

# Increased alcohol consumption, nonmedical prescription drug use, and illicit drug use are associated with energy drink consumption among college students

## MAJOR FINDINGS:

The researchers sought to examine the prevalence and correlates of energy drink use among college students to discover any possible associations with subsequent drug use, including the nonmedical use of prescription drugs. Data were collected from 1,060 students in their second and third years of college. In Year 2, 264 students drank energy drinks (approximately 22.6% of all second year students) and in Year 3, 429 students were energy drink users (36.5% of all third year students), for an annual increase of 62.5%.

Energy drink users were disproportionately male, but were otherwise demographically similar to students who did not drink energy drinks. Defining a standard serving of caffeine as approximately one can of cola, the researchers weren't surprised to find that energy drink users tended to drink more servings of caffeine per week on average than non-users. Energy drink users also had significantly greater levels of alcohol and drug involvement. For example, during Year 2, energy drink users drank alcohol on an average of 83.9 days in the past year versus a non-energy drink user who drank 68.5 days in the past year. Energy drink users also drank more alcohol on a drinking day (6.0 vs. 4.7 drinks), used more drugs in the past year (1.7 vs. 1.2) and were more likely to have used tobacco (55.3% vs. 43.5%) than their energy drink non-user peers.

The researchers looked at whether or not energy drink use was a risk factor or predictor of initiation of illicit drugs or the nonmedical use of prescription drugs. They found that for most of the drugs they studied, "energy drink use did not significantly increase the risk of starting to use a drug for the first time in the subsequent year." Among marijuana-naïve students in Year 2, the researchers observed incident marijuana use by Year 3 in 12% of energy drink users and 10% of energy drink non-users. On the other hand, energy drink users were found to be significantly more likely to initiate nonmedical use of prescription stimulants (18.8% vs. 8.2%) and prescription analgesics (8.5% vs. 4.0%).

### *Of major interest to:*

- College Administrators
- Parents
- Educators
- Health Professionals
- Students
- Law and Policy Makers



**Practice and Policy Suggestions:** It is important to note that between Years 2 and 3, the percent of students using energy drinks increased from approximately one-quarter to one-third, or a 62.5% increase, clear proof that the market for these products is quickly growing. The findings in this study show that energy drink use is related to heavier drinking and drug use. Because of these findings, the researchers worry that energy drink use might exacerbate the development of a substance abuse disorder, particularly in individuals with an underlying susceptibility. “Parents, educators, and health professionals who observe students using energy drinks should regard this as a possible marker for heavy drinking and other drug involvement.” The researchers suggest policies to be put in place that would discourage energy drink use, “such as limiting advertisements in campus venues and publications, and limiting the sales of energy drinks in on-campus retail outlets.” They also suggest that national regulatory agencies should enforce industry-wide standards requiring responsible messaging about the benefits and possible risks associated with energy drink consumption.

The complete publication referenced in this research brief can be found here: Arria, A.M., Caldeira, K.M., Kasperski, S.J., O’Grady, K.E., Vincent, K.B., Griffiths, R.R., Wish, E.D. (2010). Increased alcohol consumption, nonmedical prescription drug use, and illicit drug use are associated with energy drink consumption among college students. *Journal of Addiction Medicine*. 4(2), 74-80.



### About the College Life Study (CLS)

The CLS is a longitudinal study of 1,253 college students at a large, public, mid-Atlantic university. This study is one of the first large-scale scientific investigations that aims to discover the impact of health-related behaviors during the college experience. Any first time, first-year student between 17 and 19 years old at the university in the fall of 2004 was eligible to participate in a screening survey. The researchers then selected students to participate in the longitudinal study, which consisted of two-hour personal interviews administered annually, beginning with their first year of college. A full description of the methods used is available.<sup>1</sup> Inherent to all self-reporting research methods is the possibility for response bias. Because the sample is from one large university, the ability to generalize the findings elsewhere is uncertain. However, response rates have been excellent and attrition bias has been minimal.

For more information about the study, please visit [www.cls.umd.edu](http://www.cls.umd.edu) or contact Amelia M. Arria at the University of Maryland, College Park, at [aarria@umd.edu](mailto:aarria@umd.edu).

<sup>1</sup> Arria, A.M., Caldeira, K.M., O’Grady, K.E., Vincent, K.B., Fitzelle, D.B., Johnson, E.P., Wish, E.D. (2008). Drug exposure opportunities and use patterns among college students: Results of a longitudinal prospective cohort study. *Substance Abuse*. 29(4), 19-38.

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