

Study shows energy drink 'cocktails' lead to increased injury risk

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College students who drink alcohol mixed with so-called “energy” drinks are at dramatically higher risk for injury and other alcohol-related consequences, compared to students who drink alcohol without energy drinks, according to new research from Wake Forest University School of Medicine. The findings were reported today at the annual meeting of the American Public Health Association in Washington, D.C.

The researchers found that students who consumed alcohol mixed with energy drinks were twice as likely to be hurt or injured, twice as likely to require medical attention, and twice as likely to ride with an intoxicated driver, as were students who did not consume alcohol mixed with energy drinks. Students who drank alcohol mixed with energy drinks were more than twice as likely to take advantage of someone else sexually, and almost twice as likely to be taken advantage of sexually.

“We knew anecdotally -- from speaking with students, and from researching internet blogs and websites -- that college students mix energy drinks and alcohol in order to drink more, and to drink longer,” said Mary Claire O’Brien, M.D., associate professor of emergency medicine and public health sciences and lead researcher on the study. “But we were surprised that the risk of serious and potentially deadly consequences is so much higher for those who mixed energy drinks with alcohol, even when we adjusted for the amount of alcohol.”

Compared to current drinkers who did not consume alcohol mixed with energy drinks, students who did drink significantly more during a typical

drinking session (5.8 drinks versus 4.5 drinks/typical session). They reported twice as many episodes of weekly drunkenness (1.4 versus 0.73 days/week). The greatest number of drinks in a single episode was 36 percent higher for students who reported drinking energy drinks with their alcohol (8.3 versus 6.1 drinks.)

O'Brien and colleagues conducted a web-based survey of 4,271 college students from 10 universities. Students were asked approximately 300 questions about alcohol use, its consequences, and other health risk behaviors.

Of students who reported drinking alcohol in the past 30 days, 24 percent said they consumed alcohol mixed with energy drinks. Students who were male, white, intramural athletes, Greek society members or pledges, or older were significantly more likely to consume alcohol mixed with energy drinks. O'Brien says that this is not surprising since the energy drink companies typically tout non-essential ingredients like taurine which is rumored to raise exercise capacity, and ginseng, which some companies claim enhances libido. The main ingredient in energy drinks is caffeine. O'Brien uses the analogy that mixing caffeine (a stimulant) with alcohol (a depressant), is like getting into a car and stepping on the gas pedal and the brake at the same time.

"Students whose motor skills, visual reaction times, and judgment are impaired by alcohol may not perceive that they are intoxicated as readily when they're also ingesting a stimulant," said O'Brien. "Only the symptoms of drunkenness are reduced – but not the drunkenness. They can't tell if they're drunk; they can't tell if someone else is drunk. So they get hurt, or they hurt someone else."

The Food and Drug Administration (FDA) limits caffeine to 65 milligrams per serving of a food or beverage. Since energy drinks are currently not regulated by the FDA, they can contain as much as 300

milligrams of caffeine in a single serving.

“Twenty-nine state attorneys general have already condemned alcoholic energy drinks,” said O’Brien. “We believe the FDA has a responsibility to investigate the health risks of energy drink cocktails, and to make that information available to consumers. Students should be informed about the risks of mixing alcohol with energy drinks, as part of an overall program to reduce high-risk drinking and its consequences. And colleges should reconsider the free distribution of energy drinks at campus-sponsored events.”

Source: Wake Forest University Baptist Medical Center

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