survey. Over 100,000 BC students have completed the survey since the first one was conducted in 1992. The fifth AHS will be in schools in 2013 and will include additional questions about concurrent energy drink and substance use.

The AHS is conducted by the McCreary Centre Society, a non-profit organization dedicated to improving the health of BC youth through research, information sharing, and community-based projects that address the unmet health needs of young people.

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